



## 2014 Herbicide Evaluation Trials

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The following trials were conducted in corn and soybeans at the Spindletop Research Facility located in Lexington, Kentucky.

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|--------|--------|--------|--------|
| C14001 | C14002 | C14010 | C14011 |
| C14012 | C14014 | C14015 | C14016 |
| C14017 | C14018 | C14020 | C14021 |
| C14022 |        |        |        |
| S14020 | S14021 | S14022 | S14023 |
| S14024 | S14025 | S14026 | S14027 |
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## HERBICIDES IN REPORT

| <u>TRADE NAME</u>          | <u>COMMON NAME</u>                           | <u>COMPANY</u>  |
|----------------------------|--|-----------------|
| AATREX                     | ATRAZINE                                     | SYNGENTA        |
| ABUNDIT EXTRA              | GLYPHOSATE                                   | DUPONT          |
| ACCOLADE                   | FLUMETSULAM                                  | FMC             |
| ACURON                     | BICYCLOPYRONE                                | SYNGENTA        |
| ACTIVATOR 90               | NON-IONIC SURFACTANT                         | LOVELAND        |
| AFFORIA                    | TRIBENURON + THIFENSULFURON + FLUMIOXAZIN    | DUPONT          |
| AMS                        | AMMONIUM SULFATE                             | CLEAN CROP      |
| ANTHEM                     | PYROXASULFONE + FLUTHIACET-METHYL            | FMC             |
| ANTHEM ATZ                 | PYROXASULFONE + FLUTHIACET-METHYL + ATRAZINE | FMC             |
| ARMEZON                    | TOPRAMEZONE                                  | BASF            |
| AUTHORITY ELITE            | SULFENTRAZONE + S-METOLACHLOR                | FMC             |
| AUTHORITY FIRST            | SULFENTRAZONE + CLORANSULAM-METHYL           | FMC             |
| AUTHORITY MAXX             | SULFENTRAZONE + CHLORIMURON-ETHYL            | FMC             |
| AUTHORITY MTZ              | SULFENTRAZONE + METRIBUZIN                   | FMC             |
| BASIS                      | RIMSULFURON + THIFENSULFURON                 | DUPONT          |
| BESIEGE                    | LAMBDA-CYHALOTHRIN + CHLORANTRANILIPROLE     | SYNGENTA        |
| BOUNDARY                   | S-METOLACHLOR + METRIBUZIN                   | SYNGENTA        |
| CADET                      | FLUTHIACET-METHYL                            | FMC             |
| CALLISTO                   | MESOTRIONE                                   | SYNGENTA        |
| CANOPY                     | METRIBUZIN + CHLORIMURON ETHYL               | DUPONT          |
| CANOPY EX                  | CHLORIMURON + TRIBENURON                     | DUPONT          |
| CINCH                      | S-METOLACHLOR                                | DUPONT          |
| CINCH ATZ                  | S-METOLACHLOR + ATRAZINE                     | DUPONT          |
| CORVUS HERBICIDE           | ISOXAFLUTOLE + THIENCARBAZONE-METHYL         | BAYER           |
| CROP OIL CONCENTRATE (COC) |  | LOVELAND        |
| CRUSHER                    | RIMSULFURON + THIFENSULFURON                 | CHEMINOVA       |
| DUAL II MAGNUM             | S-METOLACHLOR + BENOXACOR                    | SYNGENTA        |
| DURANGO DMA                | GLYPHOSATE                                   | DOW AGROSCIENCE |
| ENVIVE                     | FLUMIOXAZIN + THIFENSULFURON                 | DUPONT          |

## HERBICIDES IN REPORT CONTINUED

| <u>TRADE NAME</u> | <u>COMMON NAME</u>                         | <u>COMPANY</u>  |
|-------------------|--|-----------------|
| FIERCE            | FLUMIOXAZIN + PYROXASULFONE                | VALENT          |
| FIRSTRATE         | CLORANSULAM                                | DOW AGROSCIENCE |
| FIRSTSHOT         | TRIBENURON + THIFENSULFURON                | DUPONT          |
| FLEXSTAR          | FOMESAFEN                                  | SYNGENTA        |
| FLEXSTAR GT       | FOMESAFEN + GLYPHOSATE                     | SYNGENTA        |
| FRANCHISE         | ADDITIVE FOR STROBILURIN FUNGICIDES        | LOVELAND        |
| GANGSTER FR       | CLORANSULAM                                | VALENT          |
| GLYFOS X-TRA      | GLYPHOSATE                                 | CHEMINOVA       |
| GRAMOXONE INTEON  | PARAQUAT                                   | SYNGENTA        |
| HALEX GT          | GLYPHOSATE(PS)+ MESOTRIONE + S-METOLACHLOR | SYNGENTA        |
| HARROW            | RIMSULFURON + THRIFENSULFURON              | CHEMINOVA       |
| HEADLINE          | PYRACLOSTROBIN                             | BASF            |
| HEADLINE AMP      | PYRACLOSTROBIN + METCONAZOLE               | BASF            |
| HORNET            | FLUMETSULAM + CLOPYRALID                   | DOW AGROSCIENCE |
| IMPACT            | TOPRAMEZONE                                | AMVAC           |
| INSTIGATE         | RIMSULFURON + MESOTRIONE                   | DUPONT          |
| INTIMIDATOR       | S-METOLACHLOR + METRIBUZIN + FOMESAFEN     | LOVELAND        |
| KEYSTONE NXT      | ACETOCHLOR + ATRAZINE                      | DOW AGROSCIENCE |
| LAUDIS            | TEMBOTRIONE                                | BAYER           |
| LEADOFF           | RIMSULFURON + THIFENSULFURON               | DUPONT          |
| LEXAR EZ          | S-METOLACHLOR + MESOTRIONE + ATRAZINE      | SYNGENTA        |
| LIBERTY 280       | GLUFOSINATE AMMONIUM                       | BAYER           |
| LOW VOL 4         | 2,4-D ESTER                                | LOVELAND        |
| MARVEL            | FLUTHIACET METHYL + FOMESAFEN              | FMC             |
| MSO               | METHYLATED SEED OIL                        | LOVELAND        |
| NIS               | NON-IONIC SURFACTANT                       |                 |
| NPAK AMS LIQUID   | AMMONIUM SULFATE                           | WINFIELD        |
| OPTILL            | SAFLUFENACIL + IMAZETHAPYR                 | BASF            |
| OPTILL PRO DRY    | SAFLUFENACIL + IMAZETHAPYR                 | BASF            |
| OPTILL PRO LIQUID | DIMETHENAMID-P                             | BASF            |
| OUTLOOK           | DIMETHENAMID-P                             | BASF            |
| PREFIX            | S-METOLACHLOR + BENOXACOR                  | SYNGENTA        |
| PRINCEP           | SIMAZINE                                   | SYNGENTA        |
| PRIAXOR           | FLUXAPYROXAD + PYRACLOSTROBIN              | BASF            |
| PROWL H2O         | PENDIMETHALIN                              | BASF            |

## HERBICIDES IN REPORT CONTINUED

| <u>TRADE NAME</u>  | <u>COMMON NAME</u>                     | <u>COMPANY</u>        |
|--------------------|--|-----------------------|
| QUADRIS TOP        | AZOXYSTROBIN + DIFENOCONAZOLE          | SYNGENTA              |
| QUILT XCEL         | AZOXYSTROBIN + PROPICONAZOLE           | SYNGENTA              |
| REALM Q            | RIMSULFURON + MESOTRIONE + SAFENER     | DUPONT                |
| RESOLVE Q          | RIMSULFURON + SAFENER                  | DUPONT                |
| RHYTHM             | FOMESAFEN                              | CHEMINOVA             |
| ROUNDUP POWERMAX   | GLYPHOSATE (POTASSIUM SALT)            | MONSANTO              |
| SENCOR             | METRIBUZIN                             | BAYER                 |
| SEQUENCE           | GLYPHOSATE + S-METOLACHLOR             | SYNGENTA              |
| SHARPEN            | SAFLUFENACIL                           | BASF                  |
| SOLSTICE           | MESOTRIONE + FLUTHIACET-METHYL         | FMC                   |
| SONIC              | SULFENTRAZONE + CLORANSULAM-METHYL     | DOW AGROSCIENCE       |
| STALWART XTRA      | METOLACHLOR + ATRAZINE                 | SIPCAM                |
| STALWART XTRA LITE | METOLACHLOR + ATRAZINE                 | SIPCAM                |
| STALWART MTZ       | METOLACHLOR                            | SIPCAM                |
| STATEMENT          | FOMESAFEN + METOLACHLOR                | CHEMINOVA             |
| STATUS             | DIFLUFENZOPYR + DICAMBA                | BASF                  |
| SURESTART          | ACETOCHLOR + FLUMETSULAM + CLOPYRALID  | DOW AGROSCIENCE       |
| SURESTART II       | ACETOCHLOR + FLUMETSULAM + CLOPYRALID  | DOW AGROSCIENCE       |
| SURVEIL CO-PACK    | FLUMIOXAZIN + CLORANSULAM-METHLY       | DOW AGROSCIENCE       |
| TOPYRALATE         |  | ISK BIOSCIENCES       |
| TOUCHDOWN TOTAL    | GLYPHOSATE                             | SYNGENTA              |
| TRICOR             | METRIBUZIN                             | UNITED PHOSPHORUS INC |
| TRIVENCE           | CHLORIMURON + METRIBUZIN + FLUMIOXAZIN | DUPONT                |
| UAN                | 28% UREA AMMONIUM NITRATE FERTILIZER   |                       |
| VALOR SX           | FLUMIOXAZIN (V-53482)                  | VALENT                |
| VALOR XLT          | FLUMIOXAZIN + CHLORIMURON              | VALENT                |
| VERDICT            | SAFLUFENACIL + DIMETHENAMID-P          | BASF                  |
| WARRANT            | ACETOCHOLOR                            | MONSANTO              |
| ZIDUA              | PYROXASULFONE                          | BASF                  |

## DEFINITIONS FOR METHODS OF APPLICATION

### PREEMERGENCE

|         |                         |
|---------|-------------------------|
| 30D EPP | 30 DAYS BEFORE PLANTING |
| 10D EPP | 10 DAYS BEFORE PLANTING |
| -7 DAY  | 7 DAYS BEFORE PLANTING  |
| PRE     | PREEMERGENCE            |

### POSTEMERGENCE

|         |  |
|---------|--|
| EP      | EARLY POSTEMERGENCE, WEEDS 0-2"                  |
| MP      | MID-POSTEMERGENCE, WEEDS 2-4"                    |
| LP      | LATE POSTEMERGENCE, WEEDS 4-6"                   |
| V2      | SECOND TRIFOLIATE, SOYBEAN                       |
| V4      | 12 INCH CORN                                     |
| 12C     | 12 INCH CORN                                     |
| V5      | 5 UNFOLDED TRIFOLIATES(SOYBEAN), 5 COLLARS(CORN) |
| +14 DAY | 14 DAYS AFTER PLANTING                           |
| 3WK     | 3 WEEKS AFTER PLANTING                           |
| 4WAP    | 4 WEEKS AFTER PLANTING                           |
| 5WAP    | 5 WEEKS AFTER PLANTING                           |
| 35 DAP  | 35 DAYS AFTER PLANTING                           |
| 45 DAP  | 45 DAYS AFTER PLANTING                           |
| VT      | TASSLING CORN                                    |
| R3      | BEGINNING POD ON SOYBEAN                         |



# ABBREVIATIONS

## Crop and Weed Species

| <u>ABBR</u> | <u>COMMON NAME</u>   | <u>SCIENTIFIC NAME</u>      |
|-------------|----------------------|-----------------------------|
| AMBTR       | Giant Ragweed        | <i>Ambrosia trifida</i>     |
| CHEAL       | Common Lambsquarters | <i>Chenopodium album</i>    |
| GLXMA       | Soybean              | <i>Glycine max</i>          |
| ERICA       | Marestail            | <i>Conyza canadensis</i>    |
| IPOSS       | Morningglory         | <i>Ipomoea sp.</i>          |
| LAMPU       | Purple Deadnettel    | <i>Lamium purpureum</i>     |
| SETFA       | Giant Foxtail        | <i>Setaria faberi</i>       |
| STEME       | Common Chickweed     | <i>Stellaria media</i>      |
| TAROF       | Common Dandelion     | <i>Taraxacum officinale</i> |
| ZEAMX       | Corn                 | <i>Zea mays</i>             |

# MARCH CLIMATOLOGICAL DATA, SPINDLETOP

| DATE       | AIR TEMP |    |    | PRECIP | RH |    | SOIL TEMP |    |      |    | EVAP |
|------------|----------|----|----|--------|----|----|-----------|----|------|----|------|
|            | MX       | MN | AV |        | MX | MN | GRASS     | MN | BARE | MX |      |
| 03-01-2014 | 53       | 27 | 40 |        | 78 | 42 | 38        | 34 | 41   | 36 |      |
| 03-02-2014 | 47       | 20 | 33 | 1.01   | 98 | 66 | 38        | 36 | 41   | 38 |      |
| 03-03-2014 | 21       | 7  | 14 | 0.52   | 93 | 58 | 36        | 34 | 38   | 37 |      |
| 03-04-2014 | 32       | 7  | 19 | 0.01   | 85 | 44 | 34        | 34 | 37   | 36 |      |
| 03-05-2014 | 39       | 15 | 27 |        | 98 | 49 | 34        | 34 | 36   | 36 |      |
| 03-06-2014 | 43       | 22 | 32 |        | 82 | 58 | 34        | 33 | 36   | 36 |      |
| 03-07-2014 | 56       | 24 | 40 |        | 87 | 44 | 39        | 33 | 39   | 36 |      |
| 03-08-2014 | 57       | 34 | 45 |        | 88 | 39 | 41        | 36 | 43   | 37 |      |
| 03-09-2014 | 49       | 32 | 40 |        | 89 | 39 | 43        | 39 | 45   | 41 |      |
| 03-10-2014 | 61       | 35 | 48 |        | 85 | 38 | 44        | 39 | 46   | 41 |      |
| 03-11-2014 | 70       | 47 | 58 |        | 76 | 30 | 48        | 42 | 50   | 44 |      |
| 03-12-2014 | 60       | 27 | 43 | 0.18   | 95 | 59 | 48        | 43 | 50   | 44 |      |
| 03-13-2014 | 37       | 17 | 27 |        | 77 | 31 | 42        | 39 | 44   | 40 |      |
| 03-14-2014 | 58       | 31 | 44 |        | 58 | 31 | 43        | 39 | 45   | 40 |      |
| 03-15-2014 | 61       | 40 | 50 |        | 77 | 27 | 47        | 42 | 49   | 44 |      |
| 03-16-2014 | 41       | 24 | 32 | 0.14   | 96 | 61 | 45        | 40 | 47   | 42 |      |
| 03-17-2014 | 40       | 24 | 32 | 0.04   | 89 | 71 | 42        | 39 | 43   | 40 |      |
| 03-18-2014 | 51       | 36 | 43 |        | 95 | 68 | 43        | 40 | 45   | 42 |      |
| 03-19-2014 | 54       | 41 | 47 |        | 89 | 63 | 44        | 42 | 47   | 44 |      |
| 03-20-2014 | 53       | 30 | 41 |        | 87 | 37 | 46        | 41 | 48   | 43 |      |
| 03-21-2014 | 64       | 37 | 50 |        | 65 | 25 | 47        | 42 | 49   | 44 |      |
| 03-22-2014 | 56       | 35 | 45 |        | 79 | 36 | 48        | 45 | 51   | 47 |      |
| 03-23-2014 | 42       | 25 | 33 |        | 82 | 37 | 46        | 44 | 48   | 45 |      |
| 03-24-2014 | 41       | 19 | 30 |        | 79 | 32 | 45        | 40 | 47   | 42 |      |
| 03-25-2014 | 34       | 23 | 28 | 0.14   | 97 | 50 | 43        | 40 | 45   | 42 |      |
| 03-26-2014 | 39       | 18 | 28 |        | 79 | 35 | 43        | 38 | 44   | 39 |      |
| 03-27-2014 | 57       | 28 | 42 | 0.04   | 78 | 22 | 43        | 39 | 45   | 41 |      |
| 03-28-2014 | 64       | 47 | 55 | 0.27   | 96 | 67 | 48        | 43 | 51   | 45 |      |
| 03-29-2014 | 47       | 34 | 40 | 0.73   | 96 | 79 | 48        | 44 | 50   | 46 |      |
| 03-30-2014 | 54       | 30 | 42 |        | 92 | 35 | 47        | 42 | 49   | 44 |      |
| 03-31-2014 | 64       | 31 | 47 |        | 87 | 26 | 48        | 42 | 50   | 44 |      |

Summary for the period 3-1-2014 through 3-31-2014:

|                         | AIR TEMP |    |    | TOTAL<br>PRECIP | RH |    | SOIL TEMP |    |      |    | TOTAL<br>EVAP |
|-------------------------|----------|----|----|-----------------|----|----|-----------|----|------|----|---------------|
|                         | MX       | MN | AV |                 | MX | MN | GRASS     | MN | BARE | MX |               |
|                         | 50       | 28 | 39 | 3.08            | 86 | 45 | 43        | 39 | 45   | 41 |               |
| (Deviation from normal) | -4       | -6 | -5 | -1.32           |    |    |           |    |      |    |               |

# APRIL CLIMATOLOGICAL DATA, SPINDLETOP

| DATE       | AIR TEMP |    |    | PRECIP | RH  |    | SOIL TEMP |    |      |    | EVAP |
|------------|----------|----|----|--------|-----|----|-----------|----|------|----|------|
|            | MX       | MN | AV |        | MX  | MN | GRASS     | MN | BARE | MX |      |
| 04-01-2014 | 74       | 52 | 63 |        | 78  | 29 | 51        | 46 | 54   | 48 |      |
| 04-02-2014 | 69       | 45 | 57 | 0.05   | 91  | 46 | 52        | 49 | 54   | 51 |      |
| 04-03-2014 | 68       | 51 | 59 | 0.47   | 100 | 70 | 54        | 50 | 56   | 52 |      |
| 04-04-2014 | 62       | 42 | 52 | 0.52   | 99  | 66 | 54        | 52 | 57   | 54 |      |
| 04-05-2014 | 51       | 36 | 43 |        | 72  | 45 | 53        | 49 | 55   | 51 |      |
| 04-06-2014 | 58       | 33 | 45 |        | 81  | 41 | 53        | 48 | 54   | 50 |      |
| 04-07-2014 | 65       | 52 | 58 | 0.12   | 93  | 45 | 56        | 54 |      |    |      |
| 04-08-2014 | 62       | 44 | 53 | 0.04   | 90  | 45 | 56        | 54 |      |    |      |
| 04-09-2014 | 64       | 41 | 52 | 0.06   | 86  | 30 | 54        | 52 |      |    |      |
| 04-10-2014 | 75       | 43 | 59 |        | 68  | 27 | 54        | 52 |      |    |      |
| 04-11-2014 | 73       | 60 | 66 | 0.03   | 67  | 39 | 53        | 53 |      |    |      |
| 04-12-2014 | 79       | 51 | 65 |        | 90  | 37 | 55        | 33 |      |    |      |
| 04-13-2014 | 83       | 64 | 73 |        | 53  | 24 | 65        | 61 |      |    |      |
| 04-14-2014 | 73       | 63 | 68 | 0.05   | 89  | 44 | 57        | 56 |      |    |      |
| 04-15-2014 | 44       | 33 | 38 | 0.32   | 92  | 31 | 65        | 59 |      |    |      |
| 04-16-2014 | 54       | 27 | 40 |        | 66  | 27 | 58        | 55 |      |    |      |
| 04-17-2014 | 68       | 41 | 54 |        | 55  | 28 | 57        | 54 |      |    |      |
| 04-18-2014 | 71       | 45 | 58 |        | 70  | 33 | 54        | 54 |      |    |      |
| 04-19-2014 | 73       | 46 | 59 |        | 71  | 25 | 59        | 54 |      |    |      |
| 04-20-2014 | 76       | 46 | 61 |        | 65  | 25 | 58        | 56 |      |    |      |
| 04-21-2014 | 80       | 50 | 65 |        | 74  | 30 | 57        | 55 |      |    |      |
| 04-22-2014 | 71       | 47 | 59 | 0.17   | 95  | 31 | 59        | 57 | 60   | 58 |      |
| 04-23-2014 | 63       | 39 | 51 |        | 78  | 35 | 58        | 54 | 59   | 54 |      |
| 04-24-2014 | 70       | 44 | 57 |        | 75  | 38 | 57        | 53 | 58   | 54 |      |
| 04-25-2014 | 67       | 51 | 59 | 0.70   | 98  | 47 | 57        | 55 | 59   | 57 |      |
| 04-26-2014 | 77       | 49 | 63 |        | 75  | 31 | 58        | 54 | 60   | 55 |      |
| 04-27-2014 | 80       | 50 | 65 |        | 92  | 47 | 59        | 55 | 61   | 56 |      |
| 04-28-2014 | 68       | 62 | 65 | 1.57   | 99  | 79 | 60        | 58 | 61   | 60 |      |
| 04-29-2014 | 77       | 54 | 65 | 1.32   | 99  | 43 | 62        | 59 | 64   | 61 |      |
| 04-30-2014 | 67       | 53 | 60 | 0.35   | 99  | 70 | 60        | 59 | 62   | 60 |      |

Summary for the period 4-1-2014 through 4-30-2014:

|                         | AIR TEMP |    |    | TOTAL<br>PRECIP | RH |    | SOIL TEMP |    |      |    | TOTAL<br>EVAP |
|-------------------------|----------|----|----|-----------------|----|----|-----------|----|------|----|---------------|
|                         | MX       | MN | AV |                 | MX | MN | GRASS     | MN | BARE | MX |               |
|                         | 69       | 47 | 58 | 5.77            | 82 | 40 | 57        | 53 | 58   | 55 |               |
| (Deviation from normal) | +3       | +2 | +3 | +1.89           |    |    |           |    |      |    |               |

# MAY CLIMATOLOGICAL DATA, SPINDLETOP

| DATE       | AIR TEMP |    |    | PRECIP | RH  |    | SOIL TEMP |    |      |    |    |
|------------|----------|----|----|--------|-----|----|-----------|----|------|----|----|
|            | MX       | MN | AV |        | MX  | MN | GRASS     | MN | BARE | MX | MN |
| 05-01-2014 | 61       | 46 | 53 |        | 86  | 42 | 69        | 62 |      |    |    |
| 05-02-2014 | 60       | 43 | 51 |        | 86  | 55 | 57        | 55 | 59   | 56 |    |
| 05-03-2014 | 70       | 43 | 56 |        | 91  | 41 | 57        | 54 | 59   | 55 |    |
| 05-04-2014 | 78       | 53 | 65 |        | 74  | 38 | 59        | 55 | 61   | 56 |    |
| 05-05-2014 | 84       | 48 | 66 |        | 74  | 35 | 60        | 56 | 62   | 58 |    |
| 05-06-2014 | 80       | 50 | 65 |        | 88  | 53 | 61        | 58 | 64   | 59 |    |
| 05-07-2014 | 83       | 61 | 72 |        | 85  | 38 | 63        | 59 | 65   | 61 |    |
| 05-08-2014 | 84       | 65 | 74 |        | 75  | 40 | 64        | 61 | 66   | 62 |    |
| 05-09-2014 | 76       | 62 | 69 | 0.05   | 97  | 60 | 63        | 62 | 65   | 64 |    |
| 05-10-2014 | 74       | 58 | 66 | 0.75   | 97  | 68 | 63        | 62 | 65   | 64 |    |
| 05-11-2014 | 82       | 59 | 70 |        | 99  | 63 | 63        | 61 | 66   | 62 |    |
| 05-12-2014 | 86       | 67 | 76 |        | 89  | 57 | 66        | 63 | 68   | 65 |    |
| 05-13-2014 | 85       | 67 | 76 |        | 91  | 52 | 66        | 64 | 69   | 66 |    |
| 05-14-2014 | 82       | 62 | 72 | 2.39   | 99  | 61 | 66        | 64 | 68   | 66 |    |
| 05-15-2014 | 65       | 45 | 55 | 0.40   | 97  | 78 | 64        | 60 | 67   | 63 |    |
| 05-16-2014 | 58       | 40 | 49 | 0.06   | 100 | 46 | 60        | 58 | 62   | 60 |    |
| 05-17-2014 | 60       | 39 | 49 |        | 96  | 44 | 58        | 55 | 60   | 57 |    |
| 05-18-2014 | 66       | 39 | 52 |        | 96  | 42 | 58        | 54 | 60   | 56 |    |
| 05-19-2014 | 73       | 41 | 57 |        | 91  | 37 | 58        | 54 | 61   | 57 |    |
| 05-20-2014 | 81       | 55 | 68 |        | 85  | 50 | 61        | 57 | 63   | 59 |    |
| 05-21-2014 | 83       | 63 | 73 |        | 98  | 65 | 63        | 60 | 65   | 62 |    |
| 05-22-2014 | 83       | 63 | 73 | 1.95   | 98  | 54 | 64        | 61 | 68   | 64 |    |
| 05-23-2014 | 77       | 57 | 67 |        | 79  | 43 | 64        | 62 | 67   | 64 |    |
| 05-24-2014 | 77       | 50 | 63 |        | 94  | 45 | 63        | 60 | 66   | 63 |    |
| 05-25-2014 | 80       | 53 | 66 |        | 96  | 37 | 63        | 60 | 66   | 63 |    |
| 05-26-2014 | 87       | 57 | 72 |        | 92  | 50 | 70        | 60 | 67   | 63 |    |
| 05-27-2014 | 87       | 69 | 78 | 0.01   | 92  | 51 | 73        | 66 | 69   | 66 |    |
| 05-28-2014 | 86       | 65 | 75 | 0.05   | 97  | 55 | 73        | 68 | 69   | 67 |    |
| 05-29-2014 | 85       | 64 | 74 | 0.06   | 96  | 55 | 73        | 69 | 69   | 67 |    |
| 05-30-2014 | 85       | 65 | 75 |        | 98  | 58 | 74        | 69 | 70   | 67 |    |
| 05-31-2014 | 84       | 59 | 71 |        | 85  | 42 | 74        | 69 | 70   | 67 |    |

Summary for the period 5-1-2014 through 5-31-2014:

|                         | AIR TEMP |    |    | TOTAL<br>PRECIP | RH |    | SOIL TEMP |    |      |    | TOTAL<br>EVAP |
|-------------------------|----------|----|----|-----------------|----|----|-----------|----|------|----|---------------|
|                         | MX       | MN | AV |                 | MX | MN | GRASS     | MN | BARE | MX |               |
|                         | 77       | 55 | 66 | 5.72            | 91 | 50 | 64        | 61 | 65   | 62 |               |
| (Deviation from normal) | +2       | +0 | +1 | +1.25           |    |    |           |    |      |    |               |

# JUNE CLIMATOLOGICAL DATA, SPINDLETOP

| DATE       | AIR TEMP |    |    | PRECIP | RH  |    | SOIL TEMP |    |      |    | EVAP |
|------------|----------|----|----|--------|-----|----|-----------|----|------|----|------|
|            | MX       | MN | AV |        | MX  | MN | GRASS     | MN | BARE | MN |      |
| 06-01-2014 | 88       | 58 | 73 | 0.14   | 88  | 58 | 74        | 68 | 70   | 66 |      |
| 06-02-2014 | 80       | 70 | 75 | 0.01   | 83  | 64 | 72        | 70 | 69   | 68 |      |
| 06-03-2014 | 86       | 70 | 78 |        | 94  | 62 | 74        | 70 | 71   | 68 |      |
| 06-04-2014 | 85       | 70 | 77 | 0.06   | 96  | 63 | 73        | 71 | 71   | 69 |      |
| 06-05-2014 | 79       | 60 | 69 |        | 90  | 51 | 72        | 70 | 70   | 69 |      |
| 06-06-2014 | 82       | 56 | 69 |        | 94  | 35 | 72        | 67 | 70   | 66 |      |
| 06-07-2014 | 84       | 55 | 69 |        | 91  | 37 | 72        | 67 | 70   | 66 |      |
| 06-08-2014 | 74       | 59 | 66 |        | 99  | 72 | 71        | 67 | 69   | 67 |      |
| 06-09-2014 | 76       | 54 | 65 |        | 100 | 60 | 68        | 65 | 67   | 65 |      |
| 06-10-2014 | 86       | 63 | 74 | 0.92   | 98  | 55 | 70        | 66 | 69   | 66 |      |
| 06-11-2014 | 80       | 67 | 73 | 0.05   | 96  | 61 | 69        | 68 | 70   | 67 |      |
| 06-12-2014 | 81       | 65 | 73 |        | 99  | 53 | 70        | 67 | 70   | 68 |      |
| 06-13-2014 | 79       | 61 | 70 | 0.01   | 92  | 43 | 69        | 68 | 69   | 68 |      |
| 06-14-2014 | 78       | 53 | 65 |        | 77  | 32 | 68        | 65 | 70   | 65 |      |
| 06-15-2014 | 89       | 55 | 72 |        | 89  | 41 | 69        | 64 | 73   | 66 |      |
| 06-16-2014 | 91       | 71 | 81 |        | 86  | 45 | 70        | 67 | 76   | 70 |      |
| 06-17-2014 | 92       | 72 | 82 |        | 79  | 45 | 71        | 68 | 77   | 72 |      |
| 06-18-2014 | 92       | 72 | 82 |        | 90  | 47 | 75        | 69 | 79   | 74 |      |
| 06-19-2014 | 91       | 71 | 81 | 0.49   | 95  | 51 | 75        | 71 | 78   | 75 |      |
| 06-20-2014 | 90       | 68 | 79 | 0.20   | 98  | 53 | 77        | 72 | 80   | 75 |      |
| 06-21-2014 | 88       | 70 | 79 |        | 99  | 48 | 78        | 73 | 80   | 75 |      |
| 06-22-2014 | 91       | 65 | 78 | 0.03   | 95  | 39 | 78        | 72 | 80   | 75 |      |
| 06-23-2014 | 92       | 69 | 80 |        | 89  | 38 | 78        | 74 | 81   | 76 |      |
| 06-24-2014 | 87       | 73 | 80 | 0.40   | 96  | 54 | 76        | 74 | 79   | 76 |      |
| 06-25-2014 | 87       | 72 | 79 | 0.11   | 96  | 60 | 77        | 73 | 80   | 76 |      |
| 06-26-2014 | 89       | 68 | 78 |        | 96  | 45 | 78        | 73 | 81   | 76 |      |
| 06-27-2014 | 88       | 68 | 78 | 0.13   | 94  | 48 | 77        | 74 | 80   | 76 |      |
| 06-28-2014 | 81       | 71 | 76 | 0.15   | 94  | 73 | 77        | 74 | 79   | 76 |      |
| 06-29-2014 | 85       | 72 | 78 | T      | 95  | 66 | 77        | 74 | 80   | 76 |      |
| 06-30-2014 | 87       | 71 | 79 | 0.23   | 97  | 64 | 78        | 74 | 80   | 77 |      |

Summary for the period 6-1-2014 through 6-30-2014:

|                         | AIR TEMP |    |    | TOTAL<br>PRECIP | RH |    | SOIL TEMP |    |      |    | TOTAL<br>EVAP |
|-------------------------|----------|----|----|-----------------|----|----|-----------|----|------|----|---------------|
|                         | MX       | MN | AV |                 | MX | MN | GRASS     | MN | BARE | MN |               |
|                         | 85       | 66 | 75 | 2.93            | 93 | 52 | 74        | 70 | 75   | 71 |               |
| (Deviation from normal) | +2       | +4 | +3 | -0.73           |    |    |           |    |      |    |               |

"T" indicates Trace amount of Precip (too small to measure).

# JULY CLIMATOLOGICAL DATA, SPINDLETOP

| DATE       | AIR TEMP |    |    | PRECIP | RH |    | SOIL TEMP |      |    |    | EVAP |
|------------|----------|----|----|--------|----|----|-----------|------|----|----|------|
|            | MX       | MN | AV |        | MX | MN | GRASS     | BARE | MX | MN |      |
| 07-01-2014 | 91       | 70 | 80 | 0.05   | 97 | 57 | 79        | 75   | 82 | 78 |      |
| 07-02-2014 | 86       | 69 | 77 |        | 97 | 51 | 80        | 74   | 82 | 78 |      |
| 07-03-2014 | 77       | 61 | 69 |        | 90 | 53 | 77        | 73   | 80 | 76 |      |
| 07-04-2014 | 80       | 54 | 67 |        | 96 | 34 | 76        | 70   | 77 | 73 |      |
| 07-05-2014 | 84       | 55 | 69 |        | 88 | 34 | 76        | 69   | 77 | 72 |      |
| 07-06-2014 | 87       | 65 | 76 |        | 74 | 40 | 76        | 71   | 78 | 73 |      |
| 07-07-2014 | 90       | 70 | 80 | 0.25   | 79 | 37 | 76        | 72   | 78 | 74 |      |
| 07-08-2014 | 87       | 72 | 79 |        | 86 | 49 | 76        | 73   | 78 | 75 |      |
| 07-09-2014 | 87       | 67 | 77 |        | 96 | 37 | 77        | 72   | 79 | 75 |      |
| 07-10-2014 | 87       | 63 | 75 |        | 92 | 38 | 77        | 72   | 78 | 74 |      |
| 07-11-2014 | 90       | 61 | 75 |        | 92 | 36 | 78        | 72   | 79 | 73 |      |
| 07-12-2014 | 90       | 63 | 76 |        | 94 | 40 | 77        | 73   | 78 | 74 |      |
| 07-13-2014 | 94       | 75 | 84 | 0.01   | 92 | 45 | 79        | 74   | 80 | 76 |      |
| 07-14-2014 | 86       | 69 | 77 | 0.20   | 96 | 57 | 78        | 75   | 80 | 77 |      |
| 07-15-2014 | 78       | 58 | 68 | 0.10   | 94 | 39 | 77        | 73   | 78 | 75 |      |
| 07-16-2014 | 77       | 52 | 64 |        | 97 | 44 | 74        | 69   | 75 | 71 |      |
| 07-17-2014 | 81       | 53 | 67 |        | 96 | 36 | 74        | 69   | 74 | 70 |      |
| 07-18-2014 | 71       | 60 | 65 | 0.43   | 98 | 65 | 72        | 69   | 73 | 71 |      |
| 07-19-2014 | 76       | 64 | 70 | 0.05   | 98 | 78 | 71        | 68   | 73 | 70 |      |
| 07-20-2014 | 82       | 69 | 75 | 0.04   | 98 | 69 | 75        | 70   | 76 | 72 |      |
| 07-21-2014 | 90       | 66 | 78 |        | 99 | 46 | 78        | 71   | 79 | 73 |      |
| 07-22-2014 | 92       | 69 | 80 |        | 97 | 50 | 79        | 73   | 80 | 75 |      |
| 07-23-2014 | 89       | 71 | 80 | 0.45   | 96 | 49 | 78        | 75   | 79 | 76 |      |
| 07-24-2014 | 78       | 64 | 71 |        | 97 | 51 | 76        | 73   | 78 | 75 |      |
| 07-25-2014 | 85       | 55 | 70 |        | 98 | 39 | 76        | 69   | 77 | 71 |      |
| 07-26-2014 | 88       | 65 | 76 | 0.15   | 87 | 50 | 76        | 72   | 77 | 73 |      |
| 07-27-2014 | 86       | 68 | 77 | 1.45   | 98 | 65 | 75        | 71   | 76 | 72 |      |
| 07-28-2014 | 73       | 61 | 67 |        | 86 | 64 | 73        | 70   | 75 | 72 |      |
| 07-29-2014 | 73       | 52 | 62 |        | 96 | 50 | 72        | 67   | 73 | 70 |      |
| 07-30-2014 | 81       | 58 | 69 |        | 90 | 43 | 73        | 68   | 74 | 69 |      |
| 07-31-2014 | 85       | 59 | 72 |        | 95 | 36 | 75        | 68   | 76 | 70 |      |

Summary for the period 7-1-2014 through 7-31-2014:

|                         | AIR TEMP |    |    | TOTAL<br>PRECIP | RH |    | SOIL TEMP |      |    |    | TOTAL<br>EVAP |
|-------------------------|----------|----|----|-----------------|----|----|-----------|------|----|----|---------------|
|                         | MX       | MN | AV |                 | MX | MN | GRASS     | BARE | MX | MN |               |
|                         | 84       | 63 | 74 | 3.18            | 93 | 48 | 76        | 71   | 77 | 73 |               |
| (Deviation from normal) | -2       | -2 | -2 | -1.82           |    |    |           |      |    |    |               |

# AUGUST CLIMATOLOGICAL DATA, SPINDLETOP

| DATE       | AIR TEMP |    |    | PRECIP | RH |    | SOIL TEMP |      |    |    | EVAP |
|------------|----------|----|----|--------|----|----|-----------|------|----|----|------|
|            | MX       | MN | AV |        | MX | MN | GRASS     | BARE | MX | MN |      |
| 08-01-2014 | 86       | 61 | 73 |        | 94 | 35 | 76        | 70   | 76 | 71 |      |
| 08-02-2014 | 85       | 60 | 72 | T      | 98 | 47 | 75        | 71   | 75 | 72 |      |
| 08-03-2014 | 85       | 57 | 71 |        | 99 | 43 | 75        | 70   | 76 | 71 |      |
| 08-04-2014 | 86       | 61 | 73 |        | 98 | 43 | 75        | 70   | 75 | 72 |      |
| 08-05-2014 | 88       | 62 | 75 |        | 97 | 38 | 76        | 71   | 76 | 72 |      |
| 08-06-2014 | 86       | 66 | 76 | 0.20   | 92 | 55 | 75        | 72   | 76 | 73 |      |
| 08-07-2014 | 83       | 66 | 74 |        | 94 | 50 | 76        | 72   | 77 | 73 |      |
| 08-08-2014 | 74       | 66 | 70 | 0.30   | 96 | 76 | 73        | 72   | 75 | 73 |      |
| 08-09-2014 | 80       | 70 | 75 | 0.75   | 98 | 76 | 74        | 71   | 76 | 73 |      |
| 08-10-2014 | 83       | 71 | 77 | 0.55   | 93 | 71 | 76        | 75   | 99 |    |      |
| 08-11-2014 | 84       | 71 | 77 | 0.05   | 97 | 70 | 76        | 74   | 78 | 75 |      |
| 08-12-2014 | 80       | 62 | 71 | 0.01   | 98 | 56 | 75        | 73   | 77 | 75 |      |
| 08-13-2014 | 79       | 59 | 69 |        | 97 | 48 | 74        | 70   | 75 | 72 |      |
| 08-14-2014 | 82       | 61 | 71 | 0.01   | 92 | 52 | 73        | 69   | 74 | 71 |      |
| 08-15-2014 | 82       | 60 | 71 |        | 96 | 35 | 74        | 70   | 75 | 71 |      |
| 08-16-2014 | 84       | 56 | 70 | 0.01   | 92 | 53 | 73        | 69   | 74 | 70 |      |
| 08-17-2014 | 76       | 70 | 73 | 0.30   | 96 | 82 | 72        | 71   | 74 | 73 |      |
| 08-18-2014 | 82       | 71 | 76 | 0.10   | 98 | 76 | 74        | 72   | 76 | 73 |      |
| 08-19-2014 | 88       | 70 | 79 |        | 98 | 58 | 76        | 72   | 77 | 74 |      |
| 08-20-2014 | 90       | 67 | 78 | 0.53   | 90 | 56 | 79        | 75   |    |    |      |
| 08-21-2014 | 87       | 70 | 78 | 0.15   | 95 | 68 | 76        | 73   | 77 | 75 |      |
| 08-22-2014 | 90       | 73 | 81 | 0.27   | 98 | 65 | 77        | 74   | 78 | 76 |      |
| 08-23-2014 | 92       | 70 | 81 | 1.85   | 99 | 56 | 79        | 74   | 79 | 76 |      |
| 08-24-2014 | 90       | 72 | 81 | 0.40   | 98 | 55 | 80        | 76   | 80 | 77 |      |
| 08-25-2014 | 90       | 71 | 80 |        | 96 | 56 | 80        | 76   | 80 | 77 |      |
| 08-26-2014 | 89       | 68 | 78 |        | 94 | 52 | 79        | 76   | 80 | 77 |      |
| 08-27-2014 | 94       | 67 | 80 | 0.65   | 98 | 47 | 80        | 76   | 80 | 76 |      |
| 08-28-2014 | 87       | 69 | 78 |        | 99 | 58 | 78        | 76   | 79 | 76 |      |
| 08-29-2014 | 92       | 66 | 79 |        | 93 | 47 | 79        | 75   | 80 | 76 |      |
| 08-30-2014 | 90       | 71 | 80 | 0.05   | 96 | 50 | 78        | 76   | 79 | 77 |      |
| 08-31-2014 | 76       | 72 | 74 | 0.35   | 97 | 86 | 77        | 76   | 78 | 77 |      |

Summary for the period 8-1-2014 through 8-31-2014:

|                           | AIR TEMP |    |    | TOTAL<br>PRECIP | RH |    | SOIL TEMP |      |    |    | TOTAL<br>EVAP |
|---------------------------|----------|----|----|-----------------|----|----|-----------|------|----|----|---------------|
|                           | MX       | MN | AV |                 | MX | MN | GRASS     | BARE | MX | MN |               |
|                           | 85       | 66 | 76 | 6.53            | 96 | 57 | 76        | 73   | 78 | 74 |               |
| (Deviation from normal)+1 | +1       | +4 | +3 | +2.60           |    |    |           |      |    |    |               |

"T" indicates Trace amount of Precip (too small to measure).

# SEPTEMBER CLIMATOLOGICAL DATA, SPINDLETOP

| DATE       | AIR TEMP |    |    | PRECIP | RH  |    | SOIL TEMP |    |      |    | EVAP |
|------------|----------|----|----|--------|-----|----|-----------|----|------|----|------|
|            | MX       | MN | AV |        | MX  | MN | GRASS     | MN | BARE | MX |      |
| 09-01-2014 | 86       | 74 | 80 | 0.18   | 96  | 65 | 77        | 75 | 78   | 77 |      |
| 09-02-2014 | 86       | 70 | 78 | 0.24   | 99  | 66 | 76        | 75 | 78   | 77 |      |
| 09-03-2014 | 86       | 66 | 76 |        | 99  | 60 | 76        | 74 | 78   | 75 |      |
| 09-04-2014 | 91       | 67 | 79 |        | 99  | 50 | 77        | 74 | 79   | 75 |      |
| 09-05-2014 | 92       | 71 | 81 |        | 97  | 50 | 78        | 75 | 79   | 76 |      |
| 09-06-2014 | 87       | 67 | 77 |        | 95  | 54 | 77        | 75 | 80   | 77 |      |
| 09-07-2014 | 78       | 60 | 69 |        | 93  | 35 | 75        | 72 | 78   | 75 |      |
| 09-08-2014 | 86       | 57 | 71 |        | 95  | 51 | 74        | 70 | 76   | 72 |      |
| 09-09-2014 | 87       | 63 | 75 |        | 99  | 52 | 74        | 71 | 76   | 73 |      |
| 09-10-2014 | 86       | 68 | 77 |        | 93  | 61 | 73        | 72 | 75   | 74 |      |
| 09-11-2014 | 76       | 61 | 68 | 2.95   | 99  | 87 | 73        | 71 | 75   | 73 |      |
| 09-12-2014 | 69       | 59 | 64 |        | 93  | 70 | 71        | 69 | 73   | 72 |      |
| 09-13-2014 | 68       | 51 | 59 |        | 94  | 54 | 69        | 67 | 72   | 71 |      |
| 09-14-2014 | 73       | 47 | 60 |        | 96  | 46 | 69        | 65 | 71   | 68 |      |
| 09-15-2014 | 77       | 48 | 62 | 0.25   | 97  | 50 | 69        | 65 | 70   | 67 |      |
| 09-16-2014 | 70       | 51 | 60 |        | 98  | 70 | 69        | 67 | 70   | 69 |      |
| 09-17-2014 | 73       | 48 | 60 | 0.01   | 100 | 49 | 69        | 64 | 70   | 66 |      |
| 09-18-2014 | 74       | 55 | 64 |        | 91  | 48 | 70        | 66 | 70   | 67 |      |
| 09-19-2014 | 79       | 52 | 65 |        | 92  | 44 | 70        | 65 | 70   | 67 |      |
| 09-20-2014 | 83       | 63 | 73 |        | 95  | 56 | 71        | 67 | 71   | 68 |      |
| 09-21-2014 | 82       | 57 | 69 |        | 92  | 36 | 71        | 69 | 72   | 70 |      |
| 09-22-2014 | 70       | 49 | 59 |        | 96  | 43 | 74        | 73 | 70   | 67 |      |
| 09-23-2014 | 73       | 44 | 58 |        | 95  | 38 | 67        | 63 | 68   | 64 |      |
| 09-24-2014 | 78       | 47 | 62 |        | 92  | 30 | 67        | 62 | 67   | 63 |      |
| 09-25-2014 | 82       | 50 | 66 |        | 96  | 50 | 68        | 63 | 68   | 64 |      |
| 09-26-2014 | 83       | 55 | 69 |        | 99  | 35 | 68        | 64 | 69   | 65 |      |
| 09-27-2014 | 84       | 57 | 70 |        | 91  | 42 | 69        | 65 | 69   | 66 |      |
| 09-28-2014 | 85       | 58 | 71 |        | 98  | 42 | 70        | 65 | 69   | 66 |      |
| 09-29-2014 | 84       | 59 | 71 |        | 92  | 36 | 70        | 67 | 70   | 67 |      |
| 09-30-2014 | 84       | 55 | 69 |        | 95  | 36 | 69        | 65 | 69   | 66 |      |

Summary for the period 9-1-2014 through 9-30-2014:

|                           | AIR TEMP |    |    | TOTAL<br>PRECIP | RH |    | SOIL TEMP |    |      |    | TOTAL<br>EVAP |
|---------------------------|----------|----|----|-----------------|----|----|-----------|----|------|----|---------------|
|                           | MX       | MN | AV |                 | MX | MN | GRASS     | MN | BARE | MX |               |
|                           | 80       | 58 | 69 | 3.63            | 96 | 50 | 72        | 68 | 73   | 70 |               |
| (Deviation from normal)+3 | +3       | +2 | +2 | +0.43           |    |    |           |    |      |    |               |



# OCTOBER CLIMATOLOGICAL DATA, SPINDLETOP

| DATE       | AIR TEMP |    |    | PRECIP | RH  |    | SOIL TEMP |    |      |    | EVAP |
|------------|----------|----|----|--------|-----|----|-----------|----|------|----|------|
|            | MX       | MN | AV |        | MX  | MN | GRASS     | MN | BARE | MN |      |
| 10-01-2014 | 83       | 53 | 68 |        | 100 | 48 | 69        | 66 | 69   | 66 |      |
| 10-02-2014 | 88       | 62 | 75 |        | 93  | 41 | 70        | 66 | 70   | 67 |      |
| 10-03-2014 | 74       | 48 | 61 | 0.35   | 96  | 69 | 68        | 66 | 69   | 67 |      |
| 10-04-2014 | 56       | 41 | 48 |        | 92  | 37 | 65        | 60 | 67   | 61 |      |
| 10-05-2014 | 64       | 37 | 50 | 0.01   | 84  | 34 | 60        | 57 | 61   | 59 |      |
| 10-06-2014 | 63       | 49 | 56 | 0.26   | 97  | 76 | 60        | 59 | 61   | 60 |      |
| 10-07-2014 | 66       | 50 | 58 | 0.20   | 99  | 84 | 61        | 59 | 62   | 61 |      |
| 10-08-2014 | 72       | 49 | 60 |        | 99  | 38 | 62        | 59 | 63   | 61 |      |
| 10-09-2014 | 68       | 47 | 57 |        | 95  | 66 | 61        | 58 | 62   | 60 |      |
| 10-10-2014 | 60       | 54 | 57 | 1.27   | 98  | 92 | 61        | 60 | 62   | 62 |      |
| 10-11-2014 | 57       | 52 | 54 | 0.01   | 97  | 76 | 60        | 59 | 62   | 61 |      |
| 10-12-2014 | 74       | 52 | 63 | 0.01   | 96  | 71 | 62        | 58 | 63   | 60 |      |
| 10-13-2014 | 79       | 65 | 72 | 0.55   | 98  | 64 | 64        | 62 | 66   | 63 |      |
| 10-14-2014 | 70       | 57 | 63 | 1.47   | 97  | 71 | 64        | 63 | 65   | 64 |      |
| 10-15-2014 | 59       | 54 | 56 | 0.16   | 98  | 77 | 63        | 61 | 64   | 63 |      |
| 10-16-2014 | 60       | 53 | 56 | 0.01   | 99  | 84 | 61        | 60 | 63   | 62 |      |
| 10-17-2014 | 73       | 50 | 61 |        | 96  | 46 | 61        | 59 | 63   | 61 |      |
| 10-18-2014 | 57       | 48 | 52 |        | 90  | 65 | 60        | 58 | 62   | 61 |      |
| 10-19-2014 | 61       | 45 | 53 |        | 89  | 47 | 60        | 57 | 61   | 60 |      |
| 10-20-2014 | 64       | 45 | 54 | 0.30   | 90  | 63 | 58        | 56 | 60   | 58 |      |
| 10-21-2014 | 56       | 46 | 51 |        | 95  | 60 | 57        | 56 | 59   | 59 |      |
| 10-22-2014 | 57       | 43 | 50 |        | 93  | 63 | 56        | 55 | 58   | 57 |      |
| 10-23-2014 | 62       | 46 | 54 |        | 92  | 54 | 57        | 55 | 59   | 57 |      |
| 10-24-2014 | 66       | 40 | 53 |        | 99  | 38 | 57        | 54 | 59   | 56 |      |
| 10-25-2014 | 73       | 46 | 59 |        | 88  | 63 | 57        | 54 | 59   | 56 |      |
| 10-26-2014 | 72       | 47 | 59 |        | 92  | 29 | 58        | 55 | 60   | 58 |      |
| 10-27-2014 | 81       | 52 | 66 |        | 82  | 45 | 60        | 56 | 62   | 58 |      |
| 10-28-2014 | 74       | 52 | 63 | 0.70   | 96  | 64 | 61        | 59 | 63   | 61 |      |
| 10-29-2014 | 63       | 43 | 53 |        | 98  | 37 | 60        | 57 | 61   | 59 |      |
| 10-30-2014 | 56       | 35 | 45 |        | 98  | 53 | 57        | 54 | 59   | 56 |      |
| 10-31-2014 | 47       | 35 | 41 | 0.25   | 98  | 89 | 54        | 52 | 56   | 55 |      |

Summary for the period 10-1-2014 through 10-31-2014:

|                         | AIR TEMP |    |    | TOTAL<br>PRECIP | RH |    | SOIL TEMP |    |      |    | TOTAL<br>EVAP |
|-------------------------|----------|----|----|-----------------|----|----|-----------|----|------|----|---------------|
|                         | MX       | MN | AV |                 | MX | MN | GRASS     | MN | BARE | MN |               |
|                         | 66       | 48 | 57 | 5.55            | 95 | 59 | 61        | 58 | 62   | 60 |               |
| (Deviation from normal) | -1       | +3 | +1 | +2.98           |    |    |           |    |      |    |               |

# MARCH-OCTOBER SUMMARY

Spindletop Monthly Climate Data(03-2014 to 10-2014)

| ----- AIR TEMPERATURE ----- |       |         |     |     |         |     |                         |             |      |                    | -- SOD -- |  |
|-----------------------------|-------|---------|-----|-----|---------|-----|-------------------------|-------------|------|--------------------|-----------|--|
| YEAR                        | MONTH | AVERAGE |     |     | EXTREME |     | AVG DEPART<br>FROM NORM | NO. OF DAYS |      | 4" TEMP<br>AVERAGE |           |  |
|                             |       | MAX     | MIN | AVG | MAX     | MIN |                         | >=90        | <=32 | MAX                | MIN       |  |
| 2014                        | Mar   | 50      | 28  | 39  | 70      | 7   | -5                      | 0           | 21   | 43                 | 39        |  |
| 2014                        | Apr   | 69      | 47  | 58  | 83      | 27  | +3                      | 0           | 1    | 57                 | 53        |  |
| 2014                        | May   | 77      | 55  | 66  | 87      | 39  | +2                      | 0           | 0    | 64                 | 61        |  |
| 2014                        | Jun   | 85      | 66  | 75  | 92      | 53  | +3                      | 7           | 0    | 74                 | 70        |  |
| 2014                        | Jul   | 84      | 63  | 74  | 94      | 52  | -2                      | 7           | 0    | 76                 | 71        |  |
| 2014                        | Aug   | 85      | 66  | 76  | 94      | 56  | +1                      | 8           | 0    | 76                 | 73        |  |
| 2014                        | Sep   | 80      | 58  | 69  | 92      | 44  | +1                      | 2           | 0    | 72                 | 68        |  |
| 2014                        | Oct   | 66      | 48  | 57  | 88      | 35  | +0                      | 0           | 0    | 61                 | 58        |  |

| ----- PRECIPITATION ----- |       |           |                |            |           |                  |       |                |                   |
|---------------------------|-------|-----------|----------------|------------|-----------|------------------|-------|----------------|-------------------|
| YEAR                      | MONTH | DEPARTURE |                | CUMULATIVE |           | GREATEST         |       | % RAIN<br>DAYS | NO. DAYS<br>>=.01 |
|                           |       | TOTAL     | FROM<br>NORMAL | TOTAL      | DEPARTURE | 24 HOUR<br>TOTAL | TOTAL |                |                   |
| 2014                      | Mar   | 3.08      | -1.32          | 3.08       | -1.32     | 1.01             | 32    | 10             |                   |
| 2014                      | Apr   | 5.77      | +1.89          | 8.85       | +0.57     | 1.57             | 47    | 14             |                   |
| 2014                      | May   | 5.72      | +1.25          | 14.57      | +1.82     | 2.39             | 29    | 9              |                   |
| 2014                      | Jun   | 2.93      | -0.73          | 17.50      | +1.09     | 0.92             | 47    | 14             |                   |
| 2014                      | Jul   | 3.18      | -1.82          | 20.68      | -0.73     | 1.45             | 35    | 11             |                   |
| 2014                      | Aug   | 6.53      | +2.60          | 27.21      | +1.87     | 1.85             | 58    | 18             |                   |
| 2014                      | Sep   | 3.63      | +0.43          | 30.84      | +2.30     | 2.95             | 17    | 5              |                   |
| 2014                      | Oct   | 5.55      | +2.98          | 36.39      | +5.28     | 1.47             | 45    | 14             |                   |

Plant and Soil Science, U of KY  
Weed Science Research

NO TILL CORN

Trial ID: C14001  
Protocol ID: HBI001B3NT-SYN  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: SCOTT CULLY

|                               |                |                 |                |              |
|-------------------------------|----------------|-----------------|----------------|--------------|
| Pest Type                     | W Weed         | W Weed          | W Weed         |              |
| Pest Code                     | SETFA          | AMBTR           | SETFA          |              |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Setaria faberi |              |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Giant foxtail  |              |
| Crop Code                     | ZEAMX          |                 | ZEAMX          |              |
| BBCH Scale                    | BCOR           |                 | BCOR           |              |
| Crop Scientific Name          | Zea mays       |                 | Zea mays       |              |
| Crop Name                     | Corn           |                 | Corn           |              |
| Crop Variety                  |                |                 |                |              |
| Description                   |                |                 | AT POST APPL   | AT POST APPL |
| Part Rated                    |                |                 |                |              |
| Rating Date                   | 5-23-2014      | 5-23-2014       | 5-23-2014      | 5-30-2014    |
| Rating Type                   | INJURY         | CONTROL         | CONTROL        | INJURY       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT        | PERCENT      |
| Rating Timing                 | 2 WEEK         | 2 WEEK          | 2 WEEK         | 3 WEEK       |
| Days After First/Last Applic. | 14 14          | 14 14           | 14 14          | 21 21        |

| Trt No. | Treatment Name   | Rate       | Rate Unit | Growth Stage | 1 | 2  | 3  | 4 | 5  |
|---------|------------------|------------|-----------|--------------|---|----|----|---|----|
| 1       | UNTREATED        |            |           |              | 0 | 0  | 0  | 0 | 0  |
| 2       | ACURON           | 2.5 qt/a   |           | PRE          | 0 | 99 | 99 | 0 | 91 |
| 3       | ACURON           | 2.5 qt/a   |           | PRE          | 0 | 99 | 99 | 0 | 92 |
|         | AATREX           | 1 qt/a     |           | PRE          |   |    |    |   |    |
| 4       | ACURON           | 2.5 qt/a   |           | PRE          | 0 | 99 | 99 | 0 | 93 |
|         | N-PAK AMS LIQUID | 2.5 % v/v  |           | 12C          |   |    |    |   |    |
|         | STATUS           | 5 oz wt/a  |           | 12C          |   |    |    |   |    |
|         | TOUCHDOWN TOTAL  | 30 fl oz/a |           | 12C          |   |    |    |   |    |
| 5       | ANTHEM ATZ       | 2.25 pt/a  |           | PRE          | 0 | 99 | 99 | 0 | 98 |
| 6       | SURESTART        | 2.5 pt/a   |           | PRE          | 0 | 99 | 99 | 0 | 75 |
| 7       | VERDICT          | 5 fl oz/a  |           | PRE          | 0 | 99 | 99 | 0 | 48 |
| 8       | CORVUS HERBICIDE | 5.6 oz/a   |           | PRE          | 0 | 99 | 99 | 0 | 94 |
|         | AATREX           | 1 qt/a     |           | PRE          |   |    |    |   |    |
| 9       | ACURON           | 1.5 qt/a   |           | PRE          | 0 | 99 | 99 | 0 | 99 |
|         | N-PAK AMS LIQUID | 2.5 % v/v  |           | 12C          |   |    |    |   |    |
|         | HALEX GT         | 3.6 pt/a   |           | 12C          |   |    |    |   |    |
|         | AATREX           | 1.5 pt/a   |           | 12C          |   |    |    |   |    |
|         | NIS              | 0.25 % v/v |           | 12C          |   |    |    |   |    |
| 10      | ACURON           | 1.25 qt/a  |           | PRE          | 0 | 99 | 99 | 0 | 95 |
|         | ACURON           | 1.25 qt/a  |           | 12C          |   |    |    |   |    |
|         | UAN-28%          | 2.5 % v/v  |           | 12C          |   |    |    |   |    |
|         | NIS              | 0.25 % v/v |           | 12C          |   |    |    |   |    |
| 11      | ACURON           | 1.25 qt/a  |           | PRE          | 0 | 99 | 99 | 0 | 99 |
|         | ACURON           | 1.25 qt/a  |           | 12C          |   |    |    |   |    |
|         | TOUCHDOWN TOTAL  | 30 fl oz/a |           | 12C          |   |    |    |   |    |
|         | AMS              | 2.5 % v/v  |           | 12C          |   |    |    |   |    |
| 12      | LEXAR EZ         | 3 qt/a     |           | PRE          | 0 | 99 | 99 | 0 | 92 |
| 13      | LEXAR EZ         | 3 qt/a     |           | PRE          | 0 | 99 | 99 | 0 | 95 |
|         | PRINCEP          | 1 lb ai/a  |           | PRE          |   |    |    |   |    |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |                    |                |                 |           |                           |        |        |        |
|-------------------------------|--------------------|----------------|-----------------|-----------|---------------------------|--------|--------|--------|
| Pest Type                     |                    | W Weed         | W Weed          |           | W Weed                    |        |        |        |
| Pest Code                     |                    | SETFA          | AMBTR           |           | SETFA                     |        |        |        |
| Pest Scientific Name          |                    | Setaria faberi | Ambrosia trifi> |           | Setaria faberi            |        |        |        |
| Pest Name                     |                    | Giant foxtail  | Giant ragweed   |           | Giant foxtail             |        |        |        |
| Crop Code                     |                    | ZEAMX          |                 |           | ZEAMX                     |        |        |        |
| BBCH Scale                    |                    | BCOR           |                 |           | BCOR                      |        |        |        |
| Crop Scientific Name          |                    | Zea mays       |                 |           | Zea mays                  |        |        |        |
| Crop Name                     |                    | Corn           |                 |           | Corn                      |        |        |        |
| Crop Variety                  |                    |                |                 |           |                           |        |        |        |
| Description                   |                    |                |                 |           | AT POST APPL AT POST APPL |        |        |        |
| Part Rated                    |                    |                |                 |           |                           |        |        |        |
| Rating Date                   |                    | 5-23-2014      | 5-23-2014       | 5-23-2014 | 5-30-2014                 |        |        |        |
| Rating Type                   |                    | INJURY         | CONTROL         | CONTROL   | INJURY                    |        |        |        |
| Rating Unit                   |                    | PERCENT        | PERCENT         | PERCENT   | PERCENT                   |        |        |        |
| Rating Timing                 |                    | 2 WEEK         | 2 WEEK          | 2 WEEK    | 3 WEEK                    |        |        |        |
| Days After First/Last Applic. |                    | 14 14          | 14 14           | 14 14     | 21 21                     |        |        |        |
| Trt No.                       | Treatment Name     | Rate           | Growth Stage    | 1         | 2                         | 3      | 4      | 5      |
| 14                            | LEXAR EZ           | 1.5 qt/a       | PRE             | 0         | 99                        | 99     | 0      | 98     |
|                               | HALEX GT           | 3.6 pt/a       | 12C             |           |                           |        |        |        |
|                               | AATREX             | 1 pt/a         | 12C             |           |                           |        |        |        |
|                               | AMS                | 1 % v/v        | 12C             |           |                           |        |        |        |
|                               | NIS                | 0.25 % v/v     | 12C             |           |                           |        |        |        |
|                               | LSD (P=.05)        |                |                 | 0.0       | 0.0                       | 0.0    | 0.0    | 20.7   |
|                               | Standard Deviation |                |                 | 0.0       | 0.0                       | 0.0    | 0.0    | 12.3   |
|                               | CV                 |                |                 | 0.0       | 0.0                       | 0.0    | 0.0    | 14.76  |
|                               | Replicate F        |                |                 | 0.000     | 0.000                     | 0.000  | 0.000  | 1.331  |
|                               | Replicate Prob(F)  |                |                 | 1.0000    | 1.0000                    | 1.0000 | 1.0000 | 0.2816 |
|                               | Treatment F        |                |                 | 0.000     | 0.000                     | 0.000  | 0.000  | 14.947 |
|                               | Treatment Prob(F)  |                |                 | 1.0000    | 1.0000                    | 1.0000 | 1.0000 | 0.0001 |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |   |                |                 |          |
|-------------------------------|---|----------------|-----------------|----------|
| Pest Type                     | W Weed  | W Weed         | W Weed          |          |
| Pest Code                     | AMBTR   | SETFA          | AMBTR           |          |
| Pest Scientific Name          | Ambrosia trifi>                                     | Setaria faberi | Ambrosia trifi> |          |
| Pest Name                     | Giant ragweed                                       | Giant foxtail  | Giant ragweed   |          |
| Crop Code                     |   | ZEAMX          |                 |          |
| BBCH Scale                    |   | BCOR           |                 |          |
| Crop Scientific Name          |   | Zea mays       |                 |          |
| Crop Name                     |   | Corn           |                 |          |
| Crop Variety                  |   |                |                 |          |
| Description                   | AT POST APPL AT POST APPL AT POST APPL AT POST APPL |                |                 |          |
| Part Rated                    |   |                |                 |          |
| Rating Date                   | 5-30-2014   | 6-6-2014       | 6-6-2014        | 6-6-2014 |
| Rating Type                   | CONTROL   | INJURY         | CONTROL         | CONTROL  |
| Rating Unit                   | PERCENT   | PERCENT        | PERCENT         | PERCENT  |
| Rating Timing                 | 3 WEEK  | 3 WEEK         | 3 WEEK          | 3 WEEK   |
| Days After First/Last Applic. | 21 21   | 28 7           | 28 7            | 28 7     |

| Trt No. | Treatment Name   | Rate       | Rate Unit | Growth Stage | 6  | 7 | 8  | 9  |
|---------|------------------|------------|-----------|--------------|----|---|----|----|
| 1       | UNTREATED        |            |           |              | 0  | 0 | 0  | 0  |
| 2       | ACURON           | 2.5 qt/a   |           | PRE          | 93 | 0 | 99 | 99 |
| 3       | ACURON           | 2.5 qt/a   |           | PRE          | 95 | 0 | 99 | 99 |
|         | AATREX           | 1 qt/a     |           | PRE          |    |   |    |    |
| 4       | ACURON           | 2.5 qt/a   |           | PRE          | 99 | 0 | 99 | 99 |
|         | N-PAK AMS LIQUID | 2.5 % v/v  |           | 12C          |    |   |    |    |
|         | STATUS           | 5 oz wt/a  |           | 12C          |    |   |    |    |
|         | TOUCHDOWN TOTAL  | 30 fl oz/a |           | 12C          |    |   |    |    |
| 5       | ANTHEM ATZ       | 2.25 pt/a  |           | PRE          | 88 | 0 | 99 | 99 |
| 6       | SURESTART        | 2.5 pt/a   |           | PRE          | 89 | 0 | 99 | 99 |
| 7       | VERDICT          | 5 fl oz/a  |           | PRE          | 87 | 0 | 99 | 99 |
| 8       | CORVUS HERBICIDE | 5.6 oz/a   |           | PRE          | 92 | 0 | 99 | 99 |
|         | AATREX           | 1 qt/a     |           | PRE          |    |   |    |    |
| 9       | ACURON           | 1.5 qt/a   |           | PRE          | 98 | 0 | 99 | 99 |
|         | N-PAK AMS LIQUID | 2.5 % v/v  |           | 12C          |    |   |    |    |
|         | HALEX GT         | 3.6 pt/a   |           | 12C          |    |   |    |    |
|         | AATREX           | 1.5 pt/a   |           | 12C          |    |   |    |    |
|         | NIS              | 0.25 % v/v |           | 12C          |    |   |    |    |
| 10      | ACURON           | 1.25 qt/a  |           | PRE          | 98 | 0 | 99 | 99 |
|         | ACURON           | 1.25 qt/a  |           | 12C          |    |   |    |    |
|         | UAN-28%          | 2.5 % v/v  |           | 12C          |    |   |    |    |
|         | NIS              | 0.25 % v/v |           | 12C          |    |   |    |    |
| 11      | ACURON           | 1.25 qt/a  |           | PRE          | 98 | 0 | 99 | 99 |
|         | ACURON           | 1.25 qt/a  |           | 12C          |    |   |    |    |
|         | TOUCHDOWN TOTAL  | 30 fl oz/a |           | 12C          |    |   |    |    |
|         | AMS              | 2.5 % v/v  |           | 12C          |    |   |    |    |
| 12      | LEXAR EZ         | 3 qt/a     |           | PRE          | 89 | 0 | 99 | 99 |
| 13      | LEXAR EZ         | 3 qt/a     |           | PRE          | 90 | 0 | 99 | 99 |
|         | PRINCEP          | 1 lb ai/a  |           | PRE          |    |   |    |    |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |   |                |                 |                             |
|-------------------------------|---|----------------|-----------------|-----------------------------|
| Pest Type                     | W Weed  | W Weed         | W Weed          |                             |
| Pest Code                     | AMBTR   | SETFA          | AMBTR           |                             |
| Pest Scientific Name          | Ambrosia trifi>                                     | Setaria faberi | Ambrosia trifi> |                             |
| Pest Name                     | Giant ragweed                                       | Giant foxtail  | Giant ragweed   |                             |
| Crop Code                     |   | ZEAMX          |                 |                             |
| BBCH Scale                    |   | BCOR           |                 |                             |
| Crop Scientific Name          |   | Zea mays       |                 |                             |
| Crop Name                     |   | Corn           |                 |                             |
| Crop Variety                  |   |                |                 |                             |
| Description                   | AT POST APPL AT POST APPL AT POST APPL AT POST APPL |                |                 |                             |
| Part Rated                    |   |                |                 |                             |
| Rating Date                   | 5-30-2014   | 6-6-2014       | 6-6-2014        | 6-6-2014                    |
| Rating Type                   | CONTROL   | INJURY         | CONTROL         | CONTROL                     |
| Rating Unit                   | PERCENT   | PERCENT        | PERCENT         | PERCENT                     |
| Rating Timing                 | 3 WEEK  | 3 WEEK         | 3 WEEK          | 3 WEEK                      |
| Days After First/Last Applic. | 21 21   | 28 7           | 28 7            | 28 7                        |
| Trt No.                       | Treatment Name                                      | Rate           | Growth Stage    |                             |
|                               |   | Unit           |                 |                             |
| 14                            | LEXAR EZ  | 1.5 qt/a       | PRE             | 6 99 7 0 8 99 9 99          |
|                               | HALEX GT  | 3.6 pt/a       | 12C             |                             |
|                               | AATREX  | 1 pt/a         | 12C             |                             |
|                               | AMS   | 1 % v/v        | 12C             |                             |
|                               | NIS   | 0.25 % v/v     | 12C             |                             |
| LSD (P=.05)                   |   |                |                 | 3.6 0.0 0.0 0.0             |
| Standard Deviation            |   |                |                 | 2.1 0.0 0.0 0.0             |
| CV                            |   |                |                 | 2.47 0.0 0.0 0.0            |
| Replicate F                   |   |                |                 | 1.185 0.000 0.000 0.000     |
| Replicate Prob(F)             |   |                |                 | 0.3218 1.0000 1.0000 1.0000 |
| Treatment F                   |   |                |                 | 419.909 0.000 0.000 0.000   |
| Treatment Prob(F)             |   |                |                 | 0.0001 1.0000 1.0000 1.0000 |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |                |                  |            |           |
|-------------------------------|----------------|------------------|------------|-----------|
| Pest Type                     | W Weed         | W Weed           |            |           |
| Pest Code                     | SETFA          | AMBTR            |            |           |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifida |            |           |
| Pest Name                     | Giant foxtail  | Giant ragweed    |            |           |
| Crop Code                     | ZEAMX          |                  |            | ZEAMX     |
| BBCH Scale                    | BCOR           |                  |            | BCOR      |
| Crop Scientific Name          | Zea mays       |                  |            | Zea mays  |
| Crop Name                     | Corn           |                  |            | Corn      |
| Crop Variety                  |                |                  |            |           |
| Description                   | AFTER POST     | AFTER POST       | AFTER POST |           |
| Part Rated                    |                |                  |            |           |
| Rating Date                   | 6-27-2014      | 6-6-2014         | 6-6-2014   | 10-8-2014 |
| Rating Type                   | INJURY         | CONTROL          | CONTROL    | YIELD     |
| Rating Unit                   | PERCENT        | PERCENT          | PERCENT    | BU        |
| Rating Timing                 | 6 WEEK         | 6 WEEK           | 6 WEEK     |           |
| Days After First/Last Applic. | 49 28          | 28 7             | 28 7       | 152 131   |

| Trt No. | Treatment Name   | Rate       | Unit | Growth Stage | 10 | 11 | 12 | 17    |
|---------|------------------|------------|------|--------------|----|----|----|-------|
| 1       | UNTREATED        |            |      |              | 0  | 0  | 0  | 42.3  |
| 2       | ACURON           | 2.5 qt/a   |      | PRE          | 0  | 86 | 99 | 156.0 |
| 3       | ACURON           | 2.5 qt/a   |      | PRE          | 0  | 96 | 99 | 163.8 |
|         | AATREX           | 1 qt/a     |      | PRE          |    |    |    |       |
| 4       | ACURON           | 2.5 qt/a   |      | PRE          | 0  | 93 | 99 | 170.0 |
|         | N-PAK AMS LIQUID | 2.5 % v/v  |      | 12C          |    |    |    |       |
|         | STATUS           | 5 oz wt/a  |      | 12C          |    |    |    |       |
|         | TOUCHDOWN TOTAL  | 30 fl oz/a |      | 12C          |    |    |    |       |
| 5       | ANTHEM ATZ       | 2.25 pt/a  |      | PRE          | 0  | 93 | 88 | 136.6 |
| 6       | SURESTART        | 2.5 pt/a   |      | PRE          | 0  | 86 | 88 | 145.8 |
| 7       | VERDICT          | 5 fl oz/a  |      | PRE          | 0  | 67 | 81 | 95.0  |
| 8       | CORVUS HERBICIDE | 5.6 oz/a   |      | PRE          | 0  | 93 | 96 | 161.9 |
|         | AATREX           | 1 qt/a     |      | PRE          |    |    |    |       |
| 9       | ACURON           | 1.5 qt/a   |      | PRE          | 0  | 99 | 99 | 168.3 |
|         | N-PAK AMS LIQUID | 2.5 % v/v  |      | 12C          |    |    |    |       |
|         | HALEX GT         | 3.6 pt/a   |      | 12C          |    |    |    |       |
|         | AATREX           | 1.5 pt/a   |      | 12C          |    |    |    |       |
|         | NIS              | 0.25 % v/v |      | 12C          |    |    |    |       |
| 10      | ACURON           | 1.25 qt/a  |      | PRE          | 0  | 91 | 99 | 153.7 |
|         | ACURON           | 1.25 qt/a  |      | 12C          |    |    |    |       |
|         | UAN-28%          | 2.5 % v/v  |      | 12C          |    |    |    |       |
|         | NIS              | 0.25 % v/v |      | 12C          |    |    |    |       |
| 11      | ACURON           | 1.25 qt/a  |      | PRE          | 0  | 99 | 99 | 172.6 |
|         | ACURON           | 1.25 qt/a  |      | 12C          |    |    |    |       |
|         | TOUCHDOWN TOTAL  | 30 fl oz/a |      | 12C          |    |    |    |       |
|         | AMS              | 2.5 % v/v  |      | 12C          |    |    |    |       |
| 12      | LEXAR EZ         | 3 qt/a     |      | PRE          | 0  | 86 | 92 | 170.8 |
| 13      | LEXAR EZ         | 3 qt/a     |      | PRE          | 0  | 89 | 92 | 169.6 |
|         | PRINCEP          | 1 lb ai/a  |      | PRE          |    |    |    |       |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |            |                |                 |                      |
|-------------------------------|------------|----------------|-----------------|----------------------|
| Pest Type                     |            | W Weed         | W Weed          |                      |
| Pest Code                     |            | SETFA          | AMBTR           |                      |
| Pest Scientific Name          |            | Setaria faberi | Ambrosia trifid |                      |
| Pest Name                     |            | Giant foxtail  | Giant ragweed   |                      |
| Crop Code                     |            | ZEAMX          |                 | ZEAMX                |
| BBCH Scale                    |            | BCOR           |                 | BCOR                 |
| Crop Scientific Name          |            | Zea mays       |                 | Zea mays             |
| Crop Name                     |            | Corn           |                 | Corn                 |
| Crop Variety                  |            |                |                 |                      |
| Description                   |            | AFTER POST     | AFTER POST      | AFTER POST           |
| Part Rated                    |            |                |                 |                      |
| Rating Date                   |            | 6-27-2014      | 6-6-2014        | 6-6-2014 10-8-2014   |
| Rating Type                   |            | INJURY         | CONTROL         | CONTROL YIELD        |
| Rating Unit                   |            | PERCENT        | PERCENT         | PERCENT BU           |
| Rating Timing                 |            | 6 WEEK         | 6 WEEK          | 6 WEEK               |
| Days After First/Last Applic. |            | 49 28          | 28 7            | 28 7 152 131         |
| Trt Treatment                 | Rate       | Growth         |                 |                      |
| No. Name                      | Rate Unit  | Stage          | 10              | 11 12 17             |
| 14 LEXAR EZ                   | 1.5 qt/a   | PRE            | 0               | 98 99 182.5          |
| HALEX GT                      | 3.6 pt/a   | 12C            |                 |                      |
| AATREX                        | 1 pt/a     | 12C            |                 |                      |
| AMS                           | 1 % v/v    | 12C            |                 |                      |
| NIS                           | 0.25 % v/v | 12C            |                 |                      |
| LSD (P=.05)                   |            |                | 0.0             | 12.8 10.9 17.27      |
| Standard Deviation            |            |                | 0.0             | 7.6 6.5 10.29        |
| CV                            |            |                | 0.0             | 9.07 7.38 6.9        |
| Replicate F                   |            |                | 0.000           | 4.076 2.188 0.300    |
| Replicate Prob(F)             |            |                | 1.0000          | 0.0289 0.1324 0.7434 |
| Treatment F                   |            |                | 0.000           | 33.747 47.897 39.932 |
| Treatment Prob(F)             |            |                | 1.0000          | 0.0001 0.0001 0.0001 |



Plant and Soil Science, U of KY  
Weed Science Research

NO TILL CORN

Trial ID: C14001                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: HBI001B3NT-SYN      Investigator: Charles H Slack  
Project ID:                              Study Director: CHARLES SLACK  
   Sponsor Contact: SCOTT CULLY

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, = US

AMBTR, Ambrosia trifida, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent

BU = bushel

ARM Action Codes

TY1 = 4.193576\*[14]

Plant and Soil Science, U of KY  
Weed Science Research

NO TILL CORN

Trial ID: C14001  
Protocol ID: HBI001B3NT-SYN  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: SCOTT CULLY

**General Trial Information**

**Study Director:** CHARLES SLACK **Title:** RESEARCH SPECIALIST  
**Investigator:** CHARLES SLACK **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-5-2014  
**Completion Date:** 10-8-2014

**Trial Location**

**City:** LEXINGTON **Country:** USA United States  
**State/Prov.:** KENTUCKY  
**Postal Code:** 40511

**Contacts**

**Study Director:** CHARLES SLACK **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312 **E-mail:** cslack@uky.edu

**Investigator:** CHARLES SLACK **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312 **E-mail:** cslack@uky.edu

**Other Contacts**

| Name        | Role             | Other               |
|-------------|------------------|---------------------|
| SARA LAWSON | RESEARCH ANALYST | sara.lawson@uky.edu |

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**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC64-89RIB

**Planting Date:** 5-5-2014

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-13-2014  
**Harvest Date:** 10-8-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Soil Temperature, Unit:** 58 F  
**Soil Moisture:** WET wet  
**Seed Bed:** MEDIUM medium

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 14  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WET wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-9-2014  | 5-30-2014 |
| <b>Appl. Start Time:</b>          | 4 PM      |           |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | 12C       |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 85 F      | 75 F      |
| <b>% Relative Humidity:</b>       | 70        | 50        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 4 MPH     |
| <b>Wind Direction:</b>            | SW        | SE        |
| <b>Soil Temperature, Unit:</b>    | 62 F      | 72 F      |
| <b>Soil Moisture:</b>             | EXCELL    | NORMAL    |
| <b>% Cloud Cover:</b>             | 20        | 10        |
| <b>Next Moisture Occurred On:</b> | 5-10-2014 | 6-1-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   |
|---------------------------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Height, Unit:</b>            |            | 12 IN      |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 4 IN     |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 6 IN     |

**Application Equipment**

|                                  | <b>A</b>   | <b>B</b>   |
|----------------------------------|------------|------------|
| <b>Appl. Equipment:</b>          | ATV        | ATV        |
| <b>Equipment Type:</b>           | ALTEVE     | ALTEVE     |
| <b>Operation Pressure, Unit:</b> | 30 PSI     | 30 PSI     |
| <b>Nozzle Type:</b>              | FLAT FAN   | FLAT FAN   |
| <b>Nozzle Size:</b>              | 8002 DG    | 8002 DG    |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN      | 20 IN      |
| <b>Boom Length, Unit:</b>        | 10 FT      | 10 FT      |
| <b>Boom Height, Unit:</b>        | 20 IN      | 20 IN      |
| <b>Ground Speed, Unit:</b>       | 4 MPH      | 4 MPH      |
| <b>Carrier:</b>                  | WATER      | WATER      |
| <b>Spray Volume, Unit:</b>       | 15 GPA     | 15 GPA     |
| <b>Mix Size, Unit:</b>           | 2.2 liters | 2.2 liters |
| <b>Propellant:</b>               | CO2        | CO2        |

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NO TILL CORN EARLY PREPLANT

Trial ID: C14002  
Protocol ID: HZEAMXRIM2THI1401  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: THOMAS HAYDEN

|                               |                 |                 |                |
|-------------------------------|-----------------|-----------------|----------------|
| Pest Type                     | W Weed          | W Weed          | W Weed         |
| Pest Code                     | STEME           | LAMPU           | SETFA          |
| Pest Scientific Name          | Stellaria media | Lamium purpure> | Setaria faberi |
| Pest Name                     | Common chickwe> | Purple deadnet> | Giant foxtail  |
| Crop Code                     |                 |                 | ZEAMX          |
| BBCH Scale                    |                 |                 | BCOR           |
| Crop Scientific Name          |                 |                 | Zea mays       |
| Crop Name                     |                 |                 | Corn           |
| Crop Variety                  |                 |                 |                |
| Description                   |                 |                 |                |
| Part Rated                    |                 |                 |                |
| Rating Date                   | 5-9-2014        | 5-9-2014        | 5-23-2014      |
| Rating Type                   | CONTROL         | CONTROL         | INJURY         |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT        |
| Rating Timing                 | 2 WEEK          | 2 WEEK          | 2 WEEK         |
| Days After First/Last Applic. | 14 14           | 14 14           | 28 14          |

| Trt No. | Treatment Name   | Rate           | Unit | Growth Stage | 1  | 2  | 3 | 4  |
|---------|------------------|----------------|------|--------------|----|----|---|----|
| 1       | HARROW           | 0.5 oz/a       |      | -7DAY        | 99 | 99 | 0 | 99 |
|         | GLYFOS X-TRA     | 0.75 lb ae/a   |      | -7DAY        |    |    |   |    |
|         | NIS              | 0.25 % v/v     |      | -7DAY        |    |    |   |    |
| 2       | BASIS            | 0.0234 lb ai/a |      | -7DAY        | 99 | 99 | 0 | 99 |
|         | GLYFOS X-TRA     | 0.75 lb ae/a   |      | -7DAY        |    |    |   |    |
|         | NIS              | 0.25 % v/v     |      | -7DAY        |    |    |   |    |
| 3       | CHECK            |                |      |              | 99 | 99 | 0 | 0  |
|         | GLYFOS X-TRA     | 0.75 lb ae/a   |      | -7DAY        |    |    |   |    |
|         | NIS              | 0.25 % v/v     |      | -7DAY        |    |    |   |    |
| 4       | LEXAR EZ         | 1.5 qt/a       |      | PRE          | 99 | 99 | 0 | 99 |
|         | TOUCHDOWN TOTAL  | 30 fl oz/a     |      | PRE          |    |    |   |    |
|         | HALEX GT         | 3.6 pt/a       |      | 12C          |    |    |   |    |
|         | AATREX           | 1 pt/a         |      | 12C          |    |    |   |    |
|         | AMS              | 1 % v/v        |      | 12C          |    |    |   |    |
|         | NIS              | 0.25 % v/v     |      | 12C          |    |    |   |    |
| 5       | ANTHEM ATZ       | 2.25 pt/a      |      | PRE          | 99 | 99 | 0 | 99 |
|         | ROUNDUP POWERMAX | 32 fl oz/a     |      | PRE          |    |    |   |    |
|         | AMS              | 3.7 % v/v      |      | PRE          |    |    |   |    |
|         | ROUNDUP POWERMAX | 32 fl oz/a     |      | 12C          |    |    |   |    |
|         | AMS              | 3.7 % v/v      |      | 12C          |    |    |   |    |
| 6       | STALWART XTRA    | 2 qt/a         |      | PRE          | 99 | 99 | 0 | 99 |
|         | ROUNDUP POWERMAX | 32 fl oz/a     |      | PRE          |    |    |   |    |
|         | AMS              | 3.7 % v/v      |      | PRE          |    |    |   |    |
|         | ROUNDUP POWERMAX | 32 fl oz/a     |      | 12C          |    |    |   |    |
|         | AMS              | 3.7 % v/v      |      | 12C          |    |    |   |    |

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|                               |                    |            |                 |                 |                |
|-------------------------------|--------------------|------------|-----------------|-----------------|----------------|
| Pest Type                     |                    |            | W Weed          | W Weed          | W Weed         |
| Pest Code                     |                    |            | STEME           | LAMPU           | SETFA          |
| Pest Scientific Name          |                    |            | Stellaria media | Lamium purpure> | Setaria faberi |
| Pest Name                     |                    |            | Common chickwe> | Purple deadnet> | Giant foxtail  |
| Crop Code                     |                    |            |                 |                 | ZEAMX          |
| BBCH Scale                    |                    |            |                 |                 | BCOR           |
| Crop Scientific Name          |                    |            |                 |                 | Zea mays       |
| Crop Name                     |                    |            |                 |                 | Corn           |
| Crop Variety                  |                    |            |                 |                 |                |
| Description                   |                    |            |                 |                 |                |
| Part Rated                    |                    |            |                 |                 |                |
| Rating Date                   |                    |            | 5-9-2014        | 5-9-2014        | 5-23-2014      |
| Rating Type                   |                    |            | CONTROL         | CONTROL         | INJURY         |
| Rating Unit                   |                    |            | PERCENT         | PERCENT         | PERCENT        |
| Rating Timing                 |                    |            | 2 WEEK          | 2 WEEK          | 2 WEEK         |
| Days After First/Last Applic. |                    |            | 14 14           | 14 14           | 28 14          |
| Trt No.                       | Treatment Name     | Rate       | Rate Unit       | Growth Stage    |                |
| 7                             | CORVUS HERBICIDE   | 5.6 oz/a   | PRE             |                 |                |
|                               | AATREX             | 1 qt/a     | PRE             |                 |                |
|                               | ROUNDUP POWERMAX   | 32 fl oz/a | PRE             |                 |                |
|                               | AMS                | 3.7 % v/v  | PRE             |                 |                |
|                               | ROUNDUP POWERMAX   | 32 fl oz/a | 12C             |                 |                |
|                               | AMS                | 3.7 % v/v  | 12C             |                 |                |
|                               | LSD (P=.05)        |            |                 | 0.0             | 0.0            |
|                               | Standard Deviation |            |                 | 0.0             | 0.0            |
|                               | CV                 |            |                 | 0.0             | 0.0            |
|                               | Replicate F        |            |                 | 0.000           | 0.000          |
|                               | Replicate Prob(F)  |            |                 | 1.0000          | 1.0000         |
|                               | Treatment F        |            |                 | 0.000           | 0.000          |
|                               | Treatment Prob(F)  |            |                 | 1.0000          | 1.0000         |

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| Pest Type                     | W Weed                                 | W Weed         | W Weed          |              |    |   |    |    |
|-------------------------------|--|----------------|-----------------|--------------|----|---|----|----|
| Pest Code                     | AMBTR                                  | SETFA          | AMBTR           |              |    |   |    |    |
| Pest Scientific Name          | Ambrosia trifi>                        | Setaria faberi | Ambrosia trifi> |              |    |   |    |    |
| Pest Name                     | Giant ragweed                          | Giant foxtail  | Giant ragweed   |              |    |   |    |    |
| Crop Code                     |  | ZEAMX          |                 |              |    |   |    |    |
| BBCH Scale                    |  | BCOR           |                 |              |    |   |    |    |
| Crop Scientific Name          |  | Zea mays       |                 |              |    |   |    |    |
| Crop Name                     |  | Corn           |                 |              |    |   |    |    |
| Crop Variety                  |  |                |                 |              |    |   |    |    |
| Description                   | AT POST APPL AT POST APPL AT POST APPL |                |                 |              |    |   |    |    |
| Part Rated                    |  |                |                 |              |    |   |    |    |
| Rating Date                   | 5-23-2014                              | 5-30-2014      | 5-30-2014       | 6-11-2014    |    |   |    |    |
| Rating Type                   | CONTROL                                | INJURY         | CONTROL         | CONTROL      |    |   |    |    |
| Rating Unit                   | PERCENT                                | PERCENT        | PERCENT         | PERCENT      |    |   |    |    |
| Rating Timing                 | 2 WEEK                                 | 3 WEEK         | 3 WEEK          | 3 WEEK       |    |   |    |    |
| Days After First/Last Applic. | 28 14                                  | 35 21          | 35 21           | 47 12        |    |   |    |    |
| Trt No.                       | Treatment Name                         | Rate           | Unit            | Growth Stage | 5  | 6 | 7  | 8  |
| 1                             | HARROW                                 | 0.5 oz/a       |                 | -7DAY        | 99 | 0 | 92 | 93 |
|                               | GLYFOS X-TRA                           | 0.75 lb ae/a   |                 | -7DAY        |    |   |    |    |
|                               | NIS                                    | 0.25 % v/v     |                 | -7DAY        |    |   |    |    |
| 2                             | BASIS                                  | 0.0234 lb ai/a |                 | -7DAY        | 99 | 0 | 88 | 90 |
|                               | GLYFOS X-TRA                           | 0.75 lb ae/a   |                 | -7DAY        |    |   |    |    |
|                               | NIS                                    | 0.25 % v/v     |                 | -7DAY        |    |   |    |    |
| 3                             | CHECK                                  |                |                 |              | 0  | 0 | 0  | 0  |
|                               | GLYFOS X-TRA                           | 0.75 lb ae/a   |                 | -7DAY        |    |   |    |    |
|                               | NIS                                    | 0.25 % v/v     |                 | -7DAY        |    |   |    |    |
| 4                             | LEXAR EZ                               | 1.5 qt/a       |                 | PRE          | 99 | 0 | 98 | 96 |
|                               | TOUCHDOWN TOTAL                        | 30 fl oz/a     |                 | PRE          |    |   |    |    |
|                               | HALEX GT                               | 3.6 pt/a       |                 | 12C          |    |   |    |    |
|                               | AATREX                                 | 1 pt/a         |                 | 12C          |    |   |    |    |
|                               | AMS                                    | 1 % v/v        |                 | 12C          |    |   |    |    |
|                               | NIS                                    | 0.25 % v/v     |                 | 12C          |    |   |    |    |
| 5                             | ANTHEM ATZ                             | 2.25 pt/a      |                 | PRE          | 99 | 0 | 99 | 95 |
|                               | ROUNDUP POWERMAX                       | 32 fl oz/a     |                 | PRE          |    |   |    |    |
|                               | AMS                                    | 3.7 % v/v      |                 | PRE          |    |   |    |    |
|                               | ROUNDUP POWERMAX                       | 32 fl oz/a     |                 | 12C          |    |   |    |    |
|                               | AMS                                    | 3.7 % v/v      |                 | 12C          |    |   |    |    |
| 6                             | STALWART XTRA                          | 2 qt/a         |                 | PRE          | 99 | 0 | 99 | 95 |
|                               | ROUNDUP POWERMAX                       | 32 fl oz/a     |                 | PRE          |    |   |    |    |
|                               | AMS                                    | 3.7 % v/v      |                 | PRE          |    |   |    |    |
|                               | ROUNDUP POWERMAX                       | 32 fl oz/a     |                 | 12C          |    |   |    |    |
|                               | AMS                                    | 3.7 % v/v      |                 | 12C          |    |   |    |    |

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|                               |  |            |                |                 |        |        |          |         |
|-------------------------------|--|------------|----------------|-----------------|--------|--------|----------|---------|
| Pest Type                     | W Weed                                 |            | W Weed         | W Weed          |        |        |          |         |
| Pest Code                     | AMBTR                                  |            | SETFA          | AMBTR           |        |        |          |         |
| Pest Scientific Name          | Ambrosia trifi>                        |            | Setaria faberi | Ambrosia trifi> |        |        |          |         |
| Pest Name                     | Giant ragweed                          |            | Giant foxtail  | Giant ragweed   |        |        |          |         |
| Crop Code                     |  |            | ZEAMX          |                 |        |        |          |         |
| BBCH Scale                    |  |            | BCOR           |                 |        |        |          |         |
| Crop Scientific Name          |  |            | Zea mays       |                 |        |        |          |         |
| Crop Name                     |  |            | Corn           |                 |        |        |          |         |
| Crop Variety                  |  |            |                |                 |        |        |          |         |
| Description                   | AT POST APPL AT POST APPL AT POST APPL |            |                |                 |        |        |          |         |
| Part Rated                    |  |            |                |                 |        |        |          |         |
| Rating Date                   | 5-23-2014                              | 5-30-2014  | 5-30-2014      | 6-11-2014       |        |        |          |         |
| Rating Type                   | CONTROL                                | INJURY     | CONTROL        | CONTROL         |        |        |          |         |
| Rating Unit                   | PERCENT                                | PERCENT    | PERCENT        | PERCENT         |        |        |          |         |
| Rating Timing                 | 2 WEEK                                 | 3 WEEK     | 3 WEEK         | 3 WEEK          |        |        |          |         |
| Days After First/Last Applic. | 28 14                                  | 35 21      | 35 21          | 47 12           |        |        |          |         |
| Trt No.                       | Treatment Name                         | Rate       | Rate Unit      | Growth Stage    | 5      | 6      | 7        | 8       |
| 7                             | CORVUS HERBICIDE                       | 5.6 oz/a   | PRE            | PRE             | 99     | 0      | 95       | 96      |
|                               | AATREX                                 | 1 qt/a     | PRE            | PRE             |        |        |          |         |
|                               | ROUNDUP POWERMAX                       | 32 fl oz/a | PRE            | PRE             |        |        |          |         |
|                               | AMS                                    | 3.7 % v/v  | PRE            | PRE             |        |        |          |         |
|                               | ROUNDUP POWERMAX                       | 32 fl oz/a | 12C            | 12C             |        |        |          |         |
|                               | AMS                                    | 3.7 % v/v  | 12C            | 12C             |        |        |          |         |
| LSD (P=.05)                   |  |            |                |                 | 0.0    | 0.0    | 3.1      | 6.3     |
| Standard Deviation            |  |            |                |                 | 0.0    | 0.0    | 1.7      | 3.5     |
| CV                            |  |            |                |                 | 0.0    | 0.0    | 2.14     | 4.36    |
| Replicate F                   |  |            |                |                 | 0.000  | 0.000  | 0.563    | 0.311   |
| Replicate Prob(F)             |  |            |                |                 | 1.0000 | 1.0000 | 0.5841   | 0.7386  |
| Treatment F                   |  |            |                |                 | 0.000  | 0.000  | 1286.203 | 307.315 |
| Treatment Prob(F)             |  |            |                |                 | 1.0000 | 1.0000 | 0.0001   | 0.0001  |



|                               |                                  |                |                 |           |
|-------------------------------|----------------------------------|----------------|-----------------|-----------|
| Pest Type                     |                                  | W Weed         | W Weed          |           |
| Pest Code                     |                                  | SETFA          | AMBTR           |           |
| Pest Scientific Name          |                                  | Setaria faberi | Ambrosia trifi> |           |
| Pest Name                     |                                  | Giant foxtail  | Giant ragweed   |           |
| Crop Code                     | ZEAMX                            |                |                 | ZEAMX     |
| BBCH Scale                    | BCOR                             |                |                 | BCOR      |
| Crop Scientific Name          | Zea mays                         |                |                 | Zea mays  |
| Crop Name                     | Corn                             |                |                 | Corn      |
| Crop Variety                  |                                  |                |                 |           |
| Description                   | AFTER POST AFTER POST AFTER POST |                |                 |           |
| Part Rated                    |                                  |                |                 |           |
| Rating Date                   | 7-2-2014                         | 7-2-2014       | 7-2-2014        | 10-8-2014 |
| Rating Type                   | INJURY                           | CONTROL        | CONTROL         | YIELD     |
| Rating Unit                   | PERCENT                          | PERCENT        | PERCENT         | BU        |
| Rating Timing                 | 6 WEEK                           | 6 WEEK         | 6 WEEK          |           |
| Days After First/Last Applic. | 68 33                            | 68 33          | 68 33           | 166 131   |

| Trt No. | Treatment Name   | Rate           | Unit | Growth Stage | 9 | 10 | 11 | 16    |
|---------|------------------|----------------|------|--------------|---|----|----|-------|
| 1       | HARROW           | 0.5 oz/a       |      | -7DAY        | 0 | 87 | 93 | 167.6 |
|         | GLYFOS X-TRA     | 0.75 lb ae/a   |      | -7DAY        |   |    |    |       |
|         | NIS              | 0.25 % v/v     |      | -7DAY        |   |    |    |       |
| 2       | BASIS            | 0.0234 lb ai/a |      | -7DAY        | 0 | 85 | 88 | 129.4 |
|         | GLYFOS X-TRA     | 0.75 lb ae/a   |      | -7DAY        |   |    |    |       |
|         | NIS              | 0.25 % v/v     |      | -7DAY        |   |    |    |       |
| 3       | CHECK            |                |      |              | 0 | 0  | 0  | 124.5 |
|         | GLYFOS X-TRA     | 0.75 lb ae/a   |      | -7DAY        |   |    |    |       |
|         | NIS              | 0.25 % v/v     |      | -7DAY        |   |    |    |       |
| 4       | LEXAR EZ         | 1.5 qt/a       |      | PRE          | 0 | 99 | 98 | 162.9 |
|         | TOUCHDOWN TOTAL  | 30 fl oz/a     |      | PRE          |   |    |    |       |
|         | HALEX GT         | 3.6 pt/a       |      | 12C          |   |    |    |       |
|         | AATREX           | 1 pt/a         |      | 12C          |   |    |    |       |
|         | AMS              | 1 % v/v        |      | 12C          |   |    |    |       |
|         | NIS              | 0.25 % v/v     |      | 12C          |   |    |    |       |
| 5       | ANTHEM ATZ       | 2.25 pt/a      |      | PRE          | 0 | 96 | 94 | 168.2 |
|         | ROUNDUP POWERMAX | 32 fl oz/a     |      | PRE          |   |    |    |       |
|         | AMS              | 3.7 % v/v      |      | PRE          |   |    |    |       |
|         | ROUNDUP POWERMAX | 32 fl oz/a     |      | 12C          |   |    |    |       |
|         | AMS              | 3.7 % v/v      |      | 12C          |   |    |    |       |
| 6       | STALWART XTRA    | 2 qt/a         |      | PRE          | 0 | 96 | 95 | 177.1 |
|         | ROUNDUP POWERMAX | 32 fl oz/a     |      | PRE          |   |    |    |       |
|         | AMS              | 3.7 % v/v      |      | PRE          |   |    |    |       |
|         | ROUNDUP POWERMAX | 32 fl oz/a     |      | 12C          |   |    |    |       |
|         | AMS              | 3.7 % v/v      |      | 12C          |   |    |    |       |

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|                               |                  |            |                                  |                 |          |           |         |        |
|-------------------------------|------------------|------------|----------------------------------|-----------------|----------|-----------|---------|--------|
| Pest Type                     |                  |            | W Weed                           | W Weed          |          |           |         |        |
| Pest Code                     |                  |            | SETFA                            | AMBTR           |          |           |         |        |
| Pest Scientific Name          |                  |            | Setaria faberi                   | Ambrosia trifid |          |           |         |        |
| Pest Name                     |                  |            | Giant foxtail                    | Giant ragweed   |          |           |         |        |
| Crop Code                     |                  |            | ZEAMX                            |                 |          | ZEAMX     |         |        |
| BBCH Scale                    |                  |            | BCOR                             |                 |          | BCOR      |         |        |
| Crop Scientific Name          |                  |            | Zea mays                         |                 |          | Zea mays  |         |        |
| Crop Name                     |                  |            | Corn                             |                 |          | Corn      |         |        |
| Crop Variety                  |                  |            |                                  |                 |          |           |         |        |
| Description                   |                  |            | AFTER POST AFTER POST AFTER POST |                 |          |           |         |        |
| Part Rated                    |                  |            |                                  |                 |          |           |         |        |
| Rating Date                   |                  |            | 7-2-2014                         | 7-2-2014        | 7-2-2014 | 10-8-2014 |         |        |
| Rating Type                   |                  |            | INJURY                           | CONTROL         | CONTROL  | YIELD     |         |        |
| Rating Unit                   |                  |            | PERCENT                          | PERCENT         | PERCENT  | BU        |         |        |
| Rating Timing                 |                  |            | 6 WEEK                           | 6 WEEK          | 6 WEEK   |           |         |        |
| Days After First/Last Applic. |                  |            | 68 33                            | 68 33           | 68 33    | 166 131   |         |        |
| Trt No.                       | Treatment Name   | Rate       | Rate Unit                        | Growth Stage    | 9        | 10        | 11      | 16     |
| 7                             | CORVUS HERBICIDE | 5.6 oz/a   | PRE                              |                 | 0        | 95        | 96      | 194.2  |
|                               | AATREX           | 1 qt/a     | PRE                              |                 |          |           |         |        |
|                               | ROUNDUP POWERMAX | 32 fl oz/a | PRE                              |                 |          |           |         |        |
|                               | AMS              | 3.7 % v/v  | PRE                              |                 |          |           |         |        |
|                               | ROUNDUP POWERMAX | 32 fl oz/a | 12C                              |                 |          |           |         |        |
|                               | AMS              | 3.7 % v/v  | 12C                              |                 |          |           |         |        |
| LSD (P=.05)                   |                  |            |                                  |                 | 0.0      | 4.5       | 6.9     | 9.49   |
| Standard Deviation            |                  |            |                                  |                 | 0.0      | 2.5       | 3.9     | 5.34   |
| CV                            |                  |            |                                  |                 | 0.0      | 3.14      | 4.82    | 3.32   |
| Replicate F                   |                  |            |                                  |                 | 0.000    | 4.460     | 0.455   | 0.034  |
| Replicate Prob(F)             |                  |            |                                  |                 | 1.0000   | 0.0356    | 0.6451  | 0.9667 |
| Treatment F                   |                  |            |                                  |                 | 0.000    | 603.530   | 252.867 | 66.570 |
| Treatment Prob(F)             |                  |            |                                  |                 | 1.0000   | 0.0001    | 0.0001  | 0.0001 |

Plant and Soil Science, U of KY  
Weed Science Research

NO TILL CORN EARLY PREPLANT

Trial ID: C14002  
Protocol ID: HZEAMXRIM2THI1401  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: THOMAS HAYDEN

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

STEME, Stellaria media, = US  
LAMPU, Lamium purpureum, = US  
SETFA, Setaria faberi, = US  
AMBTR, Ambrosia trifida, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent  
BU = bushel

ARM Action Codes

TY1 = 4.193576\*[13]



Plant and Soil Science, U of KY  
Weed Science Research

**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** N70J-3011A

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-5-2014  
**Planting Method:** PLANTD planted

**Soil Temperature, Unit:** 58 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Emergence Date:** 5-13-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Pest Description**

**Pest 1 Type:** W **Code:** STEME Stellaria media  
**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU Lamium purpureum  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail

**Pest 4 Type:** W **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 7  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

Plant and Soil Science, U of KY  
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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  | <b>C</b>  |
|-----------------------------------|-----------|-----------|-----------|
| <b>Application Date:</b>          | 4-25-2014 | 5-9-2014  | 5-30-2014 |
| <b>Appl. Start Time:</b>          | 3 PM      | 3 PM      |           |
| <b>Appl. Stop Time:</b>           | 3:20 PM   |           |           |
| <b>Application Method:</b>        | SPRAY     | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | - 7DAY    | PRE       | 12C       |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 61 F      | 85 F      | 75 F      |
| <b>% Relative Humidity:</b>       | 80        | 70        | 50        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 10 MPH    | 4 MPH     |
| <b>Wind Direction:</b>            | NE        | SW        | SE        |
| <b>Soil Temperature, Unit:</b>    | 56 F      | 62 F      | 72 F      |
| <b>Soil Moisture:</b>             | EXCELL    | EXCELL    | NORMAL    |
| <b>% Cloud Cover:</b>             | 90        | 60        | 10        |
| <b>Next Moisture Occurred On:</b> | 4-28-2014 | 5-10-2014 | 6-1-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|---------------------------------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |
| <b>Height, Unit:</b>            |            |            | 12 IN      |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | STEME W  | STEME W  | STEME W  |
| <b>Height, Unit:</b>             | 4 IN     | 4 IN     |          |
| <b>Pest 2 Code, Type, Scale:</b> | LAMPU W  | LAMPU W  | LAMPU W  |
| <b>Height, Unit:</b>             | 4 IN     | 4 IN     |          |
| <b>Pest 3 Code, Type, Scale:</b> | SETFA W  | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 1 IN     | 3 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 3 IN     | 6 IN     |

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**Application Equipment**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      | CO2      |

Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE

Trial ID: C14010 Location: LEXINGTON, KY Trial Year: 2014  
Protocol ID: DOW-CORN Investigator: Charles H Slack  
Project ID: Study Director: CHARLES SLACK  
Sponsor Contact: LAURA CAMPBELL

Pest Type W Weed W Weed W Weed  
Pest Code SETFA AMBTR CHEAL  
Pest Scientific Name Setaria faberi Ambrosia trifida Chenopodium album  
Pest Name Giant foxtail Giant ragweed Common lambsquarters  
Crop Code ZEAMX  
BBCH Scale BCOR  
Crop Scientific Name Zea mays  
Crop Name Corn  
Description  
Part Rated  
Rating Date 5-19-2014 5-19-2014 5-19-2014 5-19-2014  
Rating Type INJURY CONTROL CONTROL CONTROL  
Rating Unit PERCENT PERCENT PERCENT PERCENT  
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK  
Days After First/Last Applic. 14 14 14 14

| Trt No. | Treatment Name     | Rate       | Growth Stage | 1      | 2      | 3        | 4      |
|---------|--------------------|------------|--------------|--------|--------|----------|--------|
| 1       | KEYSTONE NXT       | 2.4 qt/a   | PRE          | 0      | 99     | 99       | 99     |
|         | HORNET             | 3 oz/a     | PRE          |        |        |          |        |
| 2       | SURESTART II       | 2 pt/a     | PRE          | 0      | 99     | 89       | 99     |
|         | DURANGO DMA        | 1.5 pt/a   | MP           |        |        |          |        |
|         | AMS                | 2.5 % v/v  | MP           |        |        |          |        |
| 3       | SURESTART II       | 2.5 pt/a   | PRE          | 0      | 99     | 89       | 99     |
|         | DURANGO DMA        | 1.5 pt/a   | MP           |        |        |          |        |
|         | AMS                | 2.5 % v/v  | MP           |        |        |          |        |
| 4       | SURESTART II       | 2.5 pt/a   | PRE          | 0      | 99     | 99       | 99     |
|         | AATREX             | 1 qt/a     | PRE          |        |        |          |        |
|         | DURANGO DMA        | 1.5 pt/a   | MP           |        |        |          |        |
|         | AMS                | 2.5 % v/v  | MP           |        |        |          |        |
| 5       | SURESTART II       | 2 pt/a     | EP           | 0      | 0      | 0        | 0      |
|         | DURANGO DMA        | 1.5 pt/a   | EP           |        |        |          |        |
|         | AMS                | 2.5 % v/v  | EP           |        |        |          |        |
| 6       | STALWART XTRA      | 2 qt/a     | PRE          | 0      | 99     | 96       | 99     |
|         | ROUNDUP POWERMAX   | 32 fl oz/a | MP           |        |        |          |        |
|         | AMS                | 3.7 % v/v  | MP           |        |        |          |        |
| 7       | STALWART XTRA LITE | 2.1 qt/a   | PRE          | 0      | 99     | 99       | 99     |
|         | ROUNDUP POWERMAX   | 32 fl oz/a | MP           |        |        |          |        |
|         | AMS                | 3.7 % v/v  | MP           |        |        |          |        |
| 8       | CHECK UNTREATED    |            |              | 0      | 0      | 0        | 0      |
|         | LSD (P=.05)        |            |              | 0.0    | 0.0    | 3.5      | 0.0    |
|         | Standard Deviation |            |              | 0.0    | 0.0    | 2.0      | 0.0    |
|         | CV                 |            |              | 0.0    | 0.0    | 2.78     | 0.0    |
|         | Replicate F        |            |              | 0.000  | 0.000  | 0.517    | 0.000  |
|         | Replicate Prob(F)  |            |              | 1.0000 | 1.0000 | 0.6071   | 1.0000 |
|         | Treatment F        |            |              | 0.000  | 0.000  | 1490.991 | 0.000  |
|         | Treatment Prob(F)  |            |              | 1.0000 | 1.0000 | 0.0001   | 1.0000 |



|                               |               |                |                 |
|-------------------------------|---------------|----------------|-----------------|
| Pest Type                     | W Weed        | W Weed         | W Weed          |
| Pest Code                     | IPOSS         | SETFA          | AMBTR           |
| Pest Scientific Name          | Ipomoea sp.   | Setaria faberi | Ambrosia trifi> |
| Pest Name                     | Morning glory | Giant foxtail  | Giant ragweed   |
| Crop Code                     |               | ZEAMX          |                 |
| BBCH Scale                    |               | BCOR           |                 |
| Crop Scientific Name          |               | Zea mays       |                 |
| Crop Name                     |               | Corn           |                 |
| Crop Variety                  |               |                |                 |
| Description                   |               |                |                 |
| Part Rated                    |               |                |                 |
| Rating Date                   | 5-19-2014     | 6-12-2014      | 6-12-2014       |
| Rating Type                   | CONTROL       | INJURY         | CONTROL         |
| Rating Unit                   | PERCENT       | PERCENT        | PERCENT         |
| Rating Timing                 | 2 WEEK        | 4 WEEK         | 4 WEEK          |
| Days After First/Last Applic. | 14 14         | 38 10          | 38 10           |

| Trt No. | Treatment Name     | Rate       | Growth Stage | 5         | 6      | 7      | 8       |
|---------|--------------------|------------|--------------|-----------|--------|--------|---------|
| 1       | KEYSTONE NXT       | 2.4 qt/a   | PRE          | 99        | 0      | 99     | 94      |
|         | HORNET             | 3 oz/a     | PRE          |           |        |        |         |
| 2       | SURESTART II       | 2 pt/a     | PRE          | 90        | 0      | 99     | 98      |
|         | DURANGO DMA        | 1.5 pt/a   | MP           |           |        |        |         |
|         | AMS                | 2.5 % v/v  | MP           |           |        |        |         |
| 3       | SURESTART II       | 2.5 pt/a   | PRE          | 89        | 0      | 99     | 96      |
|         | DURANGO DMA        | 1.5 pt/a   | MP           |           |        |        |         |
|         | AMS                | 2.5 % v/v  | MP           |           |        |        |         |
| 4       | SURESTART II       | 2.5 pt/a   | PRE          | 99        | 0      | 99     | 95      |
|         | AATREX             | 1 qt/a     | PRE          |           |        |        |         |
|         | DURANGO DMA        | 1.5 pt/a   | MP           |           |        |        |         |
|         | AMS                | 2.5 % v/v  | MP           |           |        |        |         |
| 5       | SURESTART II       | 2 pt/a     | EP           | 0         | 0      | 99     | 96      |
|         | DURANGO DMA        | 1.5 pt/a   | EP           |           |        |        |         |
|         | AMS                | 2.5 % v/v  | EP           |           |        |        |         |
| 6       | STALWART XTRA      | 2 qt/a     | PRE          | 99        | 0      | 99     | 98      |
|         | ROUNDUP POWERMAX   | 32 fl oz/a | MP           |           |        |        |         |
|         | AMS                | 3.7 % v/v  | MP           |           |        |        |         |
| 7       | STALWART XTRA LITE | 2.1 qt/a   | PRE          | 99        | 0      | 99     | 98      |
|         | ROUNDUP POWERMAX   | 32 fl oz/a | MP           |           |        |        |         |
|         | AMS                | 3.7 % v/v  | MP           |           |        |        |         |
| 8       | CHECK UNTREATED    |            |              | 0         | 0      | 0      | 0       |
|         | LSD (P=.05)        |            |              | 0.7       | 0.0    | 0.0    | 5.1     |
|         | Standard Deviation |            |              | 0.4       | 0.0    | 0.0    | 2.9     |
|         | CV                 |            |              | 0.57      | 0.0    | 0.0    | 3.43    |
|         | Replicate F        |            |              | 1.000     | 0.000  | 0.000  | 4.726   |
|         | Replicate Prob(F)  |            |              | 0.3927    | 1.0000 | 1.0000 | 0.0270  |
|         | Treatment F        |            |              | 35764.433 | 0.000  | 0.000  | 417.840 |
|         | Treatment Prob(F)  |            |              | 0.0001    | 1.0000 | 1.0000 | 0.0001  |

|                               |                 |               |                |
|-------------------------------|-----------------|---------------|----------------|
| Pest Type                     | W Weed          | W Weed        | W Weed         |
| Pest Code                     | CHEAL           | IPOSS         | SETFA          |
| Pest Scientific Name          | Chenopodium al> | Ipomoea sp.   | Setaria faberi |
| Pest Name                     | Common lambsqu> | Morning glory | Giant foxtail  |
| Crop Code                     |                 |               | ZEAMX          |
| BBCH Scale                    |                 |               | BCOR           |
| Crop Scientific Name          |                 |               | Zea mays       |
| Crop Name                     |                 |               | Corn           |
| Crop Variety                  |                 |               |                |
| Description                   |                 |               |                |
| Part Rated                    |                 |               |                |
| Rating Date                   | 6-12-2014       | 6-12-2014     | 7-3-2014       |
| Rating Type                   | CONTROL         | CONTROL       | INJURY         |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT        |
| Rating Timing                 | 4 WEEK          | 4 WEEK        | 8 WEEK         |
| Days After First/Last Applic. | 38 10           | 38 10         | 59 31          |

| Trt | Treatment          | Rate       | Growth | 9      | 10      | 11     | 12      |
|-----|--------------------|------------|--------|--------|---------|--------|---------|
| No. | Name               | Rate Unit  | Stage  |        |         |        |         |
| 1   | KEYSTONE NXT       | 2.4 qt/a   | PRE    | 99     | 94      | 0      | 99      |
|     | HORNET             | 3 oz/a     | PRE    |        |         |        |         |
| 2   | SURESTART II       | 2 pt/a     | PRE    | 99     | 98      | 0      | 98      |
|     | DURANGO DMA        | 1.5 pt/a   | MP     |        |         |        |         |
|     | AMS                | 2.5 % v/v  | MP     |        |         |        |         |
| 3   | SURESTART II       | 2.5 pt/a   | PRE    | 99     | 93      | 0      | 95      |
|     | DURANGO DMA        | 1.5 pt/a   | MP     |        |         |        |         |
|     | AMS                | 2.5 % v/v  | MP     |        |         |        |         |
| 4   | SURESTART II       | 2.5 pt/a   | PRE    | 99     | 94      | 0      | 96      |
|     | AATREX             | 1 qt/a     | PRE    |        |         |        |         |
|     | DURANGO DMA        | 1.5 pt/a   | MP     |        |         |        |         |
|     | AMS                | 2.5 % v/v  | MP     |        |         |        |         |
| 5   | SURESTART II       | 2 pt/a     | EP     | 99     | 98      | 0      | 98      |
|     | DURANGO DMA        | 1.5 pt/a   | EP     |        |         |        |         |
|     | AMS                | 2.5 % v/v  | EP     |        |         |        |         |
| 6   | STALWART XTRA      | 2 qt/a     | PRE    | 99     | 99      | 0      | 95      |
|     | ROUNDUP POWERMAX   | 32 fl oz/a | MP     |        |         |        |         |
|     | AMS                | 3.7 % v/v  | MP     |        |         |        |         |
| 7   | STALWART XTRA LITE | 2.1 qt/a   | PRE    | 99     | 98      | 0      | 99      |
|     | ROUNDUP POWERMAX   | 32 fl oz/a | MP     |        |         |        |         |
|     | AMS                | 3.7 % v/v  | MP     |        |         |        |         |
| 8   | CHECK UNTREATED    |            |        | 0      | 0       | 0      | 0       |
|     | LSD (P=.05)        |            |        | 0.0    | 6.3     | 0.0    | 5.9     |
|     | Standard Deviation |            |        | 0.0    | 3.6     | 0.0    | 3.4     |
|     | CV                 |            |        | 0.0    | 4.26    | 0.0    | 3.99    |
|     | Replicate F        |            |        | 0.000  | 5.811   | 0.000  | 1.546   |
|     | Replicate Prob(F)  |            |        | 1.0000 | 0.0145  | 1.0000 | 0.2473  |
|     | Treatment F        |            |        | 0.000  | 271.592 | 0.000  | 307.632 |
|     | Treatment Prob(F)  |            |        | 1.0000 | 0.0001  | 1.0000 | 0.0001  |

| Trt No. | Treatment Name       | Rate       | Growth Stage | 13      | 14     | 15      | 20      |
|---------|----------------------|------------|--------------|---------|--------|---------|---------|
|         | 1 KEYSTONE NXT       | 2.4 qt/a   | PRE          | 86      | 99     | 88      | 121.8   |
|         | HORNET               | 3 oz/a     | PRE          |         |        |         |         |
|         | 2 SURESTART II       | 2 pt/a     | PRE          | 92      | 99     | 92      | 130.4   |
|         | DURANGO DMA          | 1.5 pt/a   | MP           |         |        |         |         |
|         | AMS                  | 2.5 % v/v  | MP           |         |        |         |         |
|         | 3 SURESTART II       | 2.5 pt/a   | PRE          | 93      | 99     | 94      | 140.2   |
|         | DURANGO DMA          | 1.5 pt/a   | MP           |         |        |         |         |
|         | AMS                  | 2.5 % v/v  | MP           |         |        |         |         |
|         | 4 SURESTART II       | 2.5 pt/a   | PRE          | 93      | 99     | 93      | 128.7   |
|         | AATREX               | 1 qt/a     | PRE          |         |        |         |         |
|         | DURANGO DMA          | 1.5 pt/a   | MP           |         |        |         |         |
|         | AMS                  | 2.5 % v/v  | MP           |         |        |         |         |
|         | 5 SURESTART II       | 2 pt/a     | EP           | 87      | 99     | 90      | 130.5   |
|         | DURANGO DMA          | 1.5 pt/a   | EP           |         |        |         |         |
|         | AMS                  | 2.5 % v/v  | EP           |         |        |         |         |
|         | 6 STALWART XTRA      | 2 qt/a     | PRE          | 95      | 99     | 93      | 135.6   |
|         | ROUNDUP POWERMAX     | 32 fl oz/a | MP           |         |        |         |         |
|         | AMS                  | 3.7 % v/v  | MP           |         |        |         |         |
|         | 7 STALWART XTRA LITE | 2.1 qt/a   | PRE          | 89      | 99     | 89      | 129.7   |
|         | ROUNDUP POWERMAX     | 32 fl oz/a | MP           |         |        |         |         |
|         | AMS                  | 3.7 % v/v  | MP           |         |        |         |         |
|         | 8 CHECK UNTREATED    |            |              | 0       | 0      | 0       | 2.4     |
|         | LSD (P=.05)          |            |              | 4.5     | 0.0    | 6.6     | 12.27   |
|         | Standard Deviation   |            |              | 2.6     | 0.0    | 3.8     | 7.00    |
|         | CV                   |            |              | 3.22    | 0.0    | 4.74    | 6.1     |
|         | Replicate F          |            |              | 0.429   | 0.000  | 0.947   | 1.938   |
|         | Replicate Prob(F)    |            |              | 0.6594  | 1.0000 | 0.4114  | 0.1808  |
|         | Treatment F          |            |              | 477.591 | 0.000  | 218.943 | 128.101 |
|         | Treatment Prob(F)    |            |              | 0.0001  | 1.0000 | 0.0001  | 0.0001  |

W Weed                      W Weed                      W Weed  
 AMBTR                      CHEAL                      IPOSS  
 Ambrosia trifi>              Chenopodium al>              Ipomoea sp.  
 Giant ragweed              Common lambsqu>              Morning glory

ZEAMX  
 BCOR  
 Zea mays  
 Corn

Rating Date                      7-3-2014                      7-3-2014                      7-3-2014 10-8-2014  
 Rating Type                      CONTROL                      CONTROL                      CONTROL                      YIELD  
 Rating Unit                      PERCENT                      PERCENT                      PERCENT                      BU  
 Rating Timing                      8 WEEK                      8 WEEK                      8 WEEK  
 Days After First/Last Applic.                      59 31                      59 31                      59 31 156 128

Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE

Trial ID: C14010                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: DOW-CORN              Investigator: Charles H Slack  
Project ID:                              Study Director: CHARLES SLACK  
   Sponsor Contact: LAURA CAMPBELL

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, = US  
AMBTR, Ambrosia trifida, = US  
CHEAL, Chenopodium album, = US  
IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent  
BU = bushel

ARM Action Codes

TY1 = 4.193576\*[17]

Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE

Trial ID: C14010                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: DOW-CORN            Investigator: Charles H Slack  
Project ID:                            Study Director: CHARLES SLACK  
Sponsor Contact: LAURA CAMPBELL

**General Trial Information**

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Investigator:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-5-2014  
**Completion Date:** 10-8-2014

**Trial Location**

**City:** LEXINGTON                    **Country:** USA United States  
**State/Prov.:** KENTUCKY  
**Postal Code:** 40511

**Contacts**

**Study Director:** CHARLES SLACK                    **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY                    **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                    **E-mail:** cslack@uky.edu

**Investigator:** CHARLES SLACK                    **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY                    **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                    **E-mail:** cslack@uky.edu

**Other Contacts**

| Name        | Role             | Other               |
|-------------|------------------|---------------------|
| SARA LAWSON | RESEARCH ANALYST | sara.lawson@uky.edu |

Plant and Soil Science, U of KY  
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**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC64-89RIB

**Planting Date:** 5-5-2014

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-13-2014  
**Harvest Date:** 10-8-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 8  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Analyzed By:**

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  | <b>C</b>  |
|-----------------------------------|-----------|-----------|-----------|
| <b>Application Date:</b>          | 5-5-2014  | 5-23-2014 | 6-2-2014  |
| <b>Appl. Start Time:</b>          |           | 2:00 PM   | 11 AM     |
| <b>Application Method:</b>        | SPRAY     | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | EP        | MP        |
| <b>Application Placement:</b>     | BROSOI    | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 82 F      | 74 F      | 76 F      |
| <b>% Relative Humidity:</b>       | 38        | 48        | 75        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 8 MPH     | 10 MPH    |
| <b>Wind Direction:</b>            | ESE       | NNE       | WNW       |
| <b>Soil Temperature, Unit:</b>    | 60 F      | 66 F      | 65 F      |
| <b>Soil Moisture:</b>             | EXCELL    | EXCELL    | NORMAL    |
| <b>% Cloud Cover:</b>             | 20        | 0         | 50        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 5-27-2014 | 6-4-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|---------------------------------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |
| <b>Height, Unit:</b>            |            | 4 IN       | 6 IN       |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 1 IN     | 2 IN     |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 2.5 IN   | 4 IN     |
| <b>Pest 3 Code, Type, Scale:</b> | CHEAL W  | CHEAL W  | CHEAL W  |
| <b>Height, Unit:</b>             |          | 1 IN     | 2 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 1 IN     | 2 IN     |

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**Application Equipment**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      | CO2      |



Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE II

Trial ID: C14011 Location: LEXINGTON, KY Trial Year: 2014  
Protocol ID: FMC-ANTHEMATZ Investigator: Charles H Slack  
Project ID: Study Director: CHARLES SLACK  
Sponsor Contact: RUSTY MITCHELL

Pest Type W Weed W Weed W Weed  
Pest Code SETFA AMBTR CHEAL  
Pest Scientific Name Setaria faberi Ambrosia trifida Chenopodium album  
Pest Name Giant foxtail Giant ragweed Common lambsquarters  
Crop Code ZEAMX  
BBCH Scale BCOR  
Crop Scientific Name Zea mays  
Crop Name Corn  
Description  
Part Rated  
Rating Date 5-19-2014 5-19-2014 5-19-2014 5-19-2014  
Rating Type INJURY CONTROL CONTROL CONTROL  
Rating Unit PERCENT PERCENT PERCENT PERCENT  
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK  
Days After First/Last Applic. 14 14 14 14

| Trt No. | Treatment Name          | Rate       | Growth Stage | 1      | 2      | 3        | 4      |
|---------|-------------------------|------------|--------------|--------|--------|----------|--------|
| 1       | CHECK                   |            |              | 0      | 0      | 0        | 0      |
| 2       | ANTHEM                  | 8 oz/a     | PRE          | 0      | 99     | 86       | 99     |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 3       | ANTHEM ATZ              | 32 oz/a    | PRE          | 0      | 99     | 93       | 99     |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 4       | ANTHEM                  | 8 oz/a     | PRE          | 0      | 99     | 99       | 99     |
|         | ACCOLADE                | 0.89 oz/a  | PRE          |        |        |          |        |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 5       | ANTHEM ATZ              | 32 oz/a    | PRE          | 0      | 99     | 98       | 99     |
|         | ACCOLADE                | 0.89 oz/a  | PRE          |        |        |          |        |
|         | ROUNDUP POWERMAX        | 22 oz/a    | V4           |        |        |          |        |
| 6       | ANTHEM                  | 8 oz/a     | PRE          | 0      | 99     | 93       | 99     |
|         | BALANCE FLEXX HERBICIDE | 2 oz/a     | PRE          |        |        |          |        |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 7       | ANTHEM ATZ              | 32 oz/a    | PRE          | 0      | 99     | 99       | 99     |
|         | BALANCE FLEXX HERBICIDE | 2 oz/a     | PRE          |        |        |          |        |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 8       | DUAL II MAGNUM          | 1.3 pt/a   | PRE          | 0      | 99     | 60       | 99     |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 9       | BICEP II MAGNUM         | 1.6 qt/a   | PRE          | 0      | 99     | 95       | 99     |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 10      | CORVUS HERBICIDE        | 5.6 oz/a   | PRE          | 0      | 99     | 99       | 99     |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
|         | LSD (P=.05)             |            |              | 0.0    | 0.0    | 2.8      | 0.0    |
|         | Standard Deviation      |            |              | 0.0    | 0.0    | 1.7      | 0.0    |
|         | CV                      |            |              | 0.0    | 0.0    | 2.02     | 0.0    |
|         | Replicate F             |            |              | 0.000  | 0.000  | 0.085    | 0.000  |
|         | Replicate Prob(F)       |            |              | 1.0000 | 1.0000 | 0.9191   | 1.0000 |
|         | Treatment F             |            |              | 0.000  | 0.000  | 1061.320 | 0.000  |
|         | Treatment Prob(F)       |            |              | 1.0000 | 1.0000 | 0.0001   | 1.0000 |

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| Pest Type                     | W Weed                                 | W Weed         | W Weed           |           |        |        |          |
|-------------------------------|--|----------------|------------------|-----------|--------|--------|----------|
| Pest Code                     | IPOSS                                  | SETFA          | AMBTR            |           |        |        |          |
| Pest Scientific Name          | Ipomoea sp.                            | Setaria faberi | Ambrosia trifida |           |        |        |          |
| Pest Name                     | Morning glory                          | Giant foxtail  | Giant ragweed    |           |        |        |          |
| Crop Code                     |  | ZEAMX          |                  |           |        |        |          |
| BBCH Scale                    |  | BCOR           |                  |           |        |        |          |
| Crop Scientific Name          |  | Zea mays       |                  |           |        |        |          |
| Crop Name                     |  | Corn           |                  |           |        |        |          |
| Crop Variety                  |  |                |                  |           |        |        |          |
| Description                   | AT POST APPL AT POST APPL AT POST APPL |                |                  |           |        |        |          |
| Part Rated                    |  |                |                  |           |        |        |          |
| Rating Date                   | 5-19-2014                              | 5-27-2014      | 5-27-2014        | 5-27-2014 |        |        |          |
| Rating Type                   | CONTROL                                | INJURY         | CONTROL          | CONTROL   |        |        |          |
| Rating Unit                   | PERCENT                                | PERCENT        | PERCENT          | PERCENT   |        |        |          |
| Rating Timing                 | 2 WEEK                                 | 3 WEEK         | 3 WEEK           | 3 WEEK    |        |        |          |
| Days After First/Last Applic. | 14 14                                  | 22 22          | 22 22            | 22 22     |        |        |          |
| Trt No.                       | Treatment Name                         | Rate           | Growth Stage     | 5         | 6      | 7      | 8        |
|                               |  | Rate Unit      |                  |           |        |        |          |
| 1                             | CHECK                                  |                |                  | 0         | 0      | 0      | 0        |
| 2                             | ANTHEM                                 | 8 oz/a         | PRE              | 99        | 0      | 99     | 86       |
|                               | ROUNDUP POWERMAX                       | 22 fl oz/a     | V4               |           |        |        |          |
| 3                             | ANTHEM ATZ                             | 32 oz/a        | PRE              | 99        | 0      | 99     | 93       |
|                               | ROUNDUP POWERMAX                       | 22 fl oz/a     | V4               |           |        |        |          |
| 4                             | ANTHEM                                 | 8 oz/a         | PRE              | 99        | 0      | 99     | 99       |
|                               | ACCOLADE                               | 0.89 oz/a      | PRE              |           |        |        |          |
|                               | ROUNDUP POWERMAX                       | 22 fl oz/a     | V4               |           |        |        |          |
| 5                             | ANTHEM ATZ                             | 32 oz/a        | PRE              | 99        | 0      | 99     | 98       |
|                               | ACCOLADE                               | 0.89 oz/a      | PRE              |           |        |        |          |
|                               | ROUNDUP POWERMAX                       | 22 oz/a        | V4               |           |        |        |          |
| 6                             | ANTHEM                                 | 8 oz/a         | PRE              | 99        | 0      | 99     | 93       |
|                               | BALANCE FLEXX HERBICIDE                | 2 oz/a         | PRE              |           |        |        |          |
|                               | ROUNDUP POWERMAX                       | 22 fl oz/a     | V4               |           |        |        |          |
| 7                             | ANTHEM ATZ                             | 32 oz/a        | PRE              | 99        | 0      | 99     | 99       |
|                               | BALANCE FLEXX HERBICIDE                | 2 oz/a         | PRE              |           |        |        |          |
|                               | ROUNDUP POWERMAX                       | 22 fl oz/a     | V4               |           |        |        |          |
| 8                             | DUAL II MAGNUM                         | 1.3 pt/a       | PRE              | 60        | 0      | 99     | 60       |
|                               | ROUNDUP POWERMAX                       | 22 fl oz/a     | V4               |           |        |        |          |
| 9                             | BICEP II MAGNUM                        | 1.6 qt/a       | PRE              | 99        | 0      | 99     | 95       |
|                               | ROUNDUP POWERMAX                       | 22 fl oz/a     | V4               |           |        |        |          |
| 10                            | CORVUS HERBICIDE                       | 5.6 oz/a       | PRE              | 99        | 0      | 99     | 99       |
|                               | ROUNDUP POWERMAX                       | 22 fl oz/a     | V4               |           |        |        |          |
|                               | LSD (P=.05)                            |                |                  | 0.0       | 0.0    | 0.0    | 2.8      |
|                               | Standard Deviation                     |                |                  | 0.0       | 0.0    | 0.0    | 1.7      |
|                               | CV                                     |                |                  | 0.0       | 0.0    | 0.0    | 2.02     |
|                               | Replicate F                            |                |                  | 0.000     | 0.000  | 0.000  | 0.085    |
|                               | Replicate Prob(F)                      |                |                  | 1.0000    | 1.0000 | 1.0000 | 0.9191   |
|                               | Treatment F                            |                |                  | 0.000     | 0.000  | 0.000  | 1061.320 |
|                               | Treatment Prob(F)                      |                |                  | 1.0000    | 1.0000 | 1.0000 | 0.0001   |

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| Pest Type                     | W Weed                    | W Weed        | W Weed         |           |        |        |        |
|-------------------------------|---------------------------|---------------|----------------|-----------|--------|--------|--------|
| Pest Code                     | CHEAL                     | IPOSS         | SETFA          |           |        |        |        |
| Pest Scientific Name          | Chenopodium al>           | Ipomoea sp.   | Setaria faberi |           |        |        |        |
| Pest Name                     | Common lambsqu>           | Morning glory | Giant foxtail  |           |        |        |        |
| Crop Code                     |                           |               | ZEAMX          |           |        |        |        |
| BBCH Scale                    |                           |               | BCOR           |           |        |        |        |
| Crop Scientific Name          |                           |               | Zea mays       |           |        |        |        |
| Crop Name                     |                           |               | Corn           |           |        |        |        |
| Crop Variety                  |                           |               |                |           |        |        |        |
| Description                   | AT POST APPL AT POST APPL |               |                |           |        |        |        |
| Part Rated                    |                           |               |                |           |        |        |        |
| Rating Date                   | 5-27-2014                 | 5-27-2014     | 6-12-2014      | 6-12-2014 |        |        |        |
| Rating Type                   | CONTROL                   | CONTROL       | INJURY         | CONTROL   |        |        |        |
| Rating Unit                   | PERCENT                   | PERCENT       | PERCENT        | PERCENT   |        |        |        |
| Rating Timing                 | 3 WEEK                    | 3 WEEK        | 5 WEEK         | 5 WEEK    |        |        |        |
| Days After First/Last Applic. | 22 22                     | 22 22         | 38 16          | 38 16     |        |        |        |
| Trt No.                       | Treatment Name            | Rate          | Growth Stage   | 9         | 10     | 11     | 12     |
| Rate Unit                     |                           |               |                |           |        |        |        |
| 1                             | CHECK                     |               |                | 0         | 0      | 0      | 0      |
| 2                             | ANTHEM                    | 8 oz/a        | PRE            | 99        | 99     | 0      | 99     |
|                               | ROUNDUP POWERMAX          | 22 fl oz/a    | V4             |           |        |        |        |
| 3                             | ANTHEM ATZ                | 32 oz/a       | PRE            | 99        | 99     | 0      | 99     |
|                               | ROUNDUP POWERMAX          | 22 fl oz/a    | V4             |           |        |        |        |
| 4                             | ANTHEM                    | 8 oz/a        | PRE            | 99        | 99     | 0      | 99     |
|                               | ACCOLADE                  | 0.89 oz/a     | PRE            |           |        |        |        |
|                               | ROUNDUP POWERMAX          | 22 fl oz/a    | V4             |           |        |        |        |
| 5                             | ANTHEM ATZ                | 32 oz/a       | PRE            | 99        | 99     | 0      | 99     |
|                               | ACCOLADE                  | 0.89 oz/a     | PRE            |           |        |        |        |
|                               | ROUNDUP POWERMAX          | 22 oz/a       | V4             |           |        |        |        |
| 6                             | ANTHEM                    | 8 oz/a        | PRE            | 99        | 99     | 0      | 99     |
|                               | BALANCE FLEXX HERBICIDE   | 2 oz/a        | PRE            |           |        |        |        |
|                               | ROUNDUP POWERMAX          | 22 fl oz/a    | V4             |           |        |        |        |
| 7                             | ANTHEM ATZ                | 32 oz/a       | PRE            | 99        | 99     | 0      | 99     |
|                               | BALANCE FLEXX HERBICIDE   | 2 oz/a        | PRE            |           |        |        |        |
|                               | ROUNDUP POWERMAX          | 22 fl oz/a    | V4             |           |        |        |        |
| 8                             | DUAL II MAGNUM            | 1.3 pt/a      | PRE            | 99        | 60     | 0      | 99     |
|                               | ROUNDUP POWERMAX          | 22 fl oz/a    | V4             |           |        |        |        |
| 9                             | BICEP II MAGNUM           | 1.6 qt/a      | PRE            | 99        | 99     | 0      | 99     |
|                               | ROUNDUP POWERMAX          | 22 fl oz/a    | V4             |           |        |        |        |
| 10                            | CORVUS HERBICIDE          | 5.6 oz/a      | PRE            | 99        | 99     | 0      | 99     |
|                               | ROUNDUP POWERMAX          | 22 fl oz/a    | V4             |           |        |        |        |
|                               | LSD (P=.05)               |               |                | 0.0       | 0.0    | 0.0    | 0.0    |
|                               | Standard Deviation        |               |                | 0.0       | 0.0    | 0.0    | 0.0    |
|                               | CV                        |               |                | 0.0       | 0.0    | 0.0    | 0.0    |
|                               | Replicate F               |               |                | 0.000     | 0.000  | 0.000  | 0.000  |
|                               | Replicate Prob(F)         |               |                | 1.0000    | 1.0000 | 1.0000 | 1.0000 |
|                               | Treatment F               |               |                | 0.000     | 0.000  | 0.000  | 0.000  |
|                               | Treatment Prob(F)         |               |                | 1.0000    | 1.0000 | 1.0000 | 1.0000 |

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|                               |                 |                 |               |          |
|-------------------------------|-----------------|-----------------|---------------|----------|
| Pest Type                     | W Weed          | W Weed          | W Weed        |          |
| Pest Code                     | AMBTR           | CHEAL           | IPOSS         |          |
| Pest Scientific Name          | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |          |
| Pest Name                     | Giant ragweed   | Common lambsqu> | Morning glory |          |
| Crop Code                     |                 |                 |               | ZEAMX    |
| BBCH Scale                    |                 |                 |               | BCOR     |
| Crop Scientific Name          |                 |                 |               | Zea mays |
| Crop Name                     |                 |                 |               | Corn     |
| Crop Variety                  |                 |                 |               |          |
| Description                   |                 |                 |               |          |
| Part Rated                    |                 |                 |               |          |
| Rating Date                   | 6-12-2014       | 6-12-2014       | 6-12-2014     | 7-3-2014 |
| Rating Type                   | CONTROL         | CONTROL         | CONTROL       | INJURY   |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT       | PERCENT  |
| Rating Timing                 | 5 WEEK          | 5 WEEK          | 5 WEEK        | 8 WEEK   |
| Days After First/Last Applic. | 38 16           | 38 16           | 38 16         | 59 37    |

| Trt No. | Treatment Name          | Rate       | Growth Stage | 13     | 14     | 15       | 16     |
|---------|-------------------------|------------|--------------|--------|--------|----------|--------|
| 1       | CHECK                   |            |              | 0      | 0      | 0        | 0      |
| 2       | ANTHEM                  | 8 oz/a     | PRE          | 89     | 99     | 99       | 0      |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 3       | ANTHEM ATZ              | 32 oz/a    | PRE          | 93     | 99     | 98       | 0      |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 4       | ANTHEM                  | 8 oz/a     | PRE          | 99     | 99     | 98       | 0      |
|         | ACCOLADE                | 0.89 oz/a  | PRE          |        |        |          |        |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 5       | ANTHEM ATZ              | 32 oz/a    | PRE          | 99     | 99     | 99       | 0      |
|         | ACCOLADE                | 0.89 oz/a  | PRE          |        |        |          |        |
|         | ROUNDUP POWERMAX        | 22 oz/a    | V4           |        |        |          |        |
| 6       | ANTHEM                  | 8 oz/a     | PRE          | 93     | 99     | 99       | 0      |
|         | BALANCE FLEXX HERBICIDE | 2 oz/a     | PRE          |        |        |          |        |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 7       | ANTHEM ATZ              | 32 oz/a    | PRE          | 99     | 99     | 99       | 0      |
|         | BALANCE FLEXX HERBICIDE | 2 oz/a     | PRE          |        |        |          |        |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 8       | DUAL II MAGNUM          | 1.3 pt/a   | PRE          | 85     | 99     | 60       | 0      |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 9       | BICEP II MAGNUM         | 1.6 qt/a   | PRE          | 96     | 99     | 99       | 0      |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
| 10      | CORVUS HERBICIDE        | 5.6 oz/a   | PRE          | 99     | 99     | 99       | 0      |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |        |        |          |        |
|         | LSD (P=.05)             |            |              | 11.8   | 0.0    | 1.7      | 0.0    |
|         | Standard Deviation      |            |              | 6.9    | 0.0    | 1.0      | 0.0    |
|         | CV                      |            |              | 8.09   | 0.0    | 1.15     | 0.0    |
|         | Replicate F             |            |              | 1.690  | 0.000  | 2.250    | 0.000  |
|         | Replicate Prob(F)       |            |              | 0.2126 | 1.0000 | 0.1342   | 1.0000 |
|         | Treatment F             |            |              | 58.102 | 0.000  | 3286.000 | 0.000  |
|         | Treatment Prob(F)       |            |              | 0.0001 | 1.0000 | 0.0001   | 1.0000 |

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| Pest Type                     | W Weed                  | W Weed          | W Weed          | W Weed        |         |        |         |
|-------------------------------|-------------------------|-----------------|-----------------|---------------|---------|--------|---------|
| Pest Code                     | SETFA                   | AMBTR           | CHEAL           | IPOSS         |         |        |         |
| Pest Scientific Name          | Setaria faberi          | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |         |        |         |
| Pest Name                     | Giant foxtail           | Giant ragweed   | Common lambsqu> | Morning glory |         |        |         |
| Crop Code                     |                         |                 |                 |               |         |        |         |
| BBCH Scale                    |                         |                 |                 |               |         |        |         |
| Crop Scientific Name          |                         |                 |                 |               |         |        |         |
| Crop Name                     |                         |                 |                 |               |         |        |         |
| Crop Variety                  |                         |                 |                 |               |         |        |         |
| Description                   |                         |                 |                 |               |         |        |         |
| Part Rated                    |                         |                 |                 |               |         |        |         |
| Rating Date                   | 7-3-2014                | 7-3-2014        | 7-3-2014        | 7-3-2014      |         |        |         |
| Rating Type                   | CONTROL                 | CONTROL         | CONTROL         | CONTROL       |         |        |         |
| Rating Unit                   | PERCENT                 | PERCENT         | PERCENT         | PERCENT       |         |        |         |
| Rating Timing                 | 8 WEEK                  | 8 WEEK          | 8 WEEK          | 8 WEEK        |         |        |         |
| Days After First/Last Applic. | 59 37                   | 59 37           | 59 37           | 59 37         |         |        |         |
| Trt No.                       | Treatment Name          | Rate            | Growth Stage    | 17            | 18      | 19     | 20      |
|                               |                         | Rate Unit       |                 |               |         |        |         |
| 1                             | CHECK                   |                 |                 | 0             | 0       | 0      | 0       |
| 2                             | ANTHEM                  | 8 oz/a          | PRE             | 96            | 87      | 99     | 95      |
|                               | ROUNDUP POWERMAX        | 22 fl oz/a      | V4              |               |         |        |         |
| 3                             | ANTHEM ATZ              | 32 oz/a         | PRE             | 98            | 90      | 99     | 95      |
|                               | ROUNDUP POWERMAX        | 22 fl oz/a      | V4              |               |         |        |         |
| 4                             | ANTHEM                  | 8 oz/a          | PRE             | 95            | 96      | 99     | 96      |
|                               | ACCOLADE                | 0.89 oz/a       | PRE             |               |         |        |         |
|                               | ROUNDUP POWERMAX        | 22 fl oz/a      | V4              |               |         |        |         |
| 5                             | ANTHEM ATZ              | 32 oz/a         | PRE             | 92            | 98      | 99     | 95      |
|                               | ACCOLADE                | 0.89 oz/a       | PRE             |               |         |        |         |
|                               | ROUNDUP POWERMAX        | 22 oz/a         | V4              |               |         |        |         |
| 6                             | ANTHEM                  | 8 oz/a          | PRE             | 93            | 89      | 99     | 94      |
|                               | BALANCE FLEXX HERBICIDE | 2 oz/a          | PRE             |               |         |        |         |
|                               | ROUNDUP POWERMAX        | 22 fl oz/a      | V4              |               |         |        |         |
| 7                             | ANTHEM ATZ              | 32 oz/a         | PRE             | 98            | 92      | 99     | 96      |
|                               | BALANCE FLEXX HERBICIDE | 2 oz/a          | PRE             |               |         |        |         |
|                               | ROUNDUP POWERMAX        | 22 fl oz/a      | V4              |               |         |        |         |
| 8                             | DUAL II MAGNUM          | 1.3 pt/a        | PRE             | 99            | 88      | 99     | 81      |
|                               | ROUNDUP POWERMAX        | 22 fl oz/a      | V4              |               |         |        |         |
| 9                             | BICEP II MAGNUM         | 1.6 qt/a        | PRE             | 98            | 90      | 99     | 95      |
|                               | ROUNDUP POWERMAX        | 22 fl oz/a      | V4              |               |         |        |         |
| 10                            | CORVUS HERBICIDE        | 5.6 oz/a        | PRE             | 99            | 95      | 99     | 98      |
|                               | ROUNDUP POWERMAX        | 22 fl oz/a      | V4              |               |         |        |         |
|                               | LSD (P=.05)             |                 |                 | 4.1           | 8.5     | 0.0    | 8.2     |
|                               | Standard Deviation      |                 |                 | 2.4           | 5.0     | 0.0    | 4.8     |
|                               | CV                      |                 |                 | 2.78          | 6.04    | 0.0    | 5.67    |
|                               | Replicate F             |                 |                 | 0.739         | 0.113   | 0.000  | 0.627   |
|                               | Replicate Prob(F)       |                 |                 | 0.4915        | 0.8939  | 1.0000 | 0.5453  |
|                               | Treatment F             |                 |                 | 481.584       | 103.206 | 0.000  | 118.061 |
|                               | Treatment Prob(F)       |                 |                 | 0.0001        | 0.0001  | 1.0000 | 0.0001  |

Pest Type  
Pest Code  
Pest Scientific Name  
Pest Name  
Crop Code ZEAMX  
BBCH Scale BCOR  
Crop Scientific Name Zea mays  
Crop Name Corn  
Crop Variety  
Description  
Part Rated  
Rating Date 10-8-2014  
Rating Type YIELD  
Rating Unit BU  
Rating Timing  
Days After First/Last Applic. 156 134

| Trt No. | Treatment Name          | Rate       | Growth Stage | 25      |
|---------|-------------------------|------------|--------------|---------|
| 1       | CHECK                   |            |              | 9.7     |
| 2       | ANTHEM                  | 8 oz/a     | PRE          | 111.2   |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |         |
| 3       | ANTHEM ATZ              | 32 oz/a    | PRE          | 117.1   |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |         |
| 4       | ANTHEM                  | 8 oz/a     | PRE          | 118.8   |
|         | ACCOLADE                | 0.89 oz/a  | PRE          |         |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |         |
| 5       | ANTHEM ATZ              | 32 oz/a    | PRE          | 121.5   |
|         | ACCOLADE                | 0.89 oz/a  | PRE          |         |
|         | ROUNDUP POWERMAX        | 22 oz/a    | V4           |         |
| 6       | ANTHEM                  | 8 oz/a     | PRE          | 121.0   |
|         | BALANCE FLEXX HERBICIDE | 2 oz/a     | PRE          |         |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |         |
| 7       | ANTHEM ATZ              | 32 oz/a    | PRE          | 114.6   |
|         | BALANCE FLEXX HERBICIDE | 2 oz/a     | PRE          |         |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |         |
| 8       | DUAL II MAGNUM          | 1.3 pt/a   | PRE          | 118.4   |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |         |
| 9       | BICEP II MAGNUM         | 1.6 qt/a   | PRE          | 108.8   |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |         |
| 10      | CORVUS HERBICIDE        | 5.6 oz/a   | PRE          | 116.2   |
|         | ROUNDUP POWERMAX        | 22 fl oz/a | V4           |         |
|         | LSD (P=.05)             |            |              | 7.76    |
|         | Standard Deviation      |            |              | 4.52    |
|         | CV                      |            |              | 4.28    |
|         | Replicate F             |            |              | 1.814   |
|         | Replicate Prob(F)       |            |              | 0.1916  |
|         | Treatment F             |            |              | 169.464 |
|         | Treatment Prob(F)       |            |              | 0.0001  |

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Weed Science Research

CORN POSTEMERGENCE II

|                            |                                 |                  |
|----------------------------|---------------------------------|------------------|
| Trial ID: C14011           | Location: LEXINGTON, KY         | Trial Year: 2014 |
| Protocol ID: FMC-ANTHEMATZ | Investigator: Charles H Slack   |                  |
| Project ID:                | Study Director: CHARLES SLACK   |                  |
|                            | Sponsor Contact: RUSTY MITCHELL |                  |

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, *Setaria faberi*, = US  
 AMBTR, *Ambrosia trifida*, = US  
 CHEAL, *Chenopodium album*, = US  
 IPOSS, *Ipomoea* sp., = US

Crop Code

ZEAMX, BCOR, *Zea mays*, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent  
 BU = bushel

ARM Action Codes

TY1 = 4.193576\*[22]

Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE II

Trial ID: C14011                              Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: FMC-ANTHEMATZ            Investigator: Charles H Slack  
Project ID:                                      Study Director: CHARLES SLACK  
Sponsor Contact: RUSTY MITCHELL

**General Trial Information**

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Investigator:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-5-2014  
**Completion Date:** 10-8-2014

**Trial Location**

**City:** LEXINGTON                      **Country:** USA United States  
**State/Prov.:** KENTUCKY  
**Postal Code:** 40511

**Contacts**

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov.:** LEXINGTON, KY                      **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu

**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov.:** LEXINGTON, KY                      **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu

**Other Contacts**

**Name**                      **Role**                      **Other**  
SARA LAWSON RESEARCH ANALYST sara.lawson@uky.edu



Plant and Soil Science, U of KY  
Weed Science Research

**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC64-89RIB

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-5-2014  
**Planting Method:** PLANTD planted

**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Emergence Date:** 5-13-2014  
**Harvest Date:** 10-8-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed

**Pest 3 Type:** W **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W **Code:** IPOSS Ipomoea sp.  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 10  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-5-2014  | 5-27-2014 |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | V4        |
| <b>Application Placement:</b>     | BROSOI    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 82 F      | 80 F      |
| <b>% Relative Humidity:</b>       | 38        | 65        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 6 MPH     |
| <b>Wind Direction:</b>            | ESE       | WSW       |
| <b>Soil Temperature, Unit:</b>    | 60 F      | 67 F      |
| <b>Soil Moisture:</b>             | EXCELL    | NORMAL    |
| <b>% Cloud Cover:</b>             | 20        | 10        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 5-28-2014 |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   |
|---------------------------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            | V4         |
| <b>Height, Unit:</b>            |            | 9 IN       |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 1 IN     |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 3 IN     |
| <b>Pest 3 Code, Type, Scale:</b> | CHEAL W  | CHEAL W  |
| <b>Height, Unit:</b>             |          | 1 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 1 IN     |

**Application Equipment**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 20 IN    | 20 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      |

Plant and Soil Science, U of KY  
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CORN POSTEMERGENCE III

Trial ID: C14012  
Protocol ID: FMC-CORN PRE-POST  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: RUSTY MITCHELL

|                               |                |                 |                 |
|-------------------------------|----------------|-----------------|-----------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          |
| Pest Code                     | SETFA          | AMBTR           | CHEAL           |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Chenopodium al> |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Common lambsqu> |
| Crop Code                     | ZEAMX          |                 |                 |
| BBCH Scale                    | BCOR           |                 |                 |
| Crop Scientific Name          | Zea mays       |                 |                 |
| Crop Name                     | Corn           |                 |                 |
| Crop Variety                  |                |                 |                 |
| Description                   |                |                 |                 |
| Part Rated                    |                |                 |                 |
| Rating Date                   | 5-19-2014      | 5-19-2014       | 5-19-2014       |
| Rating Type                   | INJURY         | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         |
| Rating Timing                 | 2 WEEK         | 2 WEEK          | 2 WEEK          |
| Days After First/Last Applic. | 14 14          | 14 14           | 14 14           |

| Trt No. | Treatment Name   | Rate        | Unit | Growth Stage | 1 | 2  | 3  | 4  |
|---------|------------------|-------------|------|--------------|---|----|----|----|
| 1       | CHECK            |             |      |              | 0 | 0  | 0  | 0  |
| 2       | ANTHEM           | 8 oz/a      |      | PRE          | 0 | 99 | 89 | 99 |
|         | CADET            | 0.75 oz/a   |      | V4           |   |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  |      | V4           |   |    |    |    |
|         | COC              | 1 % v/v     |      | V4           |   |    |    |    |
| 3       | ANTHEM ATZ       | 32 oz/a     |      | PRE          | 0 | 99 | 90 | 99 |
|         | CADET            | 0.75 oz/a   |      | V4           |   |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  |      | V4           |   |    |    |    |
|         | COC              | 1 % v/v     |      | V4           |   |    |    |    |
| 4       | ANTHEM           | 8 oz/a      |      | PRE          | 0 | 99 | 85 | 99 |
|         | SOLSTICE         | 2.5 oz/a    |      | V4           |   |    |    |    |
|         | ATRAZINE         | 0.5 lb ai/a |      | V4           |   |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  |      | V4           |   |    |    |    |
|         | COC              | 1 % v/v     |      | V4           |   |    |    |    |
| 5       | ANTHEM ATZ       | 32 oz/a     |      | PRE          | 0 | 99 | 99 | 99 |
|         | SOLSTICE         | 2.5 oz/a    |      | V4           |   |    |    |    |
|         | ATRAZINE         | 0.5 lb ai/a |      | V4           |   |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  |      | V4           |   |    |    |    |
|         | COC              | 1 % v/v     |      | V4           |   |    |    |    |
| 6       | ANTHEM ATZ       | 16 oz/a     |      | V4           | 0 | 0  | 0  | 0  |
|         | SOLSTICE         | 2.5 oz/a    |      | V4           |   |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  |      | V4           |   |    |    |    |
|         | COC              | 1 % v/v     |      | V4           |   |    |    |    |
| 7       | ATRAZINE         | 0.5 lb ai/a |      | V4           | 0 | 0  | 0  | 0  |
|         | SOLSTICE         | 2.5 oz/a    |      | V4           |   |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  |      | V4           |   |    |    |    |
|         | COC              | 1 % v/v     |      | V4           |   |    |    |    |
| 8       | SOLSTICE         | 3.15 oz/a   |      | V4           | 0 | 0  | 0  | 0  |
|         | ROUNDUP POWERMAX | 22 fl oz/a  |      | V4           |   |    |    |    |
|         | COC              | 1 % v/v     |      | V4           |   |    |    |    |
| 9       | LEXAR            | 96 oz/a     |      | V4           | 0 | 0  | 0  | 0  |
|         | COC              | 1 % v/v     |      | V4           |   |    |    |    |

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|                               |           |                |                 |                 |
|-------------------------------|-----------|----------------|-----------------|-----------------|
| Pest Type                     |           | W Weed         | W Weed          | W Weed          |
| Pest Code                     |           | SETFA          | AMBTR           | CHEAL           |
| Pest Scientific Name          |           | Setaria faberi | Ambrosia trifi> | Chenopodium al> |
| Pest Name                     |           | Giant foxtail  | Giant ragweed   | Common lambsqu> |
| Crop Code                     | ZEAMX     |                |                 |                 |
| BBCH Scale                    | BCOR      |                |                 |                 |
| Crop Scientific Name          | Zea mays  |                |                 |                 |
| Crop Name                     | Corn      |                |                 |                 |
| Crop Variety                  |           |                |                 |                 |
| Description                   |           |                |                 |                 |
| Part Rated                    |           |                |                 |                 |
| Rating Date                   | 5-19-2014 | 5-19-2014      | 5-19-2014       | 5-19-2014       |
| Rating Type                   | INJURY    | CONTROL        | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT   | PERCENT        | PERCENT         | PERCENT         |
| Rating Timing                 | 2 WEEK    | 2 WEEK         | 2 WEEK          | 2 WEEK          |
| Days After First/Last Applic. | 14 14     | 14 14          | 14 14           | 14 14           |

| Trt | Treatment          | Rate      | Growth | 1      |        | 2         |        | 3 |   | 4 |   |
|-----|--------------------|-----------|--------|--------|--------|-----------|--------|---|---|---|---|
| No. | Name               | Rate Unit | Stage  |        |        |           |        |   |   |   |   |
| 10  | HALEX GT           | 3.6 pt/a  | V4     | 0      | 0      | 0         | 0      | 0 | 0 | 0 | 0 |
|     | COC                | 1 % v/v   | V4     |        |        |           |        |   |   |   |   |
|     | LSD (P=.05)        |           |        | 0.0    | 0.0    | 0.6       | 0.0    |   |   |   |   |
|     | Standard Deviation |           |        | 0.0    | 0.0    | 0.4       | 0.0    |   |   |   |   |
|     | CV                 |           |        | 0.0    | 0.0    | 1.0       | 0.0    |   |   |   |   |
|     | Replicate F        |           |        | 0.000  | 0.000  | 1.000     | 0.000  |   |   |   |   |
|     | Replicate Prob(F)  |           |        | 1.0000 | 1.0000 | 0.3874    | 1.0000 |   |   |   |   |
|     | Treatment F        |           |        | 0.000  | 0.000  | 49763.337 | 0.000  |   |   |   |   |
|     | Treatment Prob(F)  |           |        | 1.0000 | 1.0000 | 0.0001    | 1.0000 |   |   |   |   |

|                               |  |                |                 |           |
|-------------------------------|--|----------------|-----------------|-----------|
| Pest Type                     | W Weed                                 | W Weed         | W Weed          |           |
| Pest Code                     | IPOSS                                  | SETFA          | AMBTR           |           |
| Pest Scientific Name          | Ipomoea sp.                            | Setaria faberi | Ambrosia trifi> |           |
| Pest Name                     | Morning glory                          | Giant foxtail  | Giant ragweed   |           |
| Crop Code                     |  | ZEAMX          |                 |           |
| BBCH Scale                    |  | BCOR           |                 |           |
| Crop Scientific Name          |  | Zea mays       |                 |           |
| Crop Name                     |  | Corn           |                 |           |
| Crop Variety                  |  |                |                 |           |
| Description                   | AT POST APPL AT POST APPL AT POST APPL |                |                 |           |
| Part Rated                    |  |                |                 |           |
| Rating Date                   | 5-19-2014                              | 5-28-2014      | 5-28-2014       | 5-28-2014 |
| Rating Type                   | CONTROL                                | INJURY         | CONTROL         | CONTROL   |
| Rating Unit                   | PERCENT                                | PERCENT        | PERCENT         | PERCENT   |
| Rating Timing                 | 2 WEEK                                 | 3 WEEK         | 3 WEEK          | 3 WEEK    |
| Days After First/Last Applic. | 14 14                                  | 23 23          | 23 23           | 23 23     |

| Trt No. | Treatment Name   | Rate        | Growth Stage | 5  | 6 | 7  | 8  |
|---------|------------------|-------------|--------------|----|---|----|----|
| 1       | CHECK            |             |              | 0  | 0 | 0  | 0  |
| 2       | ANTHEM           | 8 oz/a      | PRE          | 99 | 0 | 99 | 89 |
|         | CADET            | 0.75 oz/a   | V4           |    |   |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |   |    |    |
|         | COC              | 1 % v/v     | V4           |    |   |    |    |
| 3       | ANTHEM ATZ       | 32 oz/a     | PRE          | 99 | 0 | 99 | 90 |
|         | CADET            | 0.75 oz/a   | V4           |    |   |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |   |    |    |
|         | COC              | 1 % v/v     | V4           |    |   |    |    |
| 4       | ANTHEM           | 8 oz/a      | PRE          | 99 | 0 | 99 | 85 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |   |    |    |
|         | ATRAZINE         | 0.5 lb ai/a | V4           |    |   |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |   |    |    |
|         | COC              | 1 % v/v     | V4           |    |   |    |    |
| 5       | ANTHEM ATZ       | 32 oz/a     | PRE          | 99 | 0 | 99 | 99 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |   |    |    |
|         | ATRAZINE         | 0.5 lb ai/a | V4           |    |   |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |   |    |    |
|         | COC              | 1 % v/v     | V4           |    |   |    |    |
| 6       | ANTHEM ATZ       | 16 oz/a     | V4           | 0  | 0 | 0  | 0  |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |   |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |   |    |    |
|         | COC              | 1 % v/v     | V4           |    |   |    |    |
| 7       | ATRAZINE         | 0.5 lb ai/a | V4           | 0  | 0 | 0  | 0  |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |   |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |   |    |    |
|         | COC              | 1 % v/v     | V4           |    |   |    |    |
| 8       | SOLSTICE         | 3.15 oz/a   | V4           | 0  | 0 | 0  | 0  |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |   |    |    |
|         | COC              | 1 % v/v     | V4           |    |   |    |    |
| 9       | LEXAR            | 96 oz/a     | V4           | 0  | 0 | 0  | 0  |
|         | COC              | 1 % v/v     | V4           |    |   |    |    |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |  |                |                 |           |
|-------------------------------|--|----------------|-----------------|-----------|
| Pest Type                     | W Weed                                 | W Weed         | W Weed          |           |
| Pest Code                     | IPOSS                                  | SETFA          | AMBTR           |           |
| Pest Scientific Name          | Ipomoea sp.                            | Setaria faberi | Ambrosia trifi> |           |
| Pest Name                     | Morning glory                          | Giant foxtail  | Giant ragweed   |           |
| Crop Code                     |  | ZEAMX          |                 |           |
| BBCH Scale                    |  | BCOR           |                 |           |
| Crop Scientific Name          |  | Zea mays       |                 |           |
| Crop Name                     |  | Corn           |                 |           |
| Crop Variety                  |  |                |                 |           |
| Description                   | AT POST APPL AT POST APPL AT POST APPL |                |                 |           |
| Part Rated                    |  |                |                 |           |
| Rating Date                   | 5-19-2014                              | 5-28-2014      | 5-28-2014       | 5-28-2014 |
| Rating Type                   | CONTROL                                | INJURY         | CONTROL         | CONTROL   |
| Rating Unit                   | PERCENT                                | PERCENT        | PERCENT         | PERCENT   |
| Rating Timing                 | 2 WEEK                                 | 3 WEEK         | 3 WEEK          | 3 WEEK    |
| Days After First/Last Applic. | 14 14                                  | 23 23          | 23 23           | 23 23     |
| Trt Treatment                 | Rate                                   | Growth         |                 |           |
| No. Name                      | Rate Unit                              | Stage          | 5               | 6         |
| 10 HALEX GT                   | 3.6 pt/a                               | V4             | 0               | 0         |
| COC                           | 1 % v/v                                | V4             |                 |           |
| LSD (P=.05)                   |  |                | 0.0             | 0.0       |
| Standard Deviation            |  |                | 0.0             | 0.0       |
| CV                            |  |                | 0.0             | 0.0       |
| Replicate F                   |  |                | 0.000           | 0.000     |
| Replicate Prob(F)             |  |                | 1.0000          | 1.0000    |
| Treatment F                   |  |                | 0.000           | 0.000     |
| Treatment Prob(F)             |  |                | 1.0000          | 1.0000    |
|                               |  |                |                 | 49763.337 |
|                               |  |                |                 | 0.0001    |

|                               |                 |               |                |
|-------------------------------|-----------------|---------------|----------------|
| Pest Type                     | W Weed          | W Weed        | W Weed         |
| Pest Code                     | CHEAL           | IPOSS         | SETFA          |
| Pest Scientific Name          | Chenopodium al> | Ipomoea sp.   | Setaria faberi |
| Pest Name                     | Common lambsqu> | Morning glory | Giant foxtail  |
| Crop Code                     |                 |               | ZEAMX          |
| BBCH Scale                    |                 |               | BCOR           |
| Crop Scientific Name          |                 |               | Zea mays       |
| Crop Name                     |                 |               | Corn           |
| Crop Variety                  |                 |               |                |
| Description                   | AT POST APPL    | AT POST APPL  | AFTER POST     |
| Part Rated                    |                 |               | AFTER POST     |
| Rating Date                   | 5-28-2014       | 5-28-2014     | 6-12-2014      |
| Rating Type                   | CONTROL         | CONTROL       | INJURY         |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT        |
| Rating Timing                 | 3 WEEK          | 3 WEEK        | 5 WEEK         |
| Days After First/Last Applic. | 23 23           | 23 23         | 38 14          |

| Trt No. | Treatment Name   | Rate        | Growth Stage | 9  | 10 | 11 | 12 |
|---------|------------------|-------------|--------------|----|----|----|----|
| 1       | CHECK            |             |              | 0  | 0  | 0  | 0  |
| 2       | ANTHEM           | 8 oz/a      | PRE          | 99 | 99 | 0  | 99 |
|         | CADET            | 0.75 oz/a   | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 3       | ANTHEM ATZ       | 32 oz/a     | PRE          | 99 | 99 | 0  | 99 |
|         | CADET            | 0.75 oz/a   | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 4       | ANTHEM           | 8 oz/a      | PRE          | 99 | 99 | 0  | 99 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |    |    |    |
|         | ATRAZINE         | 0.5 lb ai/a | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 5       | ANTHEM ATZ       | 32 oz/a     | PRE          | 99 | 99 | 0  | 99 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |    |    |    |
|         | ATRAZINE         | 0.5 lb ai/a | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 6       | ANTHEM ATZ       | 16 oz/a     | V4           | 0  | 0  | 0  | 99 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 7       | ATRAZINE         | 0.5 lb ai/a | V4           | 0  | 0  | 0  | 99 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 8       | SOLSTICE         | 3.15 oz/a   | V4           | 0  | 0  | 0  | 99 |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 9       | LEXAR            | 96 oz/a     | V4           | 0  | 0  | 0  | 92 |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |



Plant and Soil Science, U of KY  
Weed Science Research

|                               |   |               |                |           |
|-------------------------------|---|---------------|----------------|-----------|
| Pest Type                     | W Weed  | W Weed        | W Weed         |           |
| Pest Code                     | CHEAL   | IPOSS         | SETFA          |           |
| Pest Scientific Name          | Chenopodium al>                                 | Ipomoea sp.   | Setaria faberi |           |
| Pest Name                     | Common lambsqu>                                 | Morning glory | Giant foxtail  |           |
| Crop Code                     |   |               | ZEAMX          |           |
| BBCH Scale                    |   |               | BCOR           |           |
| Crop Scientific Name          |   |               | Zea mays       |           |
| Crop Name                     |   |               | Corn           |           |
| Crop Variety                  |   |               |                |           |
| Description                   | AT POST APPL AT POST APPL AFTER POST AFTER POST |               |                |           |
| Part Rated                    |   |               |                |           |
| Rating Date                   | 5-28-2014                                       | 5-28-2014     | 6-12-2014      | 6-12-2014 |
| Rating Type                   | CONTROL   | CONTROL       | INJURY         | CONTROL   |
| Rating Unit                   | PERCENT   | PERCENT       | PERCENT        | PERCENT   |
| Rating Timing                 | 3 WEEK  | 3 WEEK        | 5 WEEK         | 5 WEEK    |
| Days After First/Last Applic. | 23 23   | 23 23         | 38 14          | 38 14     |
| Trt Treatment                 | Rate  | Growth        |                |           |
| No. Name                      | Rate Unit                                       | Stage         | 9              | 10        |
| 10 HALEX GT                   | 3.6 pt/a  | V4            | 0              | 0         |
| COC                           | 1 % v/v   | V4            |                | 0         |
| LSD (P=.05)                   |   |               | 0.0            | 0.0       |
| Standard Deviation            |   |               | 0.0            | 0.0       |
| CV                            |   |               | 0.0            | 0.0       |
| Replicate F                   |   |               | 0.000          | 0.000     |
| Replicate Prob(F)             |   |               | 1.0000         | 1.0000    |
| Treatment F                   |   |               | 0.000          | 0.000     |
| Treatment Prob(F)             |   |               | 1.0000         | 1.0000    |

|                               |                  |                      |               |          |
|-------------------------------|------------------|----------------------|---------------|----------|
| Pest Type                     | W Weed           | W Weed               | W Weed        |          |
| Pest Code                     | AMBTR            | CHEAL                | IPOSS         |          |
| Pest Scientific Name          | Ambrosia trifida | Chenopodium album    | Ipomoea sp.   |          |
| Pest Name                     | Giant ragweed    | Common lambsquarters | Morning glory |          |
| Crop Code                     |                  |                      |               | ZEAMX    |
| BBCH Scale                    |                  |                      |               | BCOR     |
| Crop Scientific Name          |                  |                      |               | Zea mays |
| Crop Name                     |                  |                      |               | Corn     |
| Crop Variety                  |                  |                      |               |          |
| Description                   | AFTER POST       | AFTER POST           | AFTER POST    |          |
| Part Rated                    |                  |                      |               |          |
| Rating Date                   | 6-12-2014        | 6-12-2014            | 6-12-2014     | 7-3-2014 |
| Rating Type                   | CONTROL          | CONTROL              | CONTROL       | INJURY   |
| Rating Unit                   | PERCENT          | PERCENT              | PERCENT       | PERCENT  |
| Rating Timing                 | 5 WEEK           | 5 WEEK               | 5 WEEK        | 8 WEEK   |
| Days After First/Last Applic. | 38 14            | 38 14                | 38 14         | 59 35    |

| Trt No. | Treatment Name   | Rate        | Growth Stage | 13 | 14 | 15 | 16 |
|---------|------------------|-------------|--------------|----|----|----|----|
| 1       | CHECK            |             |              | 0  | 0  | 0  | 0  |
| 2       | ANTHEM           | 8 oz/a      | PRE          | 95 | 99 | 99 | 0  |
|         | CADET            | 0.75 oz/a   | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 3       | ANTHEM ATZ       | 32 oz/a     | PRE          | 96 | 99 | 98 | 0  |
|         | CADET            | 0.75 oz/a   | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 4       | ANTHEM           | 8 oz/a      | PRE          | 99 | 99 | 99 | 0  |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |    |    |    |
|         | ATRAZINE         | 0.5 lb ai/a | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 5       | ANTHEM ATZ       | 32 oz/a     | PRE          | 99 | 99 | 99 | 0  |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |    |    |    |
|         | ATRAZINE         | 0.5 lb ai/a | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 6       | ANTHEM ATZ       | 16 oz/a     | V4           | 99 | 99 | 99 | 0  |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 7       | ATRAZINE         | 0.5 lb ai/a | V4           | 98 | 99 | 88 | 0  |
|         | SOLSTICE         | 2.5 oz/a    | V4           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 8       | SOLSTICE         | 3.15 oz/a   | V4           | 96 | 99 | 98 | 0  |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |    |    |    |    |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |
| 9       | LEXAR            | 96 oz/a     | V4           | 99 | 99 | 99 | 0  |
|         | COC              | 1 % v/v     | V4           |    |    |    |    |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |                 |                 |               |          |
|-------------------------------|-----------------|-----------------|---------------|----------|
| Pest Type                     | W Weed          | W Weed          | W Weed        |          |
| Pest Code                     | AMBTR           | CHEAL           | IPOSS         |          |
| Pest Scientific Name          | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |          |
| Pest Name                     | Giant ragweed   | Common lambsqu> | Morning glory |          |
| Crop Code                     |                 |                 |               | ZEAMX    |
| BBCH Scale                    |                 |                 |               | BCOR     |
| Crop Scientific Name          |                 |                 |               | Zea mays |
| Crop Name                     |                 |                 |               | Corn     |
| Crop Variety                  |                 |                 |               |          |
| Description                   | AFTER POST      | AFTER POST      | AFTER POST    |          |
| Part Rated                    |                 |                 |               |          |
| Rating Date                   | 6-12-2014       | 6-12-2014       | 6-12-2014     | 7-3-2014 |
| Rating Type                   | CONTROL         | CONTROL         | CONTROL       | INJURY   |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT       | PERCENT  |
| Rating Timing                 | 5 WEEK          | 5 WEEK          | 5 WEEK        | 8 WEEK   |
| Days After First/Last Applic. | 38 14           | 38 14           | 38 14         | 59 35    |
| Trt Treatment                 | Rate            | Growth          |               |          |
| No. Name                      | Rate Unit       | Stage           | 13            | 14       |
| 10 HALEX GT                   | 3.6 pt/a        | V4              | 99            | 99       |
| COC                           | 1 % v/v         | V4              |               | 99       |
| LSD (P=.05)                   |                 |                 | 3.0           | 0.0      |
| Standard Deviation            |                 |                 | 1.8           | 0.0      |
| CV                            |                 |                 | 2.02          | 0.0      |
| Replicate F                   |                 |                 | 2.501         | 0.000    |
| Replicate Prob(F)             |                 |                 | 0.1101        | 1.0000   |
| Treatment F                   |                 |                 | 910.106       | 0.000    |
| Treatment Prob(F)             |                 |                 | 0.0001        | 1.0000   |



Plant and Soil Science, U of KY  
Weed Science Research

|                               |                |                 |                 |               |
|-------------------------------|----------------|-----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | CHEAL           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |
| Crop Code                     |                |                 |                 |               |
| BBCH Scale                    |                |                 |                 |               |
| Crop Scientific Name          |                |                 |                 |               |
| Crop Name                     |                |                 |                 |               |
| Crop Variety                  |                |                 |                 |               |
| Description                   |                |                 |                 |               |
| Part Rated                    |                |                 |                 |               |
| Rating Date                   | 7-3-2014       | 7-3-2014        | 7-3-2014        | 7-3-2014      |
| Rating Type                   | CONTROL        | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 8 WEEK         | 8 WEEK          | 8 WEEK          | 8 WEEK        |
| Days After First/Last Applic. | 59 35          | 59 35           | 59 35           | 59 35         |
| Trt Treatment                 | Rate           | Growth          |                 |               |
| No. Name                      | Rate Unit      | Stage           | 17              | 18            |
| 10 HALEX GT                   | 3.6 pt/a       | V4              | 99              | 92            |
| COC                           | 1 % v/v        | V4              |                 | 99            |
| LSD (P=.05)                   |                |                 | 6.1             | 4.3           |
| Standard Deviation            |                |                 | 3.6             | 2.5           |
| CV                            |                |                 | 4.09            | 2.95          |
| Replicate F                   |                |                 | 0.781           | 3.957         |
| Replicate Prob(F)             |                |                 | 0.4729          | 0.0377        |
| Treatment F                   |                |                 | 224.711         | 432.317       |
| Treatment Prob(F)             |                |                 | 0.0001          | 0.0001        |
|                               |                |                 |                 | 0.000         |
|                               |                |                 |                 | 1.0000        |
|                               |                |                 |                 | 0.000         |
|                               |                |                 |                 | 315.779       |
|                               |                |                 |                 | 0.0001        |

Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code ZEAMX  
 BBCH Scale BCOR  
 Crop Scientific Name Zea mays  
 Crop Name Corn  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 10-8-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Rating Timing  
 Days After First/Last Applic. 156 132

| Trt No. | Treatment Name   | Rate        | Growth Stage |       |
|---------|------------------|-------------|--------------|-------|
|         |                  | Rate Unit   |              | 25    |
| 1       | CHECK            |             |              | 7.7   |
| 2       | ANTHEM           | 8 oz/a      | PRE          | 127.8 |
|         | CADET            | 0.75 oz/a   | V4           |       |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |       |
|         | COC              | 1 % v/v     | V4           |       |
| 3       | ANTHEM ATZ       | 32 oz/a     | PRE          | 125.0 |
|         | CADET            | 0.75 oz/a   | V4           |       |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |       |
|         | COC              | 1 % v/v     | V4           |       |
| 4       | ANTHEM           | 8 oz/a      | PRE          | 135.6 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |       |
|         | ATRAZINE         | 0.5 lb ai/a | V4           |       |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |       |
|         | COC              | 1 % v/v     | V4           |       |
| 5       | ANTHEM ATZ       | 32 oz/a     | PRE          | 156.3 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |       |
|         | ATRAZINE         | 0.5 lb ai/a | V4           |       |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |       |
|         | COC              | 1 % v/v     | V4           |       |
| 6       | ANTHEM ATZ       | 16 oz/a     | V4           | 145.7 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |       |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |       |
|         | COC              | 1 % v/v     | V4           |       |
| 7       | ATRAZINE         | 0.5 lb ai/a | V4           | 150.7 |
|         | SOLSTICE         | 2.5 oz/a    | V4           |       |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |       |
|         | COC              | 1 % v/v     | V4           |       |
| 8       | SOLSTICE         | 3.15 oz/a   | V4           | 167.0 |
|         | ROUNDUP POWERMAX | 22 fl oz/a  | V4           |       |
|         | COC              | 1 % v/v     | V4           |       |
| 9       | LEXAR            | 96 oz/a     | V4           | 140.0 |
|         | COC              | 1 % v/v     | V4           |       |

Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code ZEAMX  
 BBCH Scale BCOR  
 Crop Scientific Name Zea mays  
 Crop Name Corn  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 10-8-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Rating Timing  
 Days After First/Last Applic. 156 132

| Trt | Treatment          | Rate      | Growth |         |
|-----|--------------------|-----------|--------|---------|
| No. | Name               | Rate Unit | Stage  | 25      |
| 10  | HALEX GT           | 3.6 pt/a  | V4     | 172.1   |
|     | COC                | 1 % v/v   | V4     |         |
|     | LSD (P=.05)        |           |        | 10.79   |
|     | Standard Deviation |           |        | 6.29    |
|     | CV                 |           |        | 4.74    |
|     | Replicate F        |           |        | 3.319   |
|     | Replicate Prob(F)  |           |        | 0.0593  |
|     | Treatment F        |           |        | 164.775 |
|     | Treatment Prob(F)  |           |        | 0.0001  |

Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE III

Trial ID: C14012  
Protocol ID: FMC-CORN PRE-POST  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: RUSTY MITCHELL

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, = US  
AMBTR, Ambrosia trifida, = US  
CHEAL, Chenopodium album, = US  
IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent  
BU = bushel

ARM Action Codes

TY1 = 4.193576\*[22]



Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE III

Trial ID: C14012                                  Location: LEXINGTON, KY   Trial Year: 2014  
Protocol ID: FMC-CORN PRE-POST         Investigator: Charles H Slack  
Project ID:                                         Study Director: CHARLES SLACK  
Sponsor Contact: RUSTY MITCHELL

**General Trial Information**

**Study Director:** CHARLES SLACK   **Title:** RESEARCH SPECIALIST  
**Investigator:** CHARLES SLACK   **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-5-2014  
**Completion Date:** 10-8-2014

**Trial Location**

**City:** LEXINGTON                         **Country:** USA United States  
**State/Prov.:** KENTUCKY  
**Postal Code:** 40511

**Contacts**

**Study Director:** CHARLES SLACK         **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING   **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY         **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                   **E-mail:** cslack@uky.edu

**Investigator:** CHARLES SLACK           **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING   **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY         **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                   **E-mail:** cslack@uky.edu

**Other Contacts**

| <b>Name</b>                  | <b>Role</b> | <b>Other</b>        |
|------------------------------|-------------|---------------------|
| SARA LAWSON RESEARCH ANALYST |             | sara.lawson@uky.edu |

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**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC64-89RIB

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-5-2014  
**Planting Method:** PLANTD planted

**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Emergence Date:** 5-13-2014  
**Harvest Date:** 10-8-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 10  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-5-2014  | 5-29-2014 |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | V4        |
| <b>Application Placement:</b>     | BROSOI    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 82 F      | 80 F      |
| <b>% Relative Humidity:</b>       | 38        | 68        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 4 MPH     |
| <b>Wind Direction:</b>            | ESE       | SW        |
| <b>Soil Temperature, Unit:</b>    | 60 F      | 68 F      |
| <b>Soil Moisture:</b>             | EXCELL    | GOOD      |
| <b>% Cloud Cover:</b>             | 20        | 40        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 6-1-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   |
|---------------------------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            | V4 95      |
| <b>Height, Unit:</b>            |            | 12 IN      |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 3 IN     |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 6 IN     |
| <b>Pest 3 Code, Type, Scale:</b> | CHEAL W  | CHEAL W  |
| <b>Height, Unit:</b>             |          | 2 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 2 IN     |

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**Application Equipment**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      |

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CORN POSTEMERGENCE IV

Trial ID: C14014  
Protocol ID: DUPONT-CORN-14-008  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: KELLY BARNETT

|                               |                |                 |                 |               |
|-------------------------------|----------------|-----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | CHEAL           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |
| Crop Code                     | ZEAMX          |                 |                 |               |
| BBCH Scale                    | BCOR           |                 |                 |               |
| Crop Scientific Name          | Zea mays       |                 |                 |               |
| Crop Name                     | Corn           |                 |                 |               |
| Crop Variety                  |                |                 |                 |               |
| Description                   |                |                 |                 |               |
| Part Rated                    |                |                 |                 |               |
| Rating Date                   | 5-19-2014      | 5-19-2014       | 5-19-2014       | 5-19-2014     |
| Rating Type                   | INJURY         | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 2 WEEK         | 2 WEEK          | 2 WEEK          | 2 WEEK        |
| Days After First/Last Applic. | 14 14          | 14 14           | 14 14           | 14 14         |

| Trt No. | Treatment Name | Rate       | Growth Stage | 1 | 2  | 3  | 4  | 5  |
|---------|----------------|------------|--------------|---|----|----|----|----|
| 1       | INSTIGATE      | 6 oz/a     | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | CINCH          | 1 pt/a     | PRE          |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 2       | INSTIGATE      | 6 oz/a     | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | CINCH          | 1 pt/a     | PRE          |   |    |    |    |    |
|         | REALM Q        |            | LP           |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 3       | INSTIGATE      | 6 oz/a     | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | CINCH          | 1 pt/a     | PRE          |   |    |    |    |    |
|         | RESOLVE Q      |            | LP           |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 4       | INSTIGATE      | 6 oz/a     | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | CINCH ATZ      | 1.5 pt/a   | PRE          |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 5       | LEXAR          | 3.5 qt/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 6       | INSTIGATE      | 6 oz/a     | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | CINCH ATZ      | 1.5 pt/a   | PRE          |   |    |    |    |    |
|         | RESOLVE Q      |            | LP           |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |

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|                               |                    |                |                 |                 |               |        |        |        |
|-------------------------------|--------------------|----------------|-----------------|-----------------|---------------|--------|--------|--------|
| Pest Type                     |                    | W Weed         | W Weed          | W Weed          | W Weed        |        |        |        |
| Pest Code                     |                    | SETFA          | AMBTR           | CHEAL           | IPOSS         |        |        |        |
| Pest Scientific Name          |                    | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |        |        |        |
| Pest Name                     |                    | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |        |        |        |
| Crop Code                     |                    | ZEAMX          |                 |                 |               |        |        |        |
| BBCH Scale                    |                    | BCOR           |                 |                 |               |        |        |        |
| Crop Scientific Name          |                    | Zea mays       |                 |                 |               |        |        |        |
| Crop Name                     |                    | Corn           |                 |                 |               |        |        |        |
| Crop Variety                  |                    |                |                 |                 |               |        |        |        |
| Description                   |                    |                |                 |                 |               |        |        |        |
| Part Rated                    |                    |                |                 |                 |               |        |        |        |
| Rating Date                   |                    | 5-19-2014      | 5-19-2014       | 5-19-2014       | 5-19-2014     |        |        |        |
| Rating Type                   |                    | INJURY         | CONTROL         | CONTROL         | CONTROL       |        |        |        |
| Rating Unit                   |                    | PERCENT        | PERCENT         | PERCENT         | PERCENT       |        |        |        |
| Rating Timing                 |                    | 2 WEEK         | 2 WEEK          | 2 WEEK          | 2 WEEK        |        |        |        |
| Days After First/Last Applic. |                    | 14 14          | 14 14           | 14 14           | 14 14         |        |        |        |
| Trt No.                       | Treatment Name     | Rate           | Growth Stage    | 1               | 2             | 3      | 4      | 5      |
| 7                             | INSTIGATE          | 6 oz/a         | PRE             | 0               | 99            | 99     | 99     | 99     |
|                               | CINCH ATZ          | 1.5 pt/a       | PRE             |                 |               |        |        |        |
|                               | REALM Q            |                | LP              |                 |               |        |        |        |
|                               | AATREX             | 2 lb ai/a      | LP              |                 |               |        |        |        |
|                               | ABUNDIT EXTRA      | 32 fl oz/a     | LP              |                 |               |        |        |        |
|                               | AMS                | 3.7 % v/v      | LP              |                 |               |        |        |        |
| 8                             | UNTREATED          |                |                 | 0               | 0             | 0      | 0      | 0      |
|                               | LSD (P=.05)        |                |                 | 0.0             | 0.0           | 0.0    | 0.0    | 0.0    |
|                               | Standard Deviation |                |                 | 0.0             | 0.0           | 0.0    | 0.0    | 0.0    |
|                               | CV                 |                |                 | 0.0             | 0.0           | 0.0    | 0.0    | 0.0    |
|                               | Replicate F        |                |                 | 0.000           | 0.000         | 0.000  | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                |                 | 1.0000          | 1.0000        | 1.0000 | 1.0000 | 1.0000 |
|                               | Treatment F        |                |                 | 0.000           | 0.000         | 0.000  | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                |                 | 1.0000          | 1.0000        | 1.0000 | 1.0000 | 1.0000 |

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|                               |                |                 |                 |               |
|-------------------------------|----------------|-----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | CHEAL           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |
| Crop Code                     | ZEAMX          |                 |                 |               |
| BBCH Scale                    | BCOR           |                 |                 |               |
| Crop Scientific Name          | Zea mays       |                 |                 |               |
| Crop Name                     | Corn           |                 |                 |               |
| Crop Variety                  |                |                 |                 |               |
| Description                   | AT POST APPL   |                 |                 |               |
| Part Rated                    |                |                 |                 |               |
| Rating Date                   | 6-2-2014       | 6-2-2014        | 6-2-2014        | 6-2-2014      |
| Rating Type                   | INJURY         | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 4 WEEK         | 4 WEEK          | 4 WEEK          | 4 WEEK        |
| Days After First/Last Applic. | 28 28          | 28 28           | 28 28           | 28 28         |

| Trt No. | Treatment Name | Rate       | Growth Stage | 6 | 7  | 8  | 9  | 10 |
|---------|----------------|------------|--------------|---|----|----|----|----|
| 1       | INSTIGATE      | 6 oz/a     | PRE          | 0 | 99 | 93 | 99 | 99 |
|         | CINCH          | 1 pt/a     | PRE          |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 2       | INSTIGATE      | 6 oz/a     | PRE          | 0 | 99 | 89 | 99 | 99 |
|         | CINCH          | 1 pt/a     | PRE          |   |    |    |    |    |
|         | REALM Q        |            | LP           |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 3       | INSTIGATE      | 6 oz/a     | PRE          | 3 | 99 | 98 | 99 | 99 |
|         | CINCH          | 1 pt/a     | PRE          |   |    |    |    |    |
|         | RESOLVE Q      |            | LP           |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 4       | INSTIGATE      | 6 oz/a     | PRE          | 0 | 99 | 93 | 99 | 99 |
|         | CINCH ATZ      | 1.5 pt/a   | PRE          |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 5       | LEXAR          | 3.5 qt/a   | PRE          | 0 | 99 | 96 | 99 | 99 |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |
| 6       | INSTIGATE      | 6 oz/a     | PRE          | 3 | 99 | 93 | 99 | 99 |
|         | CINCH ATZ      | 1.5 pt/a   | PRE          |   |    |    |    |    |
|         | RESOLVE Q      |            | LP           |   |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |   |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |   |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |   |    |    |    |    |

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|                               |                    |                |                 |                 |               |         |        |        |
|-------------------------------|--------------------|----------------|-----------------|-----------------|---------------|---------|--------|--------|
| Pest Type                     |                    | W Weed         | W Weed          | W Weed          | W Weed        |         |        |        |
| Pest Code                     |                    | SETFA          | AMBTR           | CHEAL           | IPOSS         |         |        |        |
| Pest Scientific Name          |                    | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |         |        |        |
| Pest Name                     |                    | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |         |        |        |
| Crop Code                     |                    | ZEAMX          |                 |                 |               |         |        |        |
| BBCH Scale                    |                    | BCOR           |                 |                 |               |         |        |        |
| Crop Scientific Name          |                    | Zea mays       |                 |                 |               |         |        |        |
| Crop Name                     |                    | Corn           |                 |                 |               |         |        |        |
| Crop Variety                  |                    |                |                 |                 |               |         |        |        |
| Description                   |                    | AT POST APPL   |                 |                 |               |         |        |        |
| Part Rated                    |                    |                |                 |                 |               |         |        |        |
| Rating Date                   |                    | 6-2-2014       | 6-2-2014        | 6-2-2014        | 6-2-2014      |         |        |        |
| Rating Type                   |                    | INJURY         | CONTROL         | CONTROL         | CONTROL       |         |        |        |
| Rating Unit                   |                    | PERCENT        | PERCENT         | PERCENT         | PERCENT       |         |        |        |
| Rating Timing                 |                    | 4 WEEK         | 4 WEEK          | 4 WEEK          | 4 WEEK        |         |        |        |
| Days After First/Last Applic. |                    | 28 28          | 28 28           | 28 28           | 28 28         |         |        |        |
| Trt No.                       | Treatment Name     | Rate           | Growth Stage    | 6               | 7             | 8       | 9      | 10     |
| 7                             | INSTIGATE          | 6 oz/a         | PRE             |                 | 7             | 99      | 98     | 99     |
|                               | CINCH ATZ          | 1.5 pt/a       | PRE             |                 |               |         |        |        |
|                               | REALM Q            |                | LP              |                 |               |         |        |        |
|                               | AATREX             | 2 lb ai/a      | LP              |                 |               |         |        |        |
|                               | ABUNDIT EXTRA      | 32 fl oz/a     | LP              |                 |               |         |        |        |
|                               | AMS                | 3.7 % v/v      | LP              |                 |               |         |        |        |
| 8                             | UNTREATED          |                |                 | 0               | 0             | 0       | 0      | 0      |
|                               | LSD (P=.05)        |                |                 | 6.5             | 0.0           | 6.0     | 0.0    | 0.0    |
|                               | Standard Deviation |                |                 | 3.7             | 0.0           | 3.4     | 0.0    | 0.0    |
|                               | CV                 |                |                 | 222.0           | 0.0           | 4.18    | 0.0    | 0.0    |
|                               | Replicate F        |                |                 | 0.304           | 0.000         | 0.390   | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                |                 | 0.7424          | 1.0000        | 0.6843  | 1.0000 | 1.0000 |
|                               | Treatment F        |                |                 | 1.391           | 0.000         | 282.488 | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                |                 | 0.2831          | 1.0000        | 0.0001  | 1.0000 | 1.0000 |



|                               |                |                 |                 |               |
|-------------------------------|----------------|-----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | CHEAL           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |
| Crop Code                     | ZEAMX          |                 |                 |               |
| BBCH Scale                    | BCOR           |                 |                 |               |
| Crop Scientific Name          | Zea mays       |                 |                 |               |
| Crop Name                     | Corn           |                 |                 |               |
| Crop Variety                  |                |                 |                 |               |
| Description                   | AFTER POST     |                 |                 |               |
| Part Rated                    |                |                 |                 |               |
| Rating Date                   | 7-2-2014       | 7-2-2014        | 7-2-2014        | 7-2-2014      |
| Rating Type                   | INJURY         | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 8 WEEK         | 8 WEEK          | 8 WEEK          | 8 WEEK        |
| Days After First/Last Applic. | 58 26          | 58 26           | 58 26           | 58 26         |

| Trt No. | Treatment Name | Rate       | Growth Stage | 11 | 12 | 13 | 14 | 15 |
|---------|----------------|------------|--------------|----|----|----|----|----|
| 1       | INSTIGATE      | 6 oz/a     | PRE          | 0  | 99 | 99 | 99 | 99 |
|         | CINCH          | 1 pt/a     | PRE          |    |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |    |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |    |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |    |    |    |    |    |
| 2       | INSTIGATE      | 6 oz/a     | PRE          | 0  | 99 | 99 | 99 | 99 |
|         | CINCH          | 1 pt/a     | PRE          |    |    |    |    |    |
|         | REALM Q        |            | LP           |    |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |    |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |    |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |    |    |    |    |    |
| 3       | INSTIGATE      | 6 oz/a     | PRE          | 0  | 99 | 99 | 99 | 99 |
|         | CINCH          | 1 pt/a     | PRE          |    |    |    |    |    |
|         | RESOLVE Q      |            | LP           |    |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |    |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |    |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |    |    |    |    |    |
| 4       | INSTIGATE      | 6 oz/a     | PRE          | 0  | 99 | 96 | 99 | 96 |
|         | CINCH ATZ      | 1.5 pt/a   | PRE          |    |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |    |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |    |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |    |    |    |    |    |
| 5       | LEXAR          | 3.5 qt/a   | PRE          | 0  | 99 | 98 | 99 | 96 |
|         | AATREX         | 2 lb ai/a  | LP           |    |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |    |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |    |    |    |    |    |
| 6       | INSTIGATE      | 6 oz/a     | PRE          | 3  | 99 | 99 | 99 | 95 |
|         | CINCH ATZ      | 1.5 pt/a   | PRE          |    |    |    |    |    |
|         | RESOLVE Q      |            | LP           |    |    |    |    |    |
|         | AATREX         | 2 lb ai/a  | LP           |    |    |    |    |    |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |    |    |    |    |    |
|         | AMS            | 3.7 % v/v  | LP           |    |    |    |    |    |

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|                               |                    |                |                 |                 |               |          |        |          |
|-------------------------------|--------------------|----------------|-----------------|-----------------|---------------|----------|--------|----------|
| Pest Type                     |                    | W Weed         | W Weed          | W Weed          | W Weed        |          |        |          |
| Pest Code                     |                    | SETFA          | AMBTR           | CHEAL           | IPOSS         |          |        |          |
| Pest Scientific Name          |                    | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |          |        |          |
| Pest Name                     |                    | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |          |        |          |
| Crop Code                     |                    | ZEAMX          |                 |                 |               |          |        |          |
| BBCH Scale                    |                    | BCOR           |                 |                 |               |          |        |          |
| Crop Scientific Name          |                    | Zea mays       |                 |                 |               |          |        |          |
| Crop Name                     |                    | Corn           |                 |                 |               |          |        |          |
| Crop Variety                  |                    |                |                 |                 |               |          |        |          |
| Description                   |                    | AFTER POST     |                 |                 |               |          |        |          |
| Part Rated                    |                    |                |                 |                 |               |          |        |          |
| Rating Date                   |                    | 7-2-2014       | 7-2-2014        | 7-2-2014        | 7-2-2014      |          |        |          |
| Rating Type                   |                    | INJURY         | CONTROL         | CONTROL         | CONTROL       |          |        |          |
| Rating Unit                   |                    | PERCENT        | PERCENT         | PERCENT         | PERCENT       |          |        |          |
| Rating Timing                 |                    | 8 WEEK         | 8 WEEK          | 8 WEEK          | 8 WEEK        |          |        |          |
| Days After First/Last Applic. |                    | 58 26          | 58 26           | 58 26           | 58 26         |          |        |          |
| Trt No.                       | Treatment Name     | Rate           | Growth Stage    | 11              | 12            | 13       | 14     | 15       |
| 7                             | INSTIGATE          | 6 oz/a         | PRE             | 3               | 99            | 99       | 99     | 99       |
|                               | CINCH ATZ          | 1.5 pt/a       | PRE             |                 |               |          |        |          |
|                               | REALM Q            |                | LP              |                 |               |          |        |          |
|                               | AATREX             | 2 lb ai/a      | LP              |                 |               |          |        |          |
|                               | ABUNDIT EXTRA      | 32 fl oz/a     | LP              |                 |               |          |        |          |
|                               | AMS                | 3.7 % v/v      | LP              |                 |               |          |        |          |
| 8                             | UNTREATED          |                |                 | 0               | 0             | 0        | 0      | 0        |
|                               | LSD (P=.05)        |                |                 | 4.7             | 0.0           | 1.9      | 0.0    | 3.1      |
|                               | Standard Deviation |                |                 | 2.7             | 0.0           | 1.1      | 0.0    | 1.8      |
|                               | CV                 |                |                 | 320.71          | 0.0           | 1.29     | 0.0    | 2.05     |
|                               | Replicate F        |                |                 | 2.333           | 0.000         | 1.615    | 0.000  | 3.113    |
|                               | Replicate Prob(F)  |                |                 | 0.1335          | 1.0000        | 0.2338   | 1.0000 | 0.0761   |
|                               | Treatment F        |                |                 | 1.000           | 0.000         | 2936.688 | 0.000  | 1168.489 |
|                               | Treatment Prob(F)  |                |                 | 0.4706          | 1.0000        | 0.0001   | 1.0000 | 0.0001   |

Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code ZEAMX  
 BBCH Scale BCOR  
 Crop Scientific Name Zea mays  
 Crop Name Corn  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 10-8-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Rating Timing  
 Days After First/Last Applic. 156 124

| Trt No. | Treatment Name | Rate       | Growth Stage |       |
|---------|----------------|------------|--------------|-------|
|         |                | Rate Unit  |              | 20    |
| 1       | INSTIGATE      | 6 oz/a     | PRE          | 133.0 |
|         | CINCH          | 1 pt/a     | PRE          |       |
|         | AATREX         | 2 lb ai/a  | LP           |       |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |       |
|         | AMS            | 3.7 % v/v  | LP           |       |
| 2       | INSTIGATE      | 6 oz/a     | PRE          | 131.6 |
|         | CINCH          | 1 pt/a     | PRE          |       |
|         | REALM Q        |            | LP           |       |
|         | AATREX         | 2 lb ai/a  | LP           |       |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |       |
|         | AMS            | 3.7 % v/v  | LP           |       |
| 3       | INSTIGATE      | 6 oz/a     | PRE          | 139.3 |
|         | CINCH          | 1 pt/a     | PRE          |       |
|         | RESOLVE Q      |            | LP           |       |
|         | AATREX         | 2 lb ai/a  | LP           |       |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |       |
|         | AMS            | 3.7 % v/v  | LP           |       |
| 4       | INSTIGATE      | 6 oz/a     | PRE          | 144.3 |
|         | CINCH ATZ      | 1.5 pt/a   | PRE          |       |
|         | AATREX         | 2 lb ai/a  | LP           |       |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |       |
|         | AMS            | 3.7 % v/v  | LP           |       |
| 5       | LEXAR          | 3.5 qt/a   | PRE          | 143.6 |
|         | AATREX         | 2 lb ai/a  | LP           |       |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |       |
|         | AMS            | 3.7 % v/v  | LP           |       |
| 6       | INSTIGATE      | 6 oz/a     | PRE          | 154.8 |
|         | CINCH ATZ      | 1.5 pt/a   | PRE          |       |
|         | RESOLVE Q      |            | LP           |       |
|         | AATREX         | 2 lb ai/a  | LP           |       |
|         | ABUNDIT EXTRA  | 32 fl oz/a | LP           |       |
|         | AMS            | 3.7 % v/v  | LP           |       |

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Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code ZEAMX  
 BBCH Scale BCOR  
 Crop Scientific Name Zea mays  
 Crop Name Corn  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 10-8-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Rating Timing  
 Days After First/Last Applic. 156 124

| Trt No. | Treatment Name     | Rate       | Unit | Growth Stage |         |
|---------|--------------------|------------|------|--------------|---------|
| 7       | INSTIGATE          | 6 oz/a     |      | PRE          | 144.1   |
|         | CINCH ATZ          | 1.5 pt/a   |      | PRE          |         |
|         | REALM Q            |            |      | LP           |         |
|         | AATREX             | 2 lb ai/a  |      | LP           |         |
|         | ABUNDIT EXTRA      | 32 fl oz/a |      | LP           |         |
|         | AMS                | 3.7 % v/v  |      | LP           |         |
| 8       | UNTREATED          |            |      |              | 3.7     |
|         | LSD (P=.05)        |            |      |              | 11.27   |
|         | Standard Deviation |            |      |              | 6.44    |
|         | CV                 |            |      |              | 5.18    |
|         | Replicate F        |            |      |              | 1.817   |
|         | Replicate Prob(F)  |            |      |              | 0.1988  |
|         | Treatment F        |            |      |              | 175.777 |
|         | Treatment Prob(F)  |            |      |              | 0.0001  |





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**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC64-89RIB

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-5-2014  
**Planting Method:** PLANTD planted

**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** WET wet  
**Seed Bed:** SMOOTH smooth

**Emergence Date:** 5-12-2014  
**Harvest Date:** 10-8-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 8  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-5-2014  | 6-6-2014  |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | LP        |
| <b>Application Placement:</b>     | BROSOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 82 F      | 67 F      |
| <b>% Relative Humidity:</b>       | 38        | 70        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 4 MPH     |
| <b>Wind Direction:</b>            | ESE       | ENE       |
| <b>Soil Temperature, Unit:</b>    | 60 F      | 68 F      |
| <b>Soil Moisture:</b>             | EXCELL    | NORMAL    |
| <b>% Cloud Cover:</b>             | 20        | 10        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 6-10-2014 |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   |
|---------------------------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Height, Unit:</b>            | 8          | IN         |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             | 4        | IN       |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             | 6        | IN       |
| <b>Pest 3 Code, Type, Scale:</b> | CHEAL W  | CHEAL W  |
| <b>Height, Unit:</b>             | 3        | IN       |
| <b>Pest 4 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             | 3        | IN       |

**Application Equipment**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      |



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CORN POSTEMERGENCE V

Trial ID: C14015 Location: LEXINGTON, KY Trial Year: 2014  
Protocol ID: SYN-CORN-PRE Investigator: Charles H Slack  
Project ID: Study Director: CHARLES SLACK  
Sponsor Contact: SCOTT CULLY

Pest Type W Weed W Weed W Weed W Weed  
Pest Code SETFA AMBTR CHEAL IPOSS  
Pest Scientific Name Setaria faberi Ambrosia trifi> Chenopodium al> Ipomoea sp.  
Pest Name Giant foxtail Giant ragweed Common lambsqu> Morning glory  
Crop Code ZEAMX  
BBCH Scale BCOR  
Crop Scientific Name Zea mays  
Crop Name Corn  
Description  
Part Rated  
Rating Date 5-19-2014 5-19-2014 5-19-2014 5-19-2014 5-19-2014  
Rating Type INJURY CONTROL CONTROL CONTROL CONTROL  
Rating Unit PERCENT PERCENT PERCENT PERCENT PERCENT  
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK 2 WEEK  
Days After First/Last Applic. 14 14 14 14 14

| Trt | Treatment          | Rate        | Growth |        |        |        |        |        |
|-----|--------------------|-------------|--------|--------|--------|--------|--------|--------|
| No. | Name               | Rate Unit   | Stage  | 1      | 2      | 3      | 4      | 5      |
| 1   | LEXAR EZ           | 3 qt/a      | PRE    | 0      | 99     | 99     | 99     | 99     |
| 2   | LEXAR EZ           | 3 qt/a      | PRE    | 0      | 99     | 99     | 99     | 99     |
|     | PRINCEP            | 1 lb ai/a   | PRE    |        |        |        |        |        |
| 3   | LEXAR EZ           | 1.5 qt/a    | PRE    | 0      | 99     | 99     | 99     | 99     |
|     | HALEX GT           | 3.6 pt/a    | 12C    |        |        |        |        |        |
|     | AATREX             | 1 pt/a      | 12C    |        |        |        |        |        |
|     | AMS                | 1 % v/v     | 12C    |        |        |        |        |        |
|     | NIS                | 0.25 % v/v  | 12C    |        |        |        |        |        |
| 4   | CORVUS HERBICIDE   | 5.6 fl oz/a | PRE    | 0      | 99     | 99     | 99     | 99     |
|     | AATREX             | 1 qt/a      | PRE    |        |        |        |        |        |
| 5   | ZIDUA              | 2.5 oz wt/a | PRE    | 0      | 99     | 99     | 99     | 99     |
|     | AATREX             | 1 qt/a      | PRE    |        |        |        |        |        |
| 6   | ANTHEM ATZ         | 2.25 pt/a   | PRE    | 0      | 99     | 99     | 99     | 99     |
| 7   | ACURON             | 1.5 qt/a    | PRE    | 0      | 99     | 99     | 99     | 99     |
|     | HALEX GT           | 3.6 pt/a    | 12C    |        |        |        |        |        |
|     | AATREX             | 1.5 pt/a    | 12C    |        |        |        |        |        |
|     | AMS                | 1 % v/v     | 12C    |        |        |        |        |        |
|     | NIS                | 0.25 % v/v  | 12C    |        |        |        |        |        |
| 8   | ACURON             | 1.25 qt/a   | PRE    | 0      | 99     | 99     | 99     | 99     |
|     | ACURON             | 1.25 qt/a   | 12C    |        |        |        |        |        |
|     | UAN-28%            | 2 % v/v     | 12C    |        |        |        |        |        |
|     | NIS                | 0.25 % v/v  | 12C    |        |        |        |        |        |
| 9   | ACURON             | 1.25 qt/a   | PRE    | 0      | 99     | 99     | 99     | 99     |
|     | ACURON             | 1.25 qt/a   | 12C    |        |        |        |        |        |
|     | TOUCHDOWN TOTAL    | 30 fl oz/a  | 12C    |        |        |        |        |        |
|     | AMS                | 2.5 % v/v   | 12C    |        |        |        |        |        |
| 10  | CHECK UNTREATED    |             |        | 0      | 0      | 0      | 0      | 0      |
|     | LSD (P=.05)        |             |        | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
|     | Standard Deviation |             |        | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
|     | CV                 |             |        | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
|     | Replicate F        |             |        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|     | Replicate Prob(F)  |             |        | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|     | Treatment F        |             |        | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|     | Treatment Prob(F)  |             |        | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

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| Pest Type                     | W Weed             | W Weed          | W Weed          |        |        |         |        |
|-------------------------------|--------------------|-----------------|-----------------|--------|--------|---------|--------|
| Pest Code                     | SETFA              | AMBTR           | CHEAL           |        |        |         |        |
| Pest Scientific Name          | Setaria faberi     | Ambrosia trifi> | Chenopodium al> |        |        |         |        |
| Pest Name                     | Giant foxtail      | Giant ragweed   | Common lambsqu> |        |        |         |        |
| Crop Code                     | ZEAMX              |                 |                 |        |        |         |        |
| BBCH Scale                    | BCOR               |                 |                 |        |        |         |        |
| Crop Scientific Name          | Zea mays           |                 |                 |        |        |         |        |
| Crop Name                     | Corn               |                 |                 |        |        |         |        |
| Crop Variety                  |                    |                 |                 |        |        |         |        |
| Description                   | AT POST APPL       |                 | AT POST APPL    |        |        |         |        |
| Part Rated                    |                    |                 |                 |        |        |         |        |
| Rating Date                   | 5-30-2014          |                 | 5-30-2014       |        |        |         |        |
| Rating Type                   | INJURY             |                 | CONTROL         |        |        |         |        |
| Rating Unit                   | PERCENT            |                 | PERCENT         |        |        |         |        |
| Rating Timing                 |                    |                 |                 |        |        |         |        |
| Days After First/Last Applic. | 25 25              |                 | 25 25           |        |        |         |        |
| Trt No.                       | Treatment Name     | Rate Rate Unit  | Growth Stage    | 6      | 7      | 8       | 9      |
| 1                             | LEXAR EZ           | 3 qt/a          | PRE             | 0      | 99     | 89      | 99     |
| 2                             | LEXAR EZ           | 3 qt/a          | PRE             | 0      | 99     | 93      | 99     |
|                               | PRINCEP            | 1 lb ai/a       | PRE             |        |        |         |        |
| 3                             | LEXAR EZ           | 1.5 qt/a        | PRE             | 0      | 99     | 87      | 99     |
|                               | HALEX GT           | 3.6 pt/a        | 12C             |        |        |         |        |
|                               | AATREX             | 1 pt/a          | 12C             |        |        |         |        |
|                               | AMS                | 1 % v/v         | 12C             |        |        |         |        |
|                               | NIS                | 0.25 % v/v      | 12C             |        |        |         |        |
| 4                             | CORVUS HERBICIDE   | 5.6 fl oz/a     | PRE             | 0      | 99     | 99      | 99     |
|                               | AATREX             | 1 qt/a          | PRE             |        |        |         |        |
| 5                             | ZIDUA              | 2.5 oz wt/a     | PRE             | 0      | 99     | 99      | 99     |
|                               | AATREX             | 1 qt/a          | PRE             |        |        |         |        |
| 6                             | ANTHEM ATZ         | 2.25 pt/a       | PRE             | 0      | 99     | 99      | 99     |
| 7                             | ACURON             | 1.5 qt/a        | PRE             | 0      | 99     | 98      | 99     |
|                               | HALEX GT           | 3.6 pt/a        | 12C             |        |        |         |        |
|                               | AATREX             | 1.5 pt/a        | 12C             |        |        |         |        |
|                               | AMS                | 1 % v/v         | 12C             |        |        |         |        |
|                               | NIS                | 0.25 % v/v      | 12C             |        |        |         |        |
| 8                             | ACURON             | 1.25 qt/a       | PRE             | 0      | 99     | 98      | 99     |
|                               | ACURON             | 1.25 qt/a       | 12C             |        |        |         |        |
|                               | UAN-28%            | 2 % v/v         | 12C             |        |        |         |        |
|                               | NIS                | 0.25 % v/v      | 12C             |        |        |         |        |
| 9                             | ACURON             | 1.25 qt/a       | PRE             | 0      | 99     | 93      | 99     |
|                               | ACURON             | 1.25 qt/a       | 12C             |        |        |         |        |
|                               | TOUCHDOWN TOTAL    | 30 fl oz/a      | 12C             |        |        |         |        |
|                               | AMS                | 2.5 % v/v       | 12C             |        |        |         |        |
| 10                            | CHECK UNTREATED    |                 |                 | 0      | 0      | 0       | 0      |
|                               | LSD (P=.05)        |                 |                 | 0.0    | 0.0    | 3.2     | 0.0    |
|                               | Standard Deviation |                 |                 | 0.0    | 0.0    | 1.9     | 0.0    |
|                               | CV                 |                 |                 | 0.0    | 0.0    | 2.19    | 0.0    |
|                               | Replicate F        |                 |                 | 0.000  | 0.000  | 0.067   | 0.000  |
|                               | Replicate Prob(F)  |                 |                 | 1.0000 | 1.0000 | 0.9356  | 1.0000 |
|                               | Treatment F        |                 |                 | 0.000  | 0.000  | 791.012 | 0.000  |
|                               | Treatment Prob(F)  |                 |                 | 1.0000 | 1.0000 | 0.0001  | 1.0000 |

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|                               |               |                |                  |
|-------------------------------|---------------|----------------|------------------|
| Pest Type                     | W Weed        | W Weed         | W Weed           |
| Pest Code                     | IPOSS         | SETFA          | AMBTR            |
| Pest Scientific Name          | Ipomoea sp.   | Setaria faberi | Ambrosia trifida |
| Pest Name                     | Morning glory | Giant foxtail  | Giant ragweed    |
| Crop Code                     |               | ZEAMX          |                  |
| BBCH Scale                    |               | BCOR           |                  |
| Crop Scientific Name          |               | Zea mays       |                  |
| Crop Name                     |               | Corn           |                  |
| Crop Variety                  |               |                |                  |
| Description                   | AT POST APPL  |                |                  |
| Part Rated                    |               |                |                  |
| Rating Date                   | 5-30-2014     | 6-12-2014      | 6-12-2014        |
| Rating Type                   | CONTROL       | INJURY         | CONTROL          |
| Rating Unit                   | PERCENT       | PERCENT        | PERCENT          |
| Rating Timing                 |               | 4 WEEK         | 4 WEEK           |
| Days After First/Last Applic. | 25 25         | 38 13          | 38 13            |

| Trt | Treatment Name     | Rate        | Growth Stage | 10     | 11     | 12     | 13      |
|-----|--------------------|-------------|--------------|--------|--------|--------|---------|
|     |                    | Rate Unit   |              |        |        |        |         |
| 1   | LEXAR EZ           | 3 qt/a      | PRE          | 99     | 0      | 99     | 89      |
| 2   | LEXAR EZ           | 3 qt/a      | PRE          | 99     | 0      | 99     | 93      |
|     | PRINCEP            | 1 lb ai/a   | PRE          |        |        |        |         |
| 3   | LEXAR EZ           | 1.5 qt/a    | PRE          | 99     | 0      | 99     | 87      |
|     | HALEX GT           | 3.6 pt/a    | 12C          |        |        |        |         |
|     | AATREX             | 1 pt/a      | 12C          |        |        |        |         |
|     | AMS                | 1 % v/v     | 12C          |        |        |        |         |
|     | NIS                | 0.25 % v/v  | 12C          |        |        |        |         |
| 4   | CORVUS HERBICIDE   | 5.6 fl oz/a | PRE          | 99     | 0      | 99     | 99      |
|     | AATREX             | 1 qt/a      | PRE          |        |        |        |         |
| 5   | ZIDUA              | 2.5 oz wt/a | PRE          | 99     | 0      | 99     | 99      |
|     | AATREX             | 1 qt/a      | PRE          |        |        |        |         |
| 6   | ANTHEM ATZ         | 2.25 pt/a   | PRE          | 99     | 0      | 99     | 99      |
| 7   | ACURON             | 1.5 qt/a    | PRE          | 99     | 0      | 99     | 98      |
|     | HALEX GT           | 3.6 pt/a    | 12C          |        |        |        |         |
|     | AATREX             | 1.5 pt/a    | 12C          |        |        |        |         |
|     | AMS                | 1 % v/v     | 12C          |        |        |        |         |
|     | NIS                | 0.25 % v/v  | 12C          |        |        |        |         |
| 8   | ACURON             | 1.25 qt/a   | PRE          | 99     | 0      | 99     | 98      |
|     | ACURON             | 1.25 qt/a   | 12C          |        |        |        |         |
|     | UAN-28%            | 2 % v/v     | 12C          |        |        |        |         |
|     | NIS                | 0.25 % v/v  | 12C          |        |        |        |         |
| 9   | ACURON             | 1.25 qt/a   | PRE          | 99     | 0      | 99     | 93      |
|     | ACURON             | 1.25 qt/a   | 12C          |        |        |        |         |
|     | TOUCHDOWN TOTAL    | 30 fl oz/a  | 12C          |        |        |        |         |
|     | AMS                | 2.5 % v/v   | 12C          |        |        |        |         |
| 10  | CHECK UNTREATED    |             |              | 0      | 0      | 0      | 0       |
|     | LSD (P=.05)        |             |              | 0.0    | 0.0    | 0.0    | 3.2     |
|     | Standard Deviation |             |              | 0.0    | 0.0    | 0.0    | 1.9     |
|     | CV                 |             |              | 0.0    | 0.0    | 0.0    | 2.19    |
|     | Replicate F        |             |              | 0.000  | 0.000  | 0.000  | 0.067   |
|     | Replicate Prob(F)  |             |              | 1.0000 | 1.0000 | 1.0000 | 0.9356  |
|     | Treatment F        |             |              | 0.000  | 0.000  | 0.000  | 791.012 |
|     | Treatment Prob(F)  |             |              | 1.0000 | 1.0000 | 1.0000 | 0.0001  |

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| Pest Type                     | W Weed          | W Weed        | W Weed         | W Weed          |        |         |         |
|-------------------------------|-----------------|---------------|----------------|-----------------|--------|---------|---------|
| Pest Code                     | CHEAL           | IPOSS         | SETFA          | AMBTR           |        |         |         |
| Pest Scientific Name          | Chenopodium al> | Ipomoea sp.   | Setaria faberi | Ambrosia trifi> |        |         |         |
| Pest Name                     | Common lambsqu> | Morning glory | Giant foxtail  | Giant ragweed   |        |         |         |
| Crop Code                     |                 |               | ZEAMX          |                 |        |         |         |
| BBCH Scale                    |                 |               | BCOR           |                 |        |         |         |
| Crop Scientific Name          |                 |               | Zea mays       |                 |        |         |         |
| Crop Name                     |                 |               | Corn           |                 |        |         |         |
| Crop Variety                  |                 |               |                |                 |        |         |         |
| Description                   |                 |               |                |                 |        |         |         |
| Part Rated                    |                 |               |                |                 |        |         |         |
| Rating Date                   | 6-12-2014       | 6-12-2014     | 7-3-2014       | 7-3-2014        |        |         |         |
| Rating Type                   | CONTROL         | CONTROL       | INJURY         | CONTROL         |        |         |         |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT        | PERCENT         |        |         |         |
| Rating Timing                 | 4 WEEK          | 4 WEEK        | 8 WEEK         | 8 WEEK          |        |         |         |
| Days After First/Last Applic. | 38 13           | 38 13         | 59 34          | 59 34           |        |         |         |
| Trt Treatment                 | Rate            | Growth        | 14             | 15              | 16     | 17      | 18      |
| No. Name                      | Rate Unit       | Stage         |                |                 |        |         |         |
| 1 LEXAR EZ                    | 3 qt/a          | PRE           | 99             | 99              | 0      | 99      | 87      |
| 2 LEXAR EZ                    | 3 qt/a          | PRE           | 99             | 99              | 0      | 99      | 85      |
| PRINCEP                       | 1 lb ai/a       | PRE           |                |                 |        |         |         |
| 3 LEXAR EZ                    | 1.5 qt/a        | PRE           | 99             | 99              | 0      | 99      | 93      |
| HALEX GT                      | 3.6 pt/a        | 12C           |                |                 |        |         |         |
| AATREX                        | 1 pt/a          | 12C           |                |                 |        |         |         |
| AMS                           | 1 % v/v         | 12C           |                |                 |        |         |         |
| NIS                           | 0.25 % v/v      | 12C           |                |                 |        |         |         |
| 4 CORVUS HERBICIDE            | 5.6 fl oz/a     | PRE           | 99             | 99              | 0      | 88      | 89      |
| AATREX                        | 1 qt/a          | PRE           |                |                 |        |         |         |
| 5 ZIDUA                       | 2.5 oz wt/a     | PRE           | 99             | 99              | 0      | 99      | 67      |
| AATREX                        | 1 qt/a          | PRE           |                |                 |        |         |         |
| 6 ANTHEM ATZ                  | 2.25 pt/a       | PRE           | 99             | 99              | 0      | 99      | 67      |
| 7 ACURON                      | 1.5 qt/a        | PRE           | 99             | 99              | 0      | 99      | 99      |
| HALEX GT                      | 3.6 pt/a        | 12C           |                |                 |        |         |         |
| AATREX                        | 1.5 pt/a        | 12C           |                |                 |        |         |         |
| AMS                           | 1 % v/v         | 12C           |                |                 |        |         |         |
| NIS                           | 0.25 % v/v      | 12C           |                |                 |        |         |         |
| 8 ACURON                      | 1.25 qt/a       | PRE           | 99             | 99              | 0      | 99      | 96      |
| ACURON                        | 1.25 qt/a       | 12C           |                |                 |        |         |         |
| UAN-28%                       | 2 % v/v         | 12C           |                |                 |        |         |         |
| NIS                           | 0.25 % v/v      | 12C           |                |                 |        |         |         |
| 9 ACURON                      | 1.25 qt/a       | PRE           | 99             | 99              | 0      | 99      | 95      |
| ACURON                        | 1.25 qt/a       | 12C           |                |                 |        |         |         |
| TOUCHDOWN TOTAL               | 30 fl oz/a      | 12C           |                |                 |        |         |         |
| AMS                           | 2.5 % v/v       | 12C           |                |                 |        |         |         |
| 10 CHECK UNTREATED            |                 |               | 0              | 0               | 0      | 0       | 0       |
| LSD (P=.05)                   |                 |               | 0.0            | 0.0             | 0.0    | 8.5     | 6.2     |
| Standard Deviation            |                 |               | 0.0            | 0.0             | 0.0    | 5.0     | 3.6     |
| CV                            |                 |               | 0.0            | 0.0             | 0.0    | 5.65    | 4.63    |
| Replicate F                   |                 |               | 0.000          | 0.000           | 0.000  | 1.000   | 1.026   |
| Replicate Prob(F)             |                 |               | 1.0000         | 1.0000          | 1.0000 | 0.3874  | 0.3786  |
| Treatment F                   |                 |               | 0.000          | 0.000           | 0.000  | 117.571 | 202.800 |
| Treatment Prob(F)             |                 |               | 1.0000         | 1.0000          | 1.0000 | 0.0001  | 0.0001  |

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|                               |                 |               |           |          |
|-------------------------------|-----------------|---------------|-----------|----------|
| Pest Type                     | W Weed          | W Weed        |           |          |
| Pest Code                     | CHEAL           | IPOSS         |           |          |
| Pest Scientific Name          | Chenopodium al> | Ipomoea sp.   |           |          |
| Pest Name                     | Common lambsqu> | Morning glory |           |          |
| Crop Code                     |                 |               |           | ZEAMX    |
| BBCH Scale                    |                 |               |           | BCOR     |
| Crop Scientific Name          |                 |               |           | Zea mays |
| Crop Name                     |                 |               |           | Corn     |
| Crop Variety                  |                 |               |           |          |
| Description                   |                 |               |           |          |
| Part Rated                    |                 |               |           |          |
| Rating Date                   | 7-3-2014        | 7-3-2014      | 10-8-2014 |          |
| Rating Type                   | CONTROL         | CONTROL       | YIELD     |          |
| Rating Unit                   | PERCENT         | PERCENT       | BU        |          |
| Rating Timing                 | 8 WEEK          | 8 WEEK        |           |          |
| Days After First/Last Applic. | 59 34           | 59 34         | 156 131   |          |

| Trt No. | Treatment Name     | Rate        | Rate Unit | Growth Stage | 19     | 20      | 25      |
|---------|--------------------|-------------|-----------|--------------|--------|---------|---------|
| 1       | LEXAR EZ           | 3 qt/a      |           | PRE          | 99     | 90      | 101.5   |
| 2       | LEXAR EZ           | 3 qt/a      |           | PRE          | 99     | 91      | 146.8   |
|         | PRINCEP            | 1 lb ai/a   |           | PRE          |        |         |         |
| 3       | LEXAR EZ           | 1.5 qt/a    |           | PRE          | 99     | 95      | 133.5   |
|         | HALEX GT           | 3.6 pt/a    |           | 12C          |        |         |         |
|         | AATREX             | 1 pt/a      |           | 12C          |        |         |         |
|         | AMS                | 1 % v/v     |           | 12C          |        |         |         |
|         | NIS                | 0.25 % v/v  |           | 12C          |        |         |         |
| 4       | CORVUS HERBICIDE   | 5.6 fl oz/a |           | PRE          | 99     | 90      | 125.2   |
|         | AATREX             | 1 qt/a      |           | PRE          |        |         |         |
| 5       | ZIDUA              | 2.5 oz wt/a |           | PRE          | 99     | 83      | 31.3    |
|         | AATREX             | 1 qt/a      |           | PRE          |        |         |         |
| 6       | ANTHEM ATZ         | 2.25 pt/a   |           | PRE          | 99     | 86      | 17.0    |
| 7       | ACURON             | 1.5 qt/a    |           | PRE          | 99     | 96      | 141.0   |
|         | HALEX GT           | 3.6 pt/a    |           | 12C          |        |         |         |
|         | AATREX             | 1.5 pt/a    |           | 12C          |        |         |         |
|         | AMS                | 1 % v/v     |           | 12C          |        |         |         |
|         | NIS                | 0.25 % v/v  |           | 12C          |        |         |         |
| 8       | ACURON             | 1.25 qt/a   |           | PRE          | 99     | 96      | 128.9   |
|         | ACURON             | 1.25 qt/a   |           | 12C          |        |         |         |
|         | UAN-28%            | 2 % v/v     |           | 12C          |        |         |         |
|         | NIS                | 0.25 % v/v  |           | 12C          |        |         |         |
| 9       | ACURON             | 1.25 qt/a   |           | PRE          | 99     | 96      | 139.2   |
|         | ACURON             | 1.25 qt/a   |           | 12C          |        |         |         |
|         | TOUCHDOWN TOTAL    | 30 fl oz/a  |           | 12C          |        |         |         |
|         | AMS                | 2.5 % v/v   |           | 12C          |        |         |         |
| 10      | CHECK UNTREATED    |             |           |              | 0      | 0       | 3.0     |
|         | LSD (P=.05)        |             |           |              | 0.0    | 8.7     | 7.49    |
|         | Standard Deviation |             |           |              | 0.0    | 5.1     | 4.37    |
|         | CV                 |             |           |              | 0.0    | 6.14    | 4.51    |
|         | Replicate F        |             |           |              | 0.000  | 2.444   | 1.865   |
|         | Replicate Prob(F)  |             |           |              | 1.0000 | 0.1151  | 0.1836  |
|         | Treatment F        |             |           |              | 0.000  | 100.828 | 505.530 |
|         | Treatment Prob(F)  |             |           |              | 1.0000 | 0.0001  | 0.0001  |





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**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** N70J-3011A

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-5-2014  
**Planting Method:** PLANTD planted

**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Emergence Date:** 5-13-2014  
**Harvest Date:** 10-8-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 10  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI



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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-5-2014  | 5-30-2014 |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | 12C       |
| <b>Application Placement:</b>     | BROSOI    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 82 F      | 75 F      |
| <b>% Relative Humidity:</b>       | 38        | 50        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 4 MPH     |
| <b>Wind Direction:</b>            | ESE       | SE        |
| <b>Soil Temperature, Unit:</b>    | 60 F      | 68 F      |
| <b>Soil Moisture:</b>             | EXCELL    | NORMAL    |
| <b>% Cloud Cover:</b>             | 20        | 10        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 6-1-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   |
|---------------------------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Height, Unit:</b>            |            | 12 IN      |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 3 IN     |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 6 IN     |
| <b>Pest 3 Code, Type, Scale:</b> | CHEAL W  | CHEAL W  |
| <b>Height, Unit:</b>             |          | 3 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 2 IN     |

**Application Equipment**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      |

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CORN POSTEMERGENCE VI

Trial ID: C14016 Location: LEXINGTON, KY Trial Year: 2014  
Protocol ID: HBI001B3-SYN Investigator: Charles H Slack  
Project ID: Study Director: CHARLES SLACK  
Sponsor Contact: SCOTT CULLY

|                               |                |                 |                 |               |
|-------------------------------|----------------|-----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | CHEAL           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |
| Crop Code                     | ZEAMX          |                 |                 |               |
| BBCH Scale                    | BCOR           |                 |                 |               |
| Crop Scientific Name          | Zea mays       |                 |                 |               |
| Crop Name                     | Corn           |                 |                 |               |
| Crop Variety                  |                |                 |                 |               |
| Description                   |                |                 |                 |               |
| Part Rated                    |                |                 |                 |               |
| Rating Date                   | 5-19-2014      | 5-19-2014       | 5-19-2014       | 5-19-2014     |
| Rating Type                   | INJURY         | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 2 WEEK         | 2 WEEK          | 2 WEEK          | 2 WEEK        |
| Days After First/Last Applic. | 14 14          | 14 14           | 14 14           | 14 14         |

| Trt No. | Treatment Name     | Rate       | Unit | Growth Stage | 1      | 2      | 3      | 4      | 5      |
|---------|--------------------|------------|------|--------------|--------|--------|--------|--------|--------|
| 1       | UNTREATED          |            |      |              | 0      | 0      | 0      | 0      | 0      |
| 2       | ACURON             | 2.5 qt/a   |      | PRE          | 0      | 99     | 99     | 99     | 99     |
| 3       | ACURON             | 2.5 qt/a   |      | PRE          | 0      | 99     | 99     | 99     | 99     |
|         | AATREX             | 1 qt/a     |      | PRE          |        |        |        |        |        |
| 4       | ACURON             | 2.5 qt/a   |      | PRE          | 0      | 99     | 99     | 99     | 99     |
|         | N-PAK AMS LIQUID   | 2.5 % v/v  |      | 12C          |        |        |        |        |        |
|         | STATUS             | 5 oz wt/a  |      | 12C          |        |        |        |        |        |
|         | TOUCHDOWN TOTAL    | 30 fl oz/a |      | 12C          |        |        |        |        |        |
| 5       | ACURON             | 1.25 qt/a  |      | PRE          | 0      | 99     | 99     | 99     | 99     |
|         | ACURON             | 1.25 qt/a  |      | 12C          |        |        |        |        |        |
|         | TOUCHDOWN TOTAL    | 30 fl oz/a |      | 12C          |        |        |        |        |        |
|         | AMS                | 2.5 % v/v  |      | 12C          |        |        |        |        |        |
| 6       | SURESTART          | 2.5 pt/a   |      | PRE          | 0      | 99     | 99     | 99     | 99     |
| 7       | VERDICT            | 5 fl oz/a  |      | PRE          | 0      | 99     | 99     | 99     | 99     |
| 8       | CORVUS HERBICIDE   | 5.6 oz/a   |      | PRE          | 0      | 99     | 99     | 99     | 99     |
|         | AATREX             | 1 qt/a     |      | PRE          |        |        |        |        |        |
| 9       | ACURON             | 1.5 qt/a   |      | PRE          | 0      | 99     | 99     | 99     | 99     |
|         | N-PAK AMS LIQUID   | 2.5 % v/v  |      | 12C          |        |        |        |        |        |
|         | HALEX GT           | 3.6 pt/a   |      | 12C          |        |        |        |        |        |
|         | AATREX             | 1.5 pt/a   |      | 12C          |        |        |        |        |        |
|         | NIS                | 0.25 % v/v |      | 12C          |        |        |        |        |        |
| 10      | ACURON             | 1.25 qt/a  |      | PRE          | 0      | 99     | 99     | 99     | 99     |
|         | ACURON             | 1.25 qt/a  |      | 12C          |        |        |        |        |        |
|         | UAN-28%            | 2.5 % v/v  |      | 12C          |        |        |        |        |        |
|         | NIS                | 0.25 % v/v |      | 12c          |        |        |        |        |        |
| 11      | ANTHEM ATZ         | 2.25 pt/a  |      | PRE          | 0      | 99     | 99     | 99     | 99     |
| 12      | CHECK UNTREATED    |            |      |              | 0      | 0      | 0      | 0      | 0      |
|         | LSD (P=.05)        |            |      |              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
|         | Standard Deviation |            |      |              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
|         | CV                 |            |      |              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
|         | Replicate F        |            |      |              | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|         | Replicate Prob(F)  |            |      |              | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|         | Treatment F        |            |      |              | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|         | Treatment Prob(F)  |            |      |              | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

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| Pest Type                     |                    | W Weed         | W Weed          | W Weed          |        |          |        |
|-------------------------------|--------------------|----------------|-----------------|-----------------|--------|----------|--------|
| Pest Code                     |                    | SETFA          | AMBTR           | CHEAL           |        |          |        |
| Pest Scientific Name          |                    | Setaria faberi | Ambrosia trifi> | Chenopodium al> |        |          |        |
| Pest Name                     |                    | Giant foxtail  | Giant ragweed   | Common lambsqu> |        |          |        |
| Crop Code                     | ZEAMX              |                |                 |                 |        |          |        |
| BBCH Scale                    | BCOR               |                |                 |                 |        |          |        |
| Crop Scientific Name          | Zea mays           |                |                 |                 |        |          |        |
| Crop Name                     | Corn               |                |                 |                 |        |          |        |
| Crop Variety                  |                    |                |                 |                 |        |          |        |
| Description                   |                    | AT POST APPL   | AT POST APPL    | AT POST APPL    |        |          |        |
| Part Rated                    |                    |                |                 |                 |        |          |        |
| Rating Date                   |                    | 5-30-2014      | 5-30-2014       | 5-30-2014       |        |          |        |
| Rating Type                   |                    | INJURY         | CONTROL         | CONTROL         |        |          |        |
| Rating Unit                   |                    | PERCENT        | PERCENT         | PERCENT         |        |          |        |
| Rating Timing                 |                    |                |                 |                 |        |          |        |
| Days After First/Last Applic. |                    | 25 25          | 25 25           | 25 25           |        |          |        |
| Trt No.                       | Treatment Name     | Rate           | Growth Stage    | 6               | 7      | 8        | 9      |
|                               |                    | Rate Unit      |                 |                 |        |          |        |
| 1                             | UNTREATED          |                |                 | 0               | 0      | 0        | 0      |
| 2                             | ACURON             | 2.5 qt/a       | PRE             | 0               | 99     | 99       | 99     |
| 3                             | ACURON             | 2.5 qt/a       | PRE             | 0               | 99     | 96       | 99     |
|                               | AATREX             | 1 qt/a         | PRE             |                 |        |          |        |
| 4                             | ACURON             | 2.5 qt/a       | PRE             | 0               | 99     | 95       | 99     |
|                               | N-PAK AMS LIQUID   | 2.5 % v/v      | 12C             |                 |        |          |        |
|                               | STATUS             | 5 oz wt/a      | 12C             |                 |        |          |        |
|                               | TOUCHDOWN TOTAL    | 30 fl oz/a     | 12C             |                 |        |          |        |
| 5                             | ACURON             | 1.25 qt/a      | PRE             | 0               | 99     | 89       | 99     |
|                               | ACURON             | 1.25 qt/a      | 12C             |                 |        |          |        |
|                               | TOUCHDOWN TOTAL    | 30 fl oz/a     | 12C             |                 |        |          |        |
|                               | AMS                | 2.5 % v/v      | 12C             |                 |        |          |        |
| 6                             | SURESTART          | 2.5 pt/a       | PRE             | 0               | 99     | 90       | 99     |
| 7                             | VERDICT            | 5 fl oz/a      | PRE             | 0               | 99     | 89       | 99     |
| 8                             | CORVUS HERBICIDE   | 5.6 oz/a       | PRE             | 0               | 99     | 99       | 99     |
|                               | AATREX             | 1 qt/a         | PRE             |                 |        |          |        |
| 9                             | ACURON             | 1.5 qt/a       | PRE             | 0               | 99     | 99       | 99     |
|                               | N-PAK AMS LIQUID   | 2.5 % v/v      | 12C             |                 |        |          |        |
|                               | HALEX GT           | 3.6 pt/a       | 12C             |                 |        |          |        |
|                               | AATREX             | 1.5 pt/a       | 12C             |                 |        |          |        |
|                               | NIS                | 0.25 % v/v     | 12C             |                 |        |          |        |
| 10                            | ACURON             | 1.25 qt/a      | PRE             | 0               | 99     | 95       | 99     |
|                               | ACURON             | 1.25 qt/a      | 12C             |                 |        |          |        |
|                               | UAN-28%            | 2.5 % v/v      | 12C             |                 |        |          |        |
|                               | NIS                | 0.25 % v/v     | 12c             |                 |        |          |        |
| 11                            | ANTHEM ATZ         | 2.25 pt/a      | PRE             | 0               | 99     | 89       | 99     |
| 12                            | CHECK UNTREATED    |                |                 | 0               | 0      | 0        | 0      |
|                               | LSD (P=.05)        |                |                 | 0.0             | 0.0    | 2.7      | 0.0    |
|                               | Standard Deviation |                |                 | 0.0             | 0.0    | 1.6      | 0.0    |
|                               | CV                 |                |                 | 0.0             | 0.0    | 2.02     | 0.0    |
|                               | Replicate F        |                |                 | 0.000           | 0.000  | 1.413    | 0.000  |
|                               | Replicate Prob(F)  |                |                 | 1.0000          | 1.0000 | 0.2648   | 1.0000 |
|                               | Treatment F        |                |                 | 0.000           | 0.000  | 1626.211 | 0.000  |
|                               | Treatment Prob(F)  |                |                 | 1.0000          | 1.0000 | 0.0001   | 1.0000 |

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|                               |   |                |                 |           |
|-------------------------------|---|----------------|-----------------|-----------|
| Pest Type                     | W Weed  | W Weed         | W Weed          |           |
| Pest Code                     | IPOSS   | SETFA          | AMBTR           |           |
| Pest Scientific Name          | Ipomoea sp.   | Setaria faberi | Ambrosia trifi> |           |
| Pest Name                     | Morning glory                                       | Giant foxtail  | Giant ragweed   |           |
| Crop Code                     |   | ZEAMX          |                 |           |
| BBCH Scale                    |   | BCOR           |                 |           |
| Crop Scientific Name          |   | Zea mays       |                 |           |
| Crop Name                     |   | Corn           |                 |           |
| Crop Variety                  |   |                |                 |           |
| Description                   | AT POST APPL AT POST APPL AT POST APPL AT POST APPL |                |                 |           |
| Part Rated                    |   |                |                 |           |
| Rating Date                   | 5-30-2014   | 6-12-2014      | 6-12-2014       | 6-12-2014 |
| Rating Type                   | CONTROL   | INJURY         | CONTROL         | CONTROL   |
| Rating Unit                   | PERCENT   | PERCENT        | PERCENT         | PERCENT   |
| Rating Timing                 |   | 4 WEEK         | 4 WEEK          | 4 WEEK    |
| Days After First/Last Applic. | 25 25   | 38 13          | 38 13           | 38 13     |

| Trt                | Treatment        | Rate       | Growth | 10 |          | 11 |        | 12 |        | 13 |          |
|--------------------|------------------|------------|--------|----|----------|----|--------|----|--------|----|----------|
| No.                | Name             | Rate Unit  | Stage  |    |          |    |        |    |        |    |          |
| 1                  | UNTREATED        |            |        |    | 0        |    | 0      |    | 0      |    | 0        |
| 2                  | ACURON           | 2.5 qt/a   | PRE    |    | 99       |    | 0      |    | 99     |    | 99       |
| 3                  | ACURON           | 2.5 qt/a   | PRE    |    | 89       |    | 0      |    | 99     |    | 96       |
|                    | AATREX           | 1 qt/a     | PRE    |    |          |    |        |    |        |    |          |
| 4                  | ACURON           | 2.5 qt/a   | PRE    |    | 95       |    | 0      |    | 99     |    | 95       |
|                    | N-PAK AMS LIQUID | 2.5 % v/v  | 12C    |    |          |    |        |    |        |    |          |
|                    | STATUS           | 5 oz wt/a  | 12C    |    |          |    |        |    |        |    |          |
|                    | TOUCHDOWN TOTAL  | 30 fl oz/a | 12C    |    |          |    |        |    |        |    |          |
| 5                  | ACURON           | 1.25 qt/a  | PRE    |    | 95       |    | 0      |    | 99     |    | 89       |
|                    | ACURON           | 1.25 qt/a  | 12C    |    |          |    |        |    |        |    |          |
|                    | TOUCHDOWN TOTAL  | 30 fl oz/a | 12C    |    |          |    |        |    |        |    |          |
|                    | AMS              | 2.5 % v/v  | 12C    |    |          |    |        |    |        |    |          |
| 6                  | SURESTART        | 2.5 pt/a   | PRE    |    | 89       |    | 0      |    | 99     |    | 90       |
| 7                  | VERDICT          | 5 fl oz/a  | PRE    |    | 89       |    | 0      |    | 99     |    | 89       |
| 8                  | CORVUS HERBICIDE | 5.6 oz/a   | PRE    |    | 99       |    | 0      |    | 99     |    | 99       |
|                    | AATREX           | 1 qt/a     | PRE    |    |          |    |        |    |        |    |          |
| 9                  | ACURON           | 1.5 qt/a   | PRE    |    | 99       |    | 0      |    | 99     |    | 99       |
|                    | N-PAK AMS LIQUID | 2.5 % v/v  | 12C    |    |          |    |        |    |        |    |          |
|                    | HALEX GT         | 3.6 pt/a   | 12C    |    |          |    |        |    |        |    |          |
|                    | AATREX           | 1.5 pt/a   | 12C    |    |          |    |        |    |        |    |          |
|                    | NIS              | 0.25 % v/v | 12C    |    |          |    |        |    |        |    |          |
| 10                 | ACURON           | 1.25 qt/a  | PRE    |    | 99       |    | 0      |    | 99     |    | 95       |
|                    | ACURON           | 1.25 qt/a  | 12C    |    |          |    |        |    |        |    |          |
|                    | UAN-28%          | 2.5 % v/v  | 12C    |    |          |    |        |    |        |    |          |
|                    | NIS              | 0.25 % v/v | 12c    |    |          |    |        |    |        |    |          |
| 11                 | ANTHEM ATZ       | 2.25 pt/a  | PRE    |    | 99       |    | 0      |    | 99     |    | 89       |
| 12                 | CHECK UNTREATED  |            |        |    | 0        |    | 0      |    | 0      |    | 0        |
| LSD (P=.05)        |                  |            |        |    | 2.4      |    | 0.0    |    | 0.0    |    | 2.7      |
| Standard Deviation |                  |            |        |    | 1.4      |    | 0.0    |    | 0.0    |    | 1.6      |
| CV                 |                  |            |        |    | 1.77     |    | 0.0    |    | 0.0    |    | 2.02     |
| Replicate F        |                  |            |        |    | 1.370    |    | 0.000  |    | 0.000  |    | 1.413    |
| Replicate Prob(F)  |                  |            |        |    | 0.2750   |    | 1.0000 |    | 1.0000 |    | 0.2648   |
| Treatment F        |                  |            |        |    | 2121.453 |    | 0.000  |    | 0.000  |    | 1626.211 |
| Treatment Prob(F)  |                  |            |        |    | 0.0001   |    | 1.0000 |    | 1.0000 |    | 0.0001   |

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|                               |                 |               |                 |            |
|-------------------------------|-----------------|---------------|-----------------|------------|
| Pest Type                     | W Weed          | W Weed        | W Weed          |            |
| Pest Code                     | CHEAL           | IPOSS         | SETFA           |            |
| Pest Scientific Name          | Chenopodium al> | Ipomoea sp.   | Setaria faberi  |            |
| Pest Name                     | Common lambsqu> | Morning glory | Giant foxtail   |            |
| Crop Code                     |                 |               | ZEAMX           |            |
| BBCH Scale                    |                 |               | BCOR            |            |
| Crop Scientific Name          |                 |               | Zea mays        |            |
| Crop Name                     |                 |               | Corn            |            |
| Crop Variety                  |                 |               |                 |            |
| Description                   | AT POST         | APPL AT POST  | APPL AFTER POST | AFTER POST |
| Part Rated                    |                 |               |                 |            |
| Rating Date                   | 6-12-2014       | 6-12-2014     | 7-3-2014        | 7-3-2014   |
| Rating Type                   | CONTROL         | CONTROL       | INJURY          | CONTROL    |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT         | PERCENT    |
| Rating Timing                 | 4 WEEK          | 4 WEEK        | 8 WEEK          | 8 WEEK     |
| Days After First/Last Applic. | 38 13           | 38 13         | 59 34           | 59 34      |

| Trt | Treatment          | Rate       | Growth | 14     | 15       | 16     | 17       |
|-----|--------------------|------------|--------|--------|----------|--------|----------|
| No. | Name               | Rate Unit  | Stage  |        |          |        |          |
| 1   | UNTREATED          |            |        | 0      | 0        | 0      | 0        |
| 2   | ACURON             | 2.5 qt/a   | PRE    | 99     | 99       | 0      | 99       |
| 3   | ACURON             | 2.5 qt/a   | PRE    | 99     | 89       | 0      | 98       |
|     | AATREX             | 1 qt/a     | PRE    |        |          |        |          |
| 4   | ACURON             | 2.5 qt/a   | PRE    | 99     | 95       | 0      | 99       |
|     | N-PAK AMS LIQUID   | 2.5 % v/v  | 12C    |        |          |        |          |
|     | STATUS             | 5 oz wt/a  | 12C    |        |          |        |          |
|     | TOUCHDOWN TOTAL    | 30 fl oz/a | 12C    |        |          |        |          |
| 5   | ACURON             | 1.25 qt/a  | PRE    | 99     | 95       | 0      | 99       |
|     | ACURON             | 1.25 qt/a  | 12C    |        |          |        |          |
|     | TOUCHDOWN TOTAL    | 30 fl oz/a | 12C    |        |          |        |          |
|     | AMS                | 2.5 % v/v  | 12C    |        |          |        |          |
| 6   | SURESTART          | 2.5 pt/a   | PRE    | 99     | 89       | 0      | 96       |
| 7   | VERDICT            | 5 fl oz/a  | PRE    | 99     | 89       | 0      | 99       |
| 8   | CORVUS HERBICIDE   | 5.6 oz/a   | PRE    | 99     | 99       | 0      | 96       |
|     | AATREX             | 1 qt/a     | PRE    |        |          |        |          |
| 9   | ACURON             | 1.5 qt/a   | PRE    | 99     | 99       | 0      | 99       |
|     | N-PAK AMS LIQUID   | 2.5 % v/v  | 12C    |        |          |        |          |
|     | HALEX GT           | 3.6 pt/a   | 12C    |        |          |        |          |
|     | AATREX             | 1.5 pt/a   | 12C    |        |          |        |          |
|     | NIS                | 0.25 % v/v | 12C    |        |          |        |          |
| 10  | ACURON             | 1.25 qt/a  | PRE    | 99     | 99       | 0      | 99       |
|     | ACURON             | 1.25 qt/a  | 12C    |        |          |        |          |
|     | UAN-28%            | 2.5 % v/v  | 12C    |        |          |        |          |
|     | NIS                | 0.25 % v/v | 12c    |        |          |        |          |
| 11  | ANTHEM ATZ         | 2.25 pt/a  | PRE    | 99     | 99       | 0      | 99       |
| 12  | CHECK UNTREATED    |            |        | 0      | 0        | 0      | 0        |
|     | LSD (P=.05)        |            |        | 0.0    | 2.4      | 0.0    | 3.0      |
|     | Standard Deviation |            |        | 0.0    | 1.4      | 0.0    | 1.8      |
|     | CV                 |            |        | 0.0    | 1.77     | 0.0    | 2.15     |
|     | Replicate F        |            |        | 0.000  | 1.370    | 0.000  | 1.156    |
|     | Replicate Prob(F)  |            |        | 1.0000 | 0.2750   | 1.0000 | 0.3330   |
|     | Treatment F        |            |        | 0.000  | 2121.453 | 0.000  | 1418.682 |
|     | Treatment Prob(F)  |            |        | 1.0000 | 0.0001   | 1.0000 | 0.0001   |

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|                               |                  |                 |               |           |
|-------------------------------|------------------|-----------------|---------------|-----------|
| Pest Type                     | W Weed           | W Weed          | W Weed        |           |
| Pest Code                     | AMBTR            | CHEAL           | IPOSS         |           |
| Pest Scientific Name          | Ambrosia trifid> | Chenopodium al> | Ipomoea sp.   |           |
| Pest Name                     | Giant ragweed    | Common lambsqu> | Morning glory |           |
| Crop Code                     |                  |                 |               | ZEAMX     |
| BBCH Scale                    |                  |                 |               | BCOR      |
| Crop Scientific Name          |                  |                 |               | Zea mays  |
| Crop Name                     |                  |                 |               | Corn      |
| Crop Variety                  |                  |                 |               |           |
| Description                   | AFTER POST       | AFTER POST      | AFTER POST    |           |
| Part Rated                    |                  |                 |               |           |
| Rating Date                   | 7-3-2014         | 7-3-2014        | 7-3-2014      | 10-8-2014 |
| Rating Type                   | CONTROL          | CONTROL         | CONTROL       | YIELD     |
| Rating Unit                   | PERCENT          | PERCENT         | PERCENT       | BU        |
| Rating Timing                 | 8 WEEK           | 8 WEEK          | 8 WEEK        |           |
| Days After First/Last Applic. | 59 34            | 59 34           | 59 34         | 156 131   |

| Trt | Treatment          | Rate       | Growth | 18      | 19     | 20      | 25      |
|-----|--------------------|------------|--------|---------|--------|---------|---------|
| No. | Name               | Rate Unit  | Stage  |         |        |         |         |
| 1   | UNTREATED          |            |        | 0       | 0      | 0       | 4.2     |
| 2   | ACURON             | 2.5 qt/a   | PRE    | 95      | 99     | 92      | 140.2   |
| 3   | ACURON             | 2.5 qt/a   | PRE    | 96      | 99     | 89      | 145.2   |
|     | AATREX             | 1 qt/a     | PRE    |         |        |         |         |
| 4   | ACURON             | 2.5 qt/a   | PRE    | 99      | 99     | 98      | 131.6   |
|     | N-PAK AMS LIQUID   | 2.5 % v/v  | 12C    |         |        |         |         |
|     | STATUS             | 5 oz wt/a  | 12C    |         |        |         |         |
|     | TOUCHDOWN TOTAL    | 30 fl oz/a | 12C    |         |        |         |         |
| 5   | ACURON             | 1.25 qt/a  | PRE    | 96      | 99     | 96      | 120.0   |
|     | ACURON             | 1.25 qt/a  | 12C    |         |        |         |         |
|     | TOUCHDOWN TOTAL    | 30 fl oz/a | 12C    |         |        |         |         |
|     | AMS                | 2.5 % v/v  | 12C    |         |        |         |         |
| 6   | SURESTART          | 2.5 pt/a   | PRE    | 83      | 99     | 83      | 123.1   |
| 7   | VERDICT            | 5 fl oz/a  | PRE    | 72      | 99     | 80      | 59.0    |
| 8   | CORVUS HERBICIDE   | 5.6 oz/a   | PRE    | 93      | 99     | 93      | 113.4   |
|     | AATREX             | 1 qt/a     | PRE    |         |        |         |         |
| 9   | ACURON             | 1.5 qt/a   | PRE    | 99      | 99     | 99      | 115.6   |
|     | N-PAK AMS LIQUID   | 2.5 % v/v  | 12C    |         |        |         |         |
|     | HALEX GT           | 3.6 pt/a   | 12C    |         |        |         |         |
|     | AATREX             | 1.5 pt/a   | 12C    |         |        |         |         |
|     | NIS                | 0.25 % v/v | 12C    |         |        |         |         |
| 10  | ACURON             | 1.25 qt/a  | PRE    | 98      | 99     | 98      | 128.4   |
|     | ACURON             | 1.25 qt/a  | 12C    |         |        |         |         |
|     | UAN-28%            | 2.5 % v/v  | 12C    |         |        |         |         |
|     | NIS                | 0.25 % v/v | 12c    |         |        |         |         |
| 11  | ANTHEM ATZ         | 2.25 pt/a  | PRE    | 75      | 99     | 80      | 55.1    |
| 12  | CHECK UNTREATED    |            |        | 0       | 0      | 0       | 1.4     |
|     | LSD (P=.05)        |            |        | 5.4     | 0.0    | 4.8     | 9.84    |
|     | Standard Deviation |            |        | 3.2     | 0.0    | 2.8     | 5.81    |
|     | CV                 |            |        | 4.2     | 0.0    | 3.71    | 6.13    |
|     | Replicate F        |            |        | 2.220   | 0.000  | 0.689   | 1.038   |
|     | Replicate Prob(F)  |            |        | 0.1324  | 1.0000 | 0.5125  | 0.3708  |
|     | Treatment F        |            |        | 396.118 | 0.000  | 491.720 | 234.935 |
|     | Treatment Prob(F)  |            |        | 0.0001  | 1.0000 | 0.0001  | 0.0001  |







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**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** N70J-3011A

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-5-2014  
**Planting Method:** PLANTD planted

**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Emergence Date:** 5-13-2014  
**Harvest Date:** 10-8-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 12  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-5-2014  | 5-30-2014 |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | 12C       |
| <b>Application Placement:</b>     | BROSOI    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 82 F      | 75 F      |
| <b>% Relative Humidity:</b>       | 38        | 50        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 4 MPH     |
| <b>Wind Direction:</b>            | ESE       | SE        |
| <b>Soil Temperature, Unit:</b>    | 60 F      | 69 F      |
| <b>Soil Moisture:</b>             | EXCELL    | NORMAL    |
| <b>% Cloud Cover:</b>             | 20        | 10        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 6-1-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   |
|---------------------------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Height, Unit:</b>            |            | 12 IN      |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 4 IN     |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 6 IN     |
| <b>Pest 3 Code, Type, Scale:</b> | CHEAL W  | CHEAL W  |
| <b>Height, Unit:</b>             |          | 3 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 2.5 IN   |

**Application Equipment**

|                                  | <b>A</b>   | <b>B</b>   |
|----------------------------------|------------|------------|
| <b>Appl. Equipment:</b>          | ATV        | ATV        |
| <b>Equipment Type:</b>           | ALTEVE     | ALTEVE     |
| <b>Operation Pressure, Unit:</b> | 30 PSI     | 30 PSI     |
| <b>Nozzle Type:</b>              | FLAT FAN   | FLAT FAN   |
| <b>Nozzle Size:</b>              | 8002 DG    | 8002 DG    |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN      | 20 IN      |
| <b>Boom Length, Unit:</b>        | 10 FT      | 10 FT      |
| <b>Boom Height, Unit:</b>        | 30 IN      | 30 IN      |
| <b>Ground Speed, Unit:</b>       | 4 MPH      | 4 MPH      |
| <b>Carrier:</b>                  | WATER      | WATER      |
| <b>Spray Volume, Unit:</b>       | 15 GPA     | 15 GPA     |
| <b>Mix Size, Unit:</b>           | 2.2 liters | 2.2 liters |
| <b>Propellant:</b>               | CO2        | CO2        |

Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE VII

Trial ID: C14017 Location: LEXINGTON, KY Trial Year: 2014  
Protocol ID: BASF-CORN Investigator: Charles H Slack  
Project ID: Study Director: CHARLES SLACK  
Sponsor Contact: GREG STAPLETON

Pest Type W Weed W Weed W Weed  
Pest Code SETFA AMBTR CHEAL  
Pest Scientific Name Setaria faberi Ambrosia trifi> Chenopodium al>  
Pest Name Giant foxtail Giant ragweed Common lambsqu>  
Crop Code ZEAMX  
BBCH Scale BCOR  
Crop Scientific Name Zea mays  
Crop Name Corn  
Crop Variety  
Description  
Part Rated  
Rating Date 5-19-2014 5-19-2014 5-19-2014 5-19-2014  
Rating Type INJURY CONTROL CONTROL CONTROL  
Rating Unit PERCENT PERCENT PERCENT PERCENT  
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK  
Days After First/Last Applic. 14 14 14 14

| Trt No. | Treatment Name     | Rate         | Rate Unit | Growth Stage | 1      | 2      | 3         | 4      |
|---------|--------------------|--------------|-----------|--------------|--------|--------|-----------|--------|
| 1       | VERDICT            | 18 fl oz/a   |           | PRE          | 0      | 99     | 99        | 99     |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |        |        |           |        |
|         | STATUS             | 5 oz wt/a    |           | 4WAP         |        |        |           |        |
| 2       | VERDICT            | 18 fl oz/a   |           | PRE          | 0      | 99     | 99        | 99     |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |        |        |           |        |
|         | ARMEZON            | 0.75 fl oz/a |           | 4WAP         |        |        |           |        |
|         | AATREX             | 0.5 qt/a     |           | 4WAP         |        |        |           |        |
| 3       | SURESTART          | 2.5 pt/a     |           | PRE          | 0      | 99     | 99        | 99     |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |        |        |           |        |
| 4       | DUAL II MAGNUM     | 1 pt/a       |           | PRE          | 0      | 99     | 50        | 99     |
|         | HALEX GT           | 3.6 pt/a     |           | 4WAP         |        |        |           |        |
| 5       | LUMAX              | 1.5 qt/a     |           | PRE          | 0      | 99     | 50        | 99     |
|         | HALEX GT           | 3.6 pt/a     |           | 4WAP         |        |        |           |        |
| 6       | SURESTART          | 2.5 pt/a     |           | PRE          | 0      | 99     | 99        | 99     |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |        |        |           |        |
| 7       | CORVUS HERBICIDE   | 4.5 fl oz/a  |           | PRE          | 0      | 99     | 98        | 99     |
|         | LAUDIS             | 3 fl oz/a    |           | 4WAP         |        |        |           |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |        |        |           |        |
| 8       | ARMEZON            | 0.75 fl oz/a |           | 4WAP         | 0      | 0      | 0         | 0      |
|         | OUTLOOK            | 18 fl oz/a   |           | 4WAP         |        |        |           |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |        |        |           |        |
|         | AATREX             | 0.5 qt/a     |           | 4WAP         |        |        |           |        |
| 9       | HALEX GT           | 3.6 pt/a     |           | 4WAP         | 0      | 0      | 0         | 0      |
| 10      | LAUDIS             | 3 fl oz/a    |           | 4WAP         | 0      | 0      | 0         | 0      |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |        |        |           |        |
|         | AATREX             | 0.5 qt/a     |           | 4WAP         |        |        |           |        |
| 11      | UNTREATED CHECK    |              |           |              | 0      | 0      | 0         | 0      |
| 12      | CHECK UNTREATED    |              |           |              | 0      | 0      | 0         | 0      |
|         | LSD (P=.05)        |              |           |              | 0.0    | 0.0    | 1.1       | 0.0    |
|         | Standard Deviation |              |           |              | 0.0    | 0.0    | 0.7       | 0.0    |
|         | CV                 |              |           |              | 0.0    | 0.0    | 1.35      | 0.0    |
|         | Replicate F        |              |           |              | 0.000  | 0.000  | 1.000     | 0.000  |
|         | Replicate Prob(F)  |              |           |              | 1.0000 | 1.0000 | 0.3840    | 1.0000 |
|         | Treatment F        |              |           |              | 0.000  | 0.000  | 14956.018 | 0.000  |
|         | Treatment Prob(F)  |              |           |              | 1.0000 | 1.0000 | 0.0001    | 1.0000 |

|                               |               |                |                 |
|-------------------------------|---------------|----------------|-----------------|
| Pest Type                     | W Weed        | W Weed         | W Weed          |
| Pest Code                     | IPOSS         | SETFA          | AMBTR           |
| Pest Scientific Name          | Ipomoea sp.   | Setaria faberi | Ambrosia trifi> |
| Pest Name                     | Morning glory | Giant foxtail  | Giant ragweed   |
| Crop Code                     |               | ZEAMX          |                 |
| BBCH Scale                    |               | BCOR           |                 |
| Crop Scientific Name          |               | Zea mays       |                 |
| Crop Name                     |               | Corn           |                 |
| Crop Variety                  |               |                |                 |
| Description                   |               |                |                 |
| Part Rated                    |               |                |                 |
| Rating Date                   | 5-19-2014     | 6-2-2014       | 6-2-2014        |
| Rating Type                   | CONTROL       | INJURY         | CONTROL         |
| Rating Unit                   | PERCENT       | PERCENT        | PERCENT         |
| Rating Timing                 | 2 WEEK        | 4 WEEK         | 4 WEEK          |
| Days After First/Last Applic. | 14 14         | 28 4           | 28 4            |

| Trt No. | Treatment Name     | Rate         | Rate Unit | Growth Stage | 5       | 6      | 7      | 8        |
|---------|--------------------|--------------|-----------|--------------|---------|--------|--------|----------|
| 1       | VERDICT            | 18 fl oz/a   |           | PRE          | 99      | 0      | 99     | 99       |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |         |        |        |          |
|         | STATUS             | 5 oz wt/a    |           | 4WAP         |         |        |        |          |
| 2       | VERDICT            | 18 fl oz/a   |           | PRE          | 99      | 0      | 99     | 99       |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |         |        |        |          |
|         | ARMEZON            | 0.75 fl oz/a |           | 4WAP         |         |        |        |          |
|         | AATREX             | 0.5 qt/a     |           | 4WAP         |         |        |        |          |
| 3       | SURESTART          | 2.5 pt/a     |           | PRE          | 99      | 0      | 99     | 98       |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |         |        |        |          |
| 4       | DUAL II MAGNUM     | 1 pt/a       |           | PRE          | 50      | 0      | 99     | 99       |
|         | HALEX GT           | 3.6 pt/a     |           | 4WAP         |         |        |        |          |
| 5       | LUMAX              | 1.5 qt/a     |           | PRE          | 43      | 0      | 99     | 99       |
|         | HALEX GT           | 3.6 pt/a     |           | 4WAP         |         |        |        |          |
| 6       | SURESTART          | 2.5 pt/a     |           | PRE          | 99      | 0      | 99     | 99       |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |         |        |        |          |
| 7       | CORVUS HERBICIDE   | 4.5 fl oz/a  |           | PRE          | 98      | 0      | 99     | 99       |
|         | LAUDIS             | 3 fl oz/a    |           | 4WAP         |         |        |        |          |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |         |        |        |          |
| 8       | ARMEZON            | 0.75 fl oz/a |           | 4WAP         | 0       | 0      | 99     | 99       |
|         | OUTLOOK            | 18 fl oz/a   |           | 4WAP         |         |        |        |          |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |         |        |        |          |
|         | AATREX             | 0.5 qt/a     |           | 4WAP         |         |        |        |          |
| 9       | HALEX GT           | 3.6 pt/a     |           | 4WAP         | 0       | 0      | 99     | 99       |
| 10      | LAUDIS             | 3 fl oz/a    |           | 4WAP         | 0       | 0      | 99     | 99       |
|         | ROUNDUP POWERMAX   | 32 fl oz/a   |           | 4WAP         |         |        |        |          |
|         | AATREX             | 0.5 qt/a     |           | 4WAP         |         |        |        |          |
| 11      | UNTREATED CHECK    |              |           |              | 0       | 0      | 0      | 0        |
| 12      | CHECK UNTREATED    |              |           |              | 0       | 0      | 0      | 0        |
|         | LSD (P=.05)        |              |           |              | 5.8     | 0.0    | 0.0    | 1.1      |
|         | Standard Deviation |              |           |              | 3.4     | 0.0    | 0.0    | 0.7      |
|         | CV                 |              |           |              | 7.01    | 0.0    | 0.0    | 0.81     |
|         | Replicate F        |              |           |              | 0.794   | 0.000  | 0.000  | 1.000    |
|         | Replicate Prob(F)  |              |           |              | 0.4646  | 1.0000 | 1.0000 | 0.3840   |
|         | Treatment F        |              |           |              | 566.130 | 0.000  | 0.000  | 9997.751 |
|         | Treatment Prob(F)  |              |           |              | 0.0001  | 1.0000 | 1.0000 | 0.0001   |

|                               |                 |               |                |
|-------------------------------|-----------------|---------------|----------------|
| Pest Type                     | W Weed          | W Weed        | W Weed         |
| Pest Code                     | CHEAL           | IPOSS         | SETFA          |
| Pest Scientific Name          | Chenopodium al> | Ipomoea sp.   | Setaria faberi |
| Pest Name                     | Common lambsqu> | Morning glory | Giant foxtail  |
| Crop Code                     |                 |               | ZEAMX          |
| BBCH Scale                    |                 |               | BCOR           |
| Crop Scientific Name          |                 |               | Zea mays       |
| Crop Name                     |                 |               | Corn           |
| Crop Variety                  |                 |               |                |
| Description                   |                 |               |                |
| Part Rated                    |                 |               |                |
| Rating Date                   | 6-2-2014        | 6-2-2014      | 7-3-2014       |
| Rating Type                   | CONTROL         | CONTROL       | INJURY         |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT        |
| Rating Timing                 | 4 WEEK          | 4 WEEK        | 8 WEEK         |
| Days After First/Last Applic. | 28 4            | 28 4          | 59 35          |

| Trt | Treatment          | Rate         | Growth | 9      | 10     | 11     | 12     |
|-----|--------------------|--------------|--------|--------|--------|--------|--------|
| No. | Name               | Rate Unit    | Stage  |        |        |        |        |
| 1   | VERDICT            | 18 fl oz/a   | PRE    | 99     | 99     | 0.0    | 99.0   |
|     | ROUNDUP POWERMAX   | 32 fl oz/a   | 4WAP   |        |        |        |        |
|     | STATUS             | 5 oz wt/a    | 4WAP   |        |        |        |        |
| 2   | VERDICT            | 18 fl oz/a   | PRE    | 99     | 99     | 0.0    | 99.0   |
|     | ROUNDUP POWERMAX   | 32 fl oz/a   | 4WAP   |        |        |        |        |
|     | ARMEZON            | 0.75 fl oz/a | 4WAP   |        |        |        |        |
|     | AATREX             | 0.5 qt/a     | 4WAP   |        |        |        |        |
| 3   | SURESTART          | 2.5 pt/a     | PRE    | 99     | 99     | 0.0    | 99.0   |
|     | ROUNDUP POWERMAX   | 32 fl oz/a   | 4WAP   |        |        |        |        |
| 4   | DUAL II MAGNUM     | 1 pt/a       | PRE    | 99     | 99     | 0.0    | 99.0   |
|     | HALEX GT           | 3.6 pt/a     | 4WAP   |        |        |        |        |
| 5   | LUMAX              | 1.5 qt/a     | PRE    | 99     | 99     | 0.0    | 99.0   |
|     | HALEX GT           | 3.6 pt/a     | 4WAP   |        |        |        |        |
| 6   | SURESTART          | 2.5 pt/a     | PRE    | 99     | 99     | 0.0    | 99.0   |
|     | ROUNDUP POWERMAX   | 32 fl oz/a   | 4WAP   |        |        |        |        |
| 7   | CORVUS HERBICIDE   | 4.5 fl oz/a  | PRE    | 99     | 99     | 0.0    | 99.0   |
|     | LAUDIS             | 3 fl oz/a    | 4WAP   |        |        |        |        |
|     | ROUNDUP POWERMAX   | 32 fl oz/a   | 4WAP   |        |        |        |        |
| 8   | ARMEZON            | 0.75 fl oz/a | 4WAP   | 99     | 99     | 0.0    | 99.0   |
|     | OUTLOOK            | 18 fl oz/a   | 4WAP   |        |        |        |        |
|     | ROUNDUP POWERMAX   | 32 fl oz/a   | 4WAP   |        |        |        |        |
|     | AATREX             | 0.5 qt/a     | 4WAP   |        |        |        |        |
| 9   | HALEX GT           | 3.6 pt/a     | 4WAP   | 99     | 99     | 0.0    | 99.0   |
| 10  | LAUDIS             | 3 fl oz/a    | 4WAP   | 99     | 99     | 0.0    | 99.0   |
|     | ROUNDUP POWERMAX   | 32 fl oz/a   | 4WAP   |        |        |        |        |
|     | AATREX             | 0.5 qt/a     | 4WAP   |        |        |        |        |
| 11  | UNTREATED CHECK    |              |        | 0      | 0      | 0.0    | 0.0    |
| 12  | CHECK UNTREATED    |              |        | 0      | 0      | 0.0    | 0.0    |
|     | LSD (P=.05)        |              |        | 0.0    | 0.0    | 0.00   | 0.00   |
|     | Standard Deviation |              |        | 0.0    | 0.0    | 0.00   | 0.00   |
|     | CV                 |              |        | 0.0    | 0.0    | 0.0    | 0.0    |
|     | Replicate F        |              |        | 0.000  | 0.000  | 0.000  | 0.000  |
|     | Replicate Prob(F)  |              |        | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|     | Treatment F        |              |        | 0.000  | 0.000  | 0.000  | 0.000  |
|     | Treatment Prob(F)  |              |        | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| Pest Type                     | W Weed             | W Weed               | W Weed        |           |        |        |         |
|-------------------------------|--------------------|----------------------|---------------|-----------|--------|--------|---------|
| Pest Code                     | AMBTR              | CHEAL                | IPOSS         |           |        |        |         |
| Pest Scientific Name          | Ambrosia triflora  | Chenopodium album    | Ipomoea sp.   |           |        |        |         |
| Pest Name                     | Giant ragweed      | Common lambsquarters | Morning glory |           |        |        |         |
| Crop Code                     |                    |                      |               | ZEAMX     |        |        |         |
| BBCH Scale                    |                    |                      |               | BCOR      |        |        |         |
| Crop Scientific Name          |                    |                      |               | Zea mays  |        |        |         |
| Crop Name                     |                    |                      |               | Corn      |        |        |         |
| Crop Variety                  |                    |                      |               |           |        |        |         |
| Description                   |                    |                      |               |           |        |        |         |
| Part Rated                    |                    |                      |               |           |        |        |         |
| Rating Date                   | 7-3-2014           | 7-3-2014             | 7-3-2014      | 10-8-2014 |        |        |         |
| Rating Type                   | CONTROL            | CONTROL              | CONTROL       | YIELD     |        |        |         |
| Rating Unit                   | PERCENT            | PERCENT              | PERCENT       | BU        |        |        |         |
| Rating Timing                 | 8 WEEK             | 8 WEEK               | 8 WEEK        |           |        |        |         |
| Days After First/Last Applic. | 59 35              | 59 35                | 59 35         | 156 132   |        |        |         |
| Trt No.                       | Treatment Name     | Rate Unit            | Growth Stage  | 13        | 14     | 15     | 20      |
| 1                             | VERDICT            | 18 fl oz/a           | PRE           | 99.0      | 99.0   | 99.0   | 109.1   |
|                               | ROUNDUP POWERMAX   | 32 fl oz/a           | 4WAP          |           |        |        |         |
|                               | STATUS             | 5 oz wt/a            | 4WAP          |           |        |        |         |
| 2                             | VERDICT            | 18 fl oz/a           | PRE           | 99.0      | 99.0   | 99.0   | 136.7   |
|                               | ROUNDUP POWERMAX   | 32 fl oz/a           | 4WAP          |           |        |        |         |
|                               | ARMEZON            | 0.75 fl oz/a         | 4WAP          |           |        |        |         |
|                               | AATREX             | 0.5 qt/a             | 4WAP          |           |        |        |         |
| 3                             | SURESTART          | 2.5 pt/a             | PRE           | 97.7      | 99.0   | 99.0   | 119.9   |
|                               | ROUNDUP POWERMAX   | 32 fl oz/a           | 4WAP          |           |        |        |         |
| 4                             | DUAL II MAGNUM     | 1 pt/a               | PRE           | 99.0      | 99.0   | 99.0   | 163.8   |
|                               | HALEX GT           | 3.6 pt/a             | 4WAP          |           |        |        |         |
| 5                             | LUMAX              | 1.5 qt/a             | PRE           | 99.0      | 99.0   | 99.0   | 100.7   |
|                               | HALEX GT           | 3.6 pt/a             | 4WAP          |           |        |        |         |
| 6                             | SURESTART          | 2.5 pt/a             | PRE           | 99.0      | 99.0   | 99.0   | 132.1   |
|                               | ROUNDUP POWERMAX   | 32 fl oz/a           | 4WAP          |           |        |        |         |
| 7                             | CORVUS HERBICIDE   | 4.5 fl oz/a          | PRE           | 99.0      | 99.0   | 99.0   | 121.1   |
|                               | LAUDIS             | 3 fl oz/a            | 4WAP          |           |        |        |         |
|                               | ROUNDUP POWERMAX   | 32 fl oz/a           | 4WAP          |           |        |        |         |
| 8                             | ARMEZON            | 0.75 fl oz/a         | 4WAP          | 99.0      | 99.0   | 99.0   | 125.5   |
|                               | OUTLOOK            | 18 fl oz/a           | 4WAP          |           |        |        |         |
|                               | ROUNDUP POWERMAX   | 32 fl oz/a           | 4WAP          |           |        |        |         |
|                               | AATREX             | 0.5 qt/a             | 4WAP          |           |        |        |         |
| 9                             | HALEX GT           | 3.6 pt/a             | 4WAP          | 99.0      | 99.0   | 99.0   | 122.0   |
| 10                            | LAUDIS             | 3 fl oz/a            | 4WAP          | 99.0      | 99.0   | 99.0   | 114.5   |
|                               | ROUNDUP POWERMAX   | 32 fl oz/a           | 4WAP          |           |        |        |         |
|                               | AATREX             | 0.5 qt/a             | 4WAP          |           |        |        |         |
| 11                            | UNTREATED CHECK    |                      |               | 0.0       | 0.0    | 0.0    | 3.5     |
| 12                            | CHECK UNTREATED    |                      |               | 0.0       | 0.0    | 0.0    | 5.7     |
|                               | LSD (P=.05)        |                      |               | 1.13      | 0.00   | 0.00   | 10.45   |
|                               | Standard Deviation |                      |               | 0.67      | 0.00   | 0.00   | 6.17    |
|                               | CV                 |                      |               | 0.81      | 0.0    | 0.0    | 5.9     |
|                               | Replicate F        |                      |               | 1.000     | 0.000  | 0.000  | 2.554   |
|                               | Replicate Prob(F)  |                      |               | 0.3840    | 1.0000 | 1.0000 | 0.1006  |
|                               | Treatment F        |                      |               | 9997.751  | 0.000  | 0.000  | 191.089 |
|                               | Treatment Prob(F)  |                      |               | 0.0001    | 1.0000 | 1.0000 | 0.0001  |

Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE VII

Trial ID: C14017                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: BASF-CORN            Investigator: Charles H Slack  
Project ID:                            Study Director: CHARLES SLACK  
Sponsor Contact: GREG STAPLETON

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, = US  
AMBTR, Ambrosia trifida, = US  
CHEAL, Chenopodium album, = US  
IPOSS, Ipomoea sp., = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

PERCENT = percent  
BU = bushel

ARM Action Codes

TY1 = 4.193576\*[17]

Plant and Soil Science, U of KY  
Weed Science Research

CORN POSTEMERGENCE VII

Trial ID: C14017                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: BASF-CORN            Investigator: Charles H Slack  
Project ID:                            Study Director: CHARLES SLACK  
Sponsor Contact: GREG STAPLETON

**General Trial Information**

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Investigator:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-5-2014  
**Completion Date:** 10-9-2014

**Trial Location**

**City:** LEXINGTON                    **Country:** USA United States  
**State/Prov.:** KENTUCKY  
**Postal Code:** 40511

**Contacts**

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**Investigator:** CHARLES SLACK            **Title:** RESEARCH SPECIALIST  
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**City+State/Prov:** LEXINGTON, KY            **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                    **E-mail:** cslack@uky.edu

**Other Contacts**

| <b>Name</b> | <b>Role</b>      | <b>Other</b>        |
|-------------|------------------|---------------------|
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**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC 62-08RIB

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-5-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-13-2014  
**Harvest Date:** 10-8-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 12  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-5-2014  | 5-29-2014 |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | 4 WAP     |
| <b>Application Placement:</b>     | BROSOI    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 82 F      | 82 F      |
| <b>% Relative Humidity:</b>       | 38        | 70        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 6 MPH     |
| <b>Wind Direction:</b>            | ESE       | SW        |
| <b>Soil Temperature, Unit:</b>    | 61 F      | 71 F      |
| <b>Soil Moisture:</b>             | EXCELL    | GOOD      |
| <b>% Cloud Cover:</b>             | 20        | 30        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 6-1-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   |
|---------------------------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Height, Unit:</b>            | 6          | IN         |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             | 2        | IN       |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             | 4        | IN       |
| <b>Pest 3 Code, Type, Scale:</b> | CHEAL W  | CHEAL W  |
| <b>Height, Unit:</b>             | 3        | IN       |
| <b>Pest 4 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             | 2        | IN       |

**Application Equipment**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      |

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CORN POSTEMERGENCE VIII

Trial ID: C14018  
Protocol ID: ISK-CORNRR-LL  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: DENNIS TONKS

|                               |                |                 |                 |
|-------------------------------|----------------|-----------------|-----------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          |
| Pest Code                     | SETFA          | AMBTR           | CHEAL           |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Chenopodium al> |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Common lambsqu> |
| Crop Code                     | ZEAMX          |                 |                 |
| BBCH Scale                    | BCOR           |                 |                 |
| Crop Scientific Name          | Zea mays       |                 |                 |
| Crop Name                     | Corn           |                 |                 |
| Crop Variety                  |                |                 |                 |
| Description                   |                |                 |                 |
| Part Rated                    |                |                 |                 |
| Rating Date                   | 6-10-2014      | 6-10-2014       | 6-10-2014       |
| Rating Type                   | INJURY         | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         |
| Rating Timing                 | 2 WEEK         | 2 WEEK          | 2 WEEK          |
| Days After First/Last Applic. | 36 14          | 36 14           | 36 14           |

| Trt No. | Treatment Name   | Rate         | Growth Stage | 1 | 2  | 3  | 4  |
|---------|------------------|--------------|--------------|---|----|----|----|
| 1       | UNTREATED CHECK  |              |              | 0 | 0  | 0  | 0  |
| 2       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 0 | 99 | 13 | 73 |
| 3       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 0 | 99 | 95 | 99 |
|         | TOPYRALATE       | 1 fl oz/a    | MP           |   |    |    |    |
|         | ATRAZINE         | 1 pt/a       | MP           |   |    |    |    |
|         | MSO              | 0.5 % v/v    | MP           |   |    |    |    |
|         | UAN-28%          | 2.5 % v/v    | MP           |   |    |    |    |
| 4       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 0 | 99 | 98 | 99 |
|         | TOPYRALATE       | 1.37 fl oz/a | MP           |   |    |    |    |
|         | ATRAZINE         | 2 pt/a       | MP           |   |    |    |    |
|         | MSO              | 0.5 % v/v    | MP           |   |    |    |    |
|         | UAN-28%          | 2.5 % v/v    | MP           |   |    |    |    |
| 5       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 0 | 99 | 95 | 99 |
|         | TOPYRALATE       | 1 fl oz/a    | MP           |   |    |    |    |
|         | ATRAZINE         | 1.75 pt/a    | MP           |   |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a   | MP           |   |    |    |    |
|         | MSO              | 0.5 % v/v    | MP           |   |    |    |    |
|         | AMS              | 2.5 % v/v    | MP           |   |    |    |    |
| 6       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 0 | 99 | 95 | 99 |
|         | TOPYRALATE       | 1.37 fl oz/a | MP           |   |    |    |    |
|         | ATRAZINE         | 1.75 pt/a    | MP           |   |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a   | MP           |   |    |    |    |
|         | MSO              | 0.5 % v/v    | MP           |   |    |    |    |
|         | AMS              | 2.5 % v/v    | MP           |   |    |    |    |
| 7       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 0 | 99 | 98 | 99 |
|         | TOPYRALATE       | 1 fl oz/a    | MP           |   |    |    |    |
|         | ATRAZINE         | 1.75 pt/a    | MP           |   |    |    |    |
|         | LIBERTY 280      | 22 fl oz/a   | MP           |   |    |    |    |
|         | MSO              | 0.5 % v/v    | MP           |   |    |    |    |
|         | AMS              | 2.5 % v/v    | MP           |   |    |    |    |
| 8       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 0 | 99 | 96 | 99 |
|         | TOPYRALATE       | 1.37 fl oz/a | MP           |   |    |    |    |
|         | ATRAZINE         | 1.75 pt/a    | MP           |   |    |    |    |
|         | LIBERTY 280      | 22 fl oz/a   | MP           |   |    |    |    |
|         | MSO              | 0.5 % v/v    | MP           |   |    |    |    |
|         | AMS              | 2.5 % v/v    | MP           |   |    |    |    |

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|                               |           |                |                 |                      |
|-------------------------------|-----------|----------------|-----------------|----------------------|
| Pest Type                     |           | W Weed         | W Weed          | W Weed               |
| Pest Code                     |           | SETFA          | AMBTR           | CHEAL                |
| Pest Scientific Name          |           | Setaria faberi | Ambrosia trifid | Chenopodium albidum  |
| Pest Name                     |           | Giant foxtail  | Giant ragweed   | Common lambsquarters |
| Crop Code                     | ZEAMX     |                |                 |                      |
| BBCH Scale                    | BCOR      |                |                 |                      |
| Crop Scientific Name          | Zea mays  |                |                 |                      |
| Crop Name                     | Corn      |                |                 |                      |
| Crop Variety                  |           |                |                 |                      |
| Description                   |           |                |                 |                      |
| Part Rated                    |           |                |                 |                      |
| Rating Date                   | 6-10-2014 | 6-10-2014      | 6-10-2014       | 6-10-2014            |
| Rating Type                   | INJURY    | CONTROL        | CONTROL         | CONTROL              |
| Rating Unit                   | PERCENT   | PERCENT        | PERCENT         | PERCENT              |
| Rating Timing                 | 2 WEEK    | 2 WEEK         | 2 WEEK          | 2 WEEK               |
| Days After First/Last Applic. | 36 14     | 36 14          | 36 14           | 36 14                |

| Trt No. | Treatment Name     | Rate | Unit    | Growth Stage | 1      | 2      | 3       | 4      |
|---------|--------------------|------|---------|--------------|--------|--------|---------|--------|
| 9       | DUAL II MAGNUM     | 1.67 | pt/a    | PRE          | 0      | 99     | 96      | 99     |
|         | CALLISTO           | 3    | fl oz/a | MP           |        |        |         |        |
|         | ATRAZINE           | 1.75 | pt/a    | MP           |        |        |         |        |
|         | COC                | 1    | % v/v   | MP           |        |        |         |        |
|         | UAN-28%            | 2.5  | % v/v   | MP           |        |        |         |        |
| 10      | DUAL II MAGNUM     | 1.67 | pt/a    | PRE          | 0      | 99     | 96      | 99     |
|         | IMPACT             | 1    | fl oz/a | MP           |        |        |         |        |
|         | ATRAZINE           | 1.75 | pt/a    | MP           |        |        |         |        |
|         | MSO                | 0.5  | % v/v   | MP           |        |        |         |        |
|         | UAN-28%            | 2.5  | % v/v   | MP           |        |        |         |        |
|         | LSD (P=.05)        |      |         |              | 0.0    | 0.0    | 5.1     | 24.7   |
|         | Standard Deviation |      |         |              | 0.0    | 0.0    | 3.0     | 14.4   |
|         | CV                 |      |         |              | 0.0    | 0.0    | 3.78    | 16.68  |
|         | Replicate F        |      |         |              | 0.000  | 0.000  | 0.163   | 1.000  |
|         | Replicate Prob(F)  |      |         |              | 1.0000 | 1.0000 | 0.8504  | 0.3874 |
|         | Treatment F        |      |         |              | 0.000  | 0.000  | 490.605 | 14.298 |
|         | Treatment Prob(F)  |      |         |              | 1.0000 | 1.0000 | 0.0001  | 0.0001 |

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|                               |               |                |                 |
|-------------------------------|---------------|----------------|-----------------|
| Pest Type                     | W Weed        | W Weed         | W Weed          |
| Pest Code                     | IPOSS         | SETFA          | AMBTR           |
| Pest Scientific Name          | Ipomoea sp.   | Setaria faberi | Ambrosia trifi> |
| Pest Name                     | Morning glory | Giant foxtail  | Giant ragweed   |
| Crop Code                     |               | ZEAMX          |                 |
| BBCH Scale                    |               | BCOR           |                 |
| Crop Scientific Name          |               | Zea mays       |                 |
| Crop Name                     |               | Corn           |                 |
| Crop Variety                  |               |                |                 |
| Description                   |               |                |                 |
| Part Rated                    |               |                |                 |
| Rating Date                   | 6-10-2014     | 6-24-2014      | 6-24-2014       |
| Rating Type                   | CONTROL       | INJURY         | CONTROL         |
| Rating Unit                   | PERCENT       | PERCENT        | PERCENT         |
| Rating Timing                 | 2 WEEK        | 4 WEEK         | 4 WEEK          |
| Days After First/Last Applic. | 36 14         | 50 28          | 50 28           |

| Trt No. | Treatment Name   | Rate         | Growth Stage | 5  | 6 | 7  | 8  |
|---------|------------------|--------------|--------------|----|---|----|----|
| 1       | UNTREATED CHECK  |              |              | 0  | 0 | 0  | 0  |
| 2       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 13 | 0 | 99 | 99 |
| 3       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 93 | 0 | 99 | 99 |
|         | TOPYRALATE       | 1 fl oz/a    | MP           |    |   |    |    |
|         | ATRAZINE         | 1 pt/a       | MP           |    |   |    |    |
|         | MSO              | 0.5 % v/v    | MP           |    |   |    |    |
|         | UAN-28%          | 2.5 % v/v    | MP           |    |   |    |    |
| 4       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 96 | 0 | 99 | 99 |
|         | TOPYRALATE       | 1.37 fl oz/a | MP           |    |   |    |    |
|         | ATRAZINE         | 2 pt/a       | MP           |    |   |    |    |
|         | MSO              | 0.5 % v/v    | MP           |    |   |    |    |
|         | UAN-28%          | 2.5 % v/v    | MP           |    |   |    |    |
| 5       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 98 | 0 | 99 | 99 |
|         | TOPYRALATE       | 1 fl oz/a    | MP           |    |   |    |    |
|         | ATRAZINE         | 1.75 pt/a    | MP           |    |   |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a   | MP           |    |   |    |    |
|         | MSO              | 0.5 % v/v    | MP           |    |   |    |    |
|         | AMS              | 2.5 % v/v    | MP           |    |   |    |    |
| 6       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 99 | 0 | 99 | 99 |
|         | TOPYRALATE       | 1.37 fl oz/a | MP           |    |   |    |    |
|         | ATRAZINE         | 1.75 pt/a    | MP           |    |   |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a   | MP           |    |   |    |    |
|         | MSO              | 0.5 % v/v    | MP           |    |   |    |    |
|         | AMS              | 2.5 % v/v    | MP           |    |   |    |    |
| 7       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 99 | 0 | 99 | 99 |
|         | TOPYRALATE       | 1 fl oz/a    | MP           |    |   |    |    |
|         | ATRAZINE         | 1.75 pt/a    | MP           |    |   |    |    |
|         | LIBERTY 280      | 22 fl oz/a   | MP           |    |   |    |    |
|         | MSO              | 0.5 % v/v    | MP           |    |   |    |    |
|         | AMS              | 2.5 % v/v    | MP           |    |   |    |    |
| 8       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 99 | 0 | 99 | 99 |
|         | TOPYRALATE       | 1.37 fl oz/a | MP           |    |   |    |    |
|         | ATRAZINE         | 1.75 pt/a    | MP           |    |   |    |    |
|         | LIBERTY 280      | 22 fl oz/a   | MP           |    |   |    |    |
|         | MSO              | 0.5 % v/v    | MP           |    |   |    |    |
|         | AMS              | 2.5 % v/v    | MP           |    |   |    |    |

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|                               |               |                |                             |
|-------------------------------|---------------|----------------|-----------------------------|
| Pest Type                     | W Weed        | W Weed         | W Weed                      |
| Pest Code                     | IPOSS         | SETFA          | AMBTR                       |
| Pest Scientific Name          | Ipomoea sp.   | Setaria faberi | Ambrosia trifi>             |
| Pest Name                     | Morning glory | Giant foxtail  | Giant ragweed               |
| Crop Code                     |               | ZEAMX          |                             |
| BBCH Scale                    |               | BCOR           |                             |
| Crop Scientific Name          |               | Zea mays       |                             |
| Crop Name                     |               | Corn           |                             |
| Crop Variety                  |               |                |                             |
| Description                   |               |                |                             |
| Part Rated                    |               |                |                             |
| Rating Date                   | 6-10-2014     | 6-24-2014      | 6-24-2014                   |
| Rating Type                   | CONTROL       | INJURY         | CONTROL                     |
| Rating Unit                   | PERCENT       | PERCENT        | PERCENT                     |
| Rating Timing                 | 2 WEEK        | 4 WEEK         | 4 WEEK                      |
| Days After First/Last Applic. | 36 14         | 50 28          | 50 28                       |
| Trt No.                       | Rate          | Growth         |                             |
| Treatment Name                | Unit          | Stage          |                             |
|                               |               |                | 5 6 7 8                     |
| 9 DUAL II MAGNUM              | 1.67 pt/a     | PRE            | 99 0 99 99                  |
| CALLISTO                      | 3 fl oz/a     | MP             |                             |
| ATRAZINE                      | 1.75 pt/a     | MP             |                             |
| COC                           | 1 % v/v       | MP             |                             |
| UAN-28%                       | 2.5 % v/v     | MP             |                             |
| 10 DUAL II MAGNUM             | 1.67 pt/a     | PRE            | 98 0 99 99                  |
| IMPACT                        | 1 fl oz/a     | MP             |                             |
| ATRAZINE                      | 1.75 pt/a     | MP             |                             |
| MSO                           | 0.5 % v/v     | MP             |                             |
| UAN-28%                       | 2.5 % v/v     | MP             |                             |
| LSD (P=.05)                   |               |                | 7.6 0.0 0.0 0.0             |
| Standard Deviation            |               |                | 4.4 0.0 0.0 0.0             |
| CV                            |               |                | 5.6 0.0 0.0 0.0             |
| Replicate F                   |               |                | 0.696 0.000 0.000 0.000     |
| Replicate Prob(F)             |               |                | 0.5115 1.0000 1.0000 1.0000 |
| Treatment F                   |               |                | 225.079 0.000 0.000 0.000   |
| Treatment Prob(F)             |               |                | 0.0001 1.0000 1.0000 1.0000 |

|                               |                 |               |                |
|-------------------------------|-----------------|---------------|----------------|
| Pest Type                     | W Weed          | W Weed        | W Weed         |
| Pest Code                     | CHEAL           | IPOSS         | SETFA          |
| Pest Scientific Name          | Chenopodium al> | Ipomoea sp.   | Setaria faberi |
| Pest Name                     | Common lambsqu> | Morning glory | Giant foxtail  |
| Crop Code                     |                 |               | ZEAMX          |
| BBCH Scale                    |                 |               | BCOR           |
| Crop Scientific Name          |                 |               | Zea mays       |
| Crop Name                     |                 |               | Corn           |
| Crop Variety                  |                 |               |                |
| Description                   |                 |               |                |
| Part Rated                    |                 |               |                |
| Rating Date                   | 6-24-2014       | 6-24-2014     | 7-22-2014      |
| Rating Type                   | CONTROL         | CONTROL       | INJURY         |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT        |
| Rating Timing                 | 4 WEEK          | 4 WEEK        | 8 WEEK         |
| Days After First/Last Applic. | 50 28           | 50 28         | 78 56          |

| Trt | Treatment        | Rate         | Growth | 9  | 10 | 11 | 12 |
|-----|------------------|--------------|--------|----|----|----|----|
| No. | Name             | Rate Unit    | Stage  |    |    |    |    |
| 1   | UNTREATED CHECK  |              |        | 0  | 0  | 0  | 0  |
| 2   | DUAL II MAGNUM   | 1.67 pt/a    | PRE    | 99 | 99 | 0  | 99 |
| 3   | DUAL II MAGNUM   | 1.67 pt/a    | PRE    | 99 | 99 | 0  | 99 |
|     | TOPYRALATE       | 1 fl oz/a    | MP     |    |    |    |    |
|     | ATRAZINE         | 1 pt/a       | MP     |    |    |    |    |
|     | MSO              | 0.5 % v/v    | MP     |    |    |    |    |
|     | UAN-28%          | 2.5 % v/v    | MP     |    |    |    |    |
| 4   | DUAL II MAGNUM   | 1.67 pt/a    | PRE    | 99 | 99 | 0  | 99 |
|     | TOPYRALATE       | 1.37 fl oz/a | MP     |    |    |    |    |
|     | ATRAZINE         | 2 pt/a       | MP     |    |    |    |    |
|     | MSO              | 0.5 % v/v    | MP     |    |    |    |    |
|     | UAN-28%          | 2.5 % v/v    | MP     |    |    |    |    |
| 5   | DUAL II MAGNUM   | 1.67 pt/a    | PRE    | 99 | 99 | 0  | 99 |
|     | TOPYRALATE       | 1 fl oz/a    | MP     |    |    |    |    |
|     | ATRAZINE         | 1.75 pt/a    | MP     |    |    |    |    |
|     | ROUNDUP POWERMAX | 22 fl oz/a   | MP     |    |    |    |    |
|     | MSO              | 0.5 % v/v    | MP     |    |    |    |    |
|     | AMS              | 2.5 % v/v    | MP     |    |    |    |    |
| 6   | DUAL II MAGNUM   | 1.67 pt/a    | PRE    | 99 | 99 | 0  | 99 |
|     | TOPYRALATE       | 1.37 fl oz/a | MP     |    |    |    |    |
|     | ATRAZINE         | 1.75 pt/a    | MP     |    |    |    |    |
|     | ROUNDUP POWERMAX | 22 fl oz/a   | MP     |    |    |    |    |
|     | MSO              | 0.5 % v/v    | MP     |    |    |    |    |
|     | AMS              | 2.5 % v/v    | MP     |    |    |    |    |
| 7   | DUAL II MAGNUM   | 1.67 pt/a    | PRE    | 99 | 99 | 0  | 99 |
|     | TOPYRALATE       | 1 fl oz/a    | MP     |    |    |    |    |
|     | ATRAZINE         | 1.75 pt/a    | MP     |    |    |    |    |
|     | LIBERTY 280      | 22 fl oz/a   | MP     |    |    |    |    |
|     | MSO              | 0.5 % v/v    | MP     |    |    |    |    |
|     | AMS              | 2.5 % v/v    | MP     |    |    |    |    |
| 8   | DUAL II MAGNUM   | 1.67 pt/a    | PRE    | 99 | 99 | 0  | 99 |
|     | TOPYRALATE       | 1.37 fl oz/a | MP     |    |    |    |    |
|     | ATRAZINE         | 1.75 pt/a    | MP     |    |    |    |    |
|     | LIBERTY 280      | 22 fl oz/a   | MP     |    |    |    |    |
|     | MSO              | 0.5 % v/v    | MP     |    |    |    |    |
|     | AMS              | 2.5 % v/v    | MP     |    |    |    |    |

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|                               |                    |                 |               |              |                |
|-------------------------------|--------------------|-----------------|---------------|--------------|----------------|
| Pest Type                     |                    | W Weed          | W Weed        |              | W Weed         |
| Pest Code                     |                    | CHEAL           | IPOSS         |              | SETFA          |
| Pest Scientific Name          |                    | Chenopodium al> | Ipomoea sp.   |              | Setaria faberi |
| Pest Name                     |                    | Common lambsqu> | Morning glory |              | Giant foxtail  |
| Crop Code                     |                    |                 |               |              | ZEAMX          |
| BBCH Scale                    |                    |                 |               |              | BCOR           |
| Crop Scientific Name          |                    |                 |               |              | Zea mays       |
| Crop Name                     |                    |                 |               |              | Corn           |
| Crop Variety                  |                    |                 |               |              |                |
| Description                   |                    |                 |               |              |                |
| Part Rated                    |                    |                 |               |              |                |
| Rating Date                   |                    | 6-24-2014       | 6-24-2014     | 7-22-2014    | 7-22-2014      |
| Rating Type                   |                    | CONTROL         | CONTROL       | INJURY       | CONTROL        |
| Rating Unit                   |                    | PERCENT         | PERCENT       | PERCENT      | PERCENT        |
| Rating Timing                 |                    | 4 WEEK          | 4 WEEK        | 8 WEEK       | 8 WEEK         |
| Days After First/Last Applic. |                    | 50 28           | 50 28         | 78 56        | 78 56          |
| Trt No.                       | Treatment Name     | Rate            | Unit          | Growth Stage |                |
| 9                             | DUAL II MAGNUM     | 1.67 pt/a       |               | PRE          |                |
|                               | CALLISTO           | 3 fl oz/a       |               | MP           |                |
|                               | ATRAZINE           | 1.75 pt/a       |               | MP           |                |
|                               | COC                | 1 % v/v         |               | MP           |                |
|                               | UAN-28%            | 2.5 % v/v       |               | MP           |                |
| 10                            | DUAL II MAGNUM     | 1.67 pt/a       |               | PRE          |                |
|                               | IMPACT             | 1 fl oz/a       |               | MP           |                |
|                               | ATRAZINE           | 1.75 pt/a       |               | MP           |                |
|                               | MSO                | 0.5 % v/v       |               | MP           |                |
|                               | UAN-28%            | 2.5 % v/v       |               | MP           |                |
|                               | LSD (P=.05)        |                 |               |              | 0.0            |
|                               | Standard Deviation |                 |               |              | 0.0            |
|                               | CV                 |                 |               |              | 0.0            |
|                               | Replicate F        |                 |               |              | 0.000          |
|                               | Replicate Prob(F)  |                 |               |              | 1.0000         |
|                               | Treatment F        |                 |               |              | 0.000          |
|                               | Treatment Prob(F)  |                 |               |              | 1.0000         |



|                               |                 |                 |               |           |
|-------------------------------|-----------------|-----------------|---------------|-----------|
| Pest Type                     | W Weed          | W Weed          | W Weed        |           |
| Pest Code                     | AMBTR           | CHEAL           | IPOSS         |           |
| Pest Scientific Name          | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |           |
| Pest Name                     | Giant ragweed   | Common lambsqu> | Morning glory |           |
| Crop Code                     |                 |                 |               | ZEAMX     |
| BBCH Scale                    |                 |                 |               | BCOR      |
| Crop Scientific Name          |                 |                 |               | Zea mays  |
| Crop Name                     |                 |                 |               | Corn      |
| Crop Variety                  |                 |                 |               |           |
| Description                   |                 |                 |               |           |
| Part Rated                    |                 |                 |               |           |
| Rating Date                   | 7-22-2014       | 7-22-2014       | 7-22-2014     | 10-8-2014 |
| Rating Type                   | CONTROL         | CONTROL         | CONTROL       | YIELD     |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT       | BU        |
| Rating Timing                 | 8 WEEK          | 8 WEEK          | 8 WEEK        |           |
| Days After First/Last Applic. | 78 56           | 78 56           | 78 56         | 156 134   |

| Trt No. | Treatment Name   | Rate         | Growth Stage | 13 | 14 | 15 | 20    |
|---------|------------------|--------------|--------------|----|----|----|-------|
| 1       | UNTREATED CHECK  |              |              | 0  | 0  | 0  | 1.5   |
| 2       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 20 | 99 | 20 | 3.6   |
| 3       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 89 | 99 | 86 | 134.4 |
|         | TOPYRALATE       | 1 fl oz/a    | MP           |    |    |    |       |
|         | ATRAZINE         | 1 pt/a       | MP           |    |    |    |       |
|         | MSO              | 0.5 % v/v    | MP           |    |    |    |       |
|         | UAN-28%          | 2.5 % v/v    | MP           |    |    |    |       |
| 4       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 93 | 99 | 88 | 137.0 |
|         | TOPYRALATE       | 1.37 fl oz/a | MP           |    |    |    |       |
|         | ATRAZINE         | 2 pt/a       | MP           |    |    |    |       |
|         | MSO              | 0.5 % v/v    | MP           |    |    |    |       |
|         | UAN-28%          | 2.5 % v/v    | MP           |    |    |    |       |
| 5       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 90 | 99 | 90 | 154.3 |
|         | TOPYRALATE       | 1 fl oz/a    | MP           |    |    |    |       |
|         | ATRAZINE         | 1.75 pt/a    | MP           |    |    |    |       |
|         | ROUNDUP POWERMAX | 22 fl oz/a   | MP           |    |    |    |       |
|         | MSO              | 0.5 % v/v    | MP           |    |    |    |       |
|         | AMS              | 2.5 % v/v    | MP           |    |    |    |       |
| 6       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 90 | 99 | 90 | 150.5 |
|         | TOPYRALATE       | 1.37 fl oz/a | MP           |    |    |    |       |
|         | ATRAZINE         | 1.75 pt/a    | MP           |    |    |    |       |
|         | ROUNDUP POWERMAX | 22 fl oz/a   | MP           |    |    |    |       |
|         | MSO              | 0.5 % v/v    | MP           |    |    |    |       |
|         | AMS              | 2.5 % v/v    | MP           |    |    |    |       |
| 7       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 92 | 99 | 93 | 148.2 |
|         | TOPYRALATE       | 1 fl oz/a    | MP           |    |    |    |       |
|         | ATRAZINE         | 1.75 pt/a    | MP           |    |    |    |       |
|         | LIBERTY 280      | 22 fl oz/a   | MP           |    |    |    |       |
|         | MSO              | 0.5 % v/v    | MP           |    |    |    |       |
|         | AMS              | 2.5 % v/v    | MP           |    |    |    |       |
| 8       | DUAL II MAGNUM   | 1.67 pt/a    | PRE          | 92 | 99 | 93 | 127.2 |
|         | TOPYRALATE       | 1.37 fl oz/a | MP           |    |    |    |       |
|         | ATRAZINE         | 1.75 pt/a    | MP           |    |    |    |       |
|         | LIBERTY 280      | 22 fl oz/a   | MP           |    |    |    |       |
|         | MSO              | 0.5 % v/v    | MP           |    |    |    |       |
|         | AMS              | 2.5 % v/v    | MP           |    |    |    |       |

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|                               |                 |                |               |           |
|-------------------------------|-----------------|----------------|---------------|-----------|
| Pest Type                     | W Weed          | W Weed         | W Weed        |           |
| Pest Code                     | AMBTR           | CHEAL          | IPOSS         |           |
| Pest Scientific Name          | Ambrosia trifid | Chenopodium al | Ipomoea sp.   |           |
| Pest Name                     | Giant ragweed   | Common lambsqu | Morning glory |           |
| Crop Code                     |                 |                |               | ZEAMX     |
| BBCH Scale                    |                 |                |               | BCOR      |
| Crop Scientific Name          |                 |                |               | Zea mays  |
| Crop Name                     |                 |                |               | Corn      |
| Crop Variety                  |                 |                |               |           |
| Description                   |                 |                |               |           |
| Part Rated                    |                 |                |               |           |
| Rating Date                   | 7-22-2014       | 7-22-2014      | 7-22-2014     | 10-8-2014 |
| Rating Type                   | CONTROL         | CONTROL        | CONTROL       | YIELD     |
| Rating Unit                   | PERCENT         | PERCENT        | PERCENT       | BU        |
| Rating Timing                 | 8 WEEK          | 8 WEEK         | 8 WEEK        |           |
| Days After First/Last Applic. | 78 56           | 78 56          | 78 56         | 156 134   |
| Trt No.                       |                 |                |               |           |
| Treatment Name                |                 |                |               |           |
| Rate                          |                 |                |               |           |
| Unit                          |                 |                |               |           |
| Growth Stage                  |                 |                |               |           |
|                               | 13              | 14             | 15            | 20        |
| 9 DUAL II MAGNUM              | 1.67 pt/a       |                |               |           |
| CALLISTO                      | 3 fl oz/a       |                |               |           |
| MP                            |                 |                |               |           |
| ATRAZINE                      | 1.75 pt/a       |                |               |           |
| MP                            |                 |                |               |           |
| COC                           | 1 % v/v         |                |               |           |
| MP                            |                 |                |               |           |
| UAN-28%                       | 2.5 % v/v       |                |               |           |
| MP                            |                 |                |               |           |
| 10 DUAL II MAGNUM             | 1.67 pt/a       |                |               |           |
| PRE                           |                 |                |               |           |
| IMPACT                        | 1 fl oz/a       |                |               |           |
| MP                            |                 |                |               |           |
| ATRAZINE                      | 1.75 pt/a       |                |               |           |
| MP                            |                 |                |               |           |
| MSO                           | 0.5 % v/v       |                |               |           |
| MP                            |                 |                |               |           |
| UAN-28%                       | 2.5 % v/v       |                |               |           |
| MP                            |                 |                |               |           |
| LSD (P=.05)                   | 7.9             | 0.0            | 7.3           | 7.43      |
| Standard Deviation            | 4.6             | 0.0            | 4.2           | 4.33      |
| CV                            | 6.14            | 0.0            | 5.69          | 3.77      |
| Replicate F                   | 0.096           | 0.000          | 0.201         | 0.351     |
| Replicate Prob(F)             | 0.9088          | 1.0000         | 0.8199        | 0.7085    |
| Treatment F                   | 168.994         | 0.000          | 197.294       | 571.115   |
| Treatment Prob(F)             | 0.0001          | 1.0000         | 0.0001        | 0.0001    |





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**Crop Description**

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** DKC 62-08RIB

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-5-2014  
**Planting Method:** PLANTD planted

**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Emergence Date:** 5-13-2014  
**Harvest Date:** 10-8-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 36 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 10  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 1.5 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-5-2014  | 5-27-2014 |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | MP        |
| <b>Application Placement:</b>     | BROSOI    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 82 F      | 78 F      |
| <b>% Relative Humidity:</b>       | 38        | 50        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 8 MPH     |
| <b>Wind Direction:</b>            | SW        | WSW       |
| <b>Soil Temperature, Unit:</b>    | 61 F      | 70 F      |
| <b>Soil Moisture:</b>             | EXCELL    | NORMAL    |
| <b>% Cloud Cover:</b>             | 20        | 10        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 5-28-2014 |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   |
|---------------------------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            | V4         |
| <b>Height, Unit:</b>            |            | 10 IN      |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 1.5 IN   |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 4 IN     |
| <b>Pest 3 Code, Type, Scale:</b> | CHEAL W  | CHEAL W  |
| <b>Height, Unit:</b>             |          | 1 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 1 IN     |

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**Application Equipment**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      |





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Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code ZEAMX  
 BBCH Scale BCOR  
 Crop Scientific Name Zea mays  
 Crop Name Corn  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 10-30-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Days After First/Last Applic. 162 86

| Trt No. | Treatment Name | Rate    | Growth Unit | Stage     |       |
|---------|----------------|---------|-------------|-----------|-------|
|         |                |         |             |           | 4     |
| 17      | DKC 62-08      |         |             |           | 196.1 |
|         | HEADLINE       | 6 oz/a  |             | IN-FURROW |       |
|         | HEADLINE AMP   | 10 oz/a |             | TASSEL    |       |
|         | FRANCHISE      | 4 oz/a  |             | TASSEL    |       |
| 18      | DKC 62-08      |         |             |           | 180.6 |
|         | PRIAXOR        | 4 oz/a  |             | V5        |       |
|         | FRANCHISE      | 4 oz/a  |             | V5        |       |
| 19      | DKC 62-08      |         |             |           | 188.5 |
|         | PRIAXOR        | 4 oz/a  |             | V5        |       |
|         | FRANCHISE      | 4 oz/a  |             | V5        |       |
|         | HEADLINE AMP   | 10 oz/a |             | TASSEL    |       |
|         | FRANCHISE      | 4 oz/a  |             | TASSEL    |       |
| 20      | DKC 62-77      |         |             |           | 199.7 |
| 21      | DKC 62-77      |         |             |           | 197.3 |
|         | HEADLINE       | 6 oz/a  |             | IN-FURROW |       |
| 22      | DKC 62-77      |         |             |           | 191.0 |
|         | PRIAXOR        | 4 oz/a  |             | V5        |       |
|         | FRANCHISE      | 4 oz/a  |             | V5        |       |
| 23      | DKC 62-77      |         |             |           | 187.7 |
|         | HEADLINE       | 6 oz/a  |             | IN-FURROW |       |
|         | HEADLINE AMP   | 10 oz/a |             | TASSEL    |       |
|         | FRANCHISE      | 4 oz/a  |             | TASSEL    |       |
| 24      | DKC 62-77      |         |             |           | 186.2 |
|         | PRIAXOR        | 4 oz/a  |             | V5        |       |
|         | FRANCHISE      | 4 oz/a  |             | V5        |       |
|         | HEADLINE AMP   | 10 oz/a |             | TASSEL    |       |
|         | FRANCHISE      | 4 oz/a  |             | TASSEL    |       |
| 25      | DKC 62-98      |         |             |           | 181.5 |
| 26      | DKC 62-98      |         |             |           | 167.9 |
|         | HEADLINE       | 6 oz/a  |             | IN-FURROW |       |
| 27      | DKC 62-98      |         |             |           | 171.2 |
|         | PRIAXOR        | 4 oz/a  |             | V5        |       |
|         | FRANCHISE      | 4 oz/a  |             | V5        |       |
| 28      | DKC 63-25      |         |             |           | 154.8 |
| 29      | DKC 63-25      |         |             |           | 166.3 |
|         | HEADLINE       | 6 oz/a  |             | IN-FURROW |       |
| 30      | DKC 63-25      |         |             |           | 169.6 |
|         | PRIAXOR        | 4 oz/a  |             | V5        |       |
|         | FRANCHISE      | 4 oz/a  |             | V5        |       |
| 31      | DKC 63-35      |         |             |           | 189.7 |
| 32      | DKC 63-35      |         |             |           | 184.3 |
|         | HEADLINE       | 6 oz/a  |             | IN-FURROW |       |
| 33      | DKC 63-35      |         |             |           | 189.0 |
|         | PRIAXOR        | 4 oz/a  |             | V5        |       |
|         | FRANCHISE      | 4 oz/a  |             | V5        |       |
| 34      | DKC 64-89      |         |             |           | 185.8 |

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Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code ZEAMX  
 BBCH Scale BCOR  
 Crop Scientific Name Zea mays  
 Crop Name Corn  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 10-30-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Days After First/Last Applic. 162 86

| Trt No. | Treatment Name   | Rate  | Growth Unit | Stage                                      | 4     |
|---------|--|---|-------------|--|-------|
| 35      | DKC 64-89<br>HEADLINE  | 6 oz/a  |             | IN-FURROW                                  | 176.3 |
| 36      | DKC 64-89<br>HEADLINE<br>HEADLINE AMP<br>FRANCHISE             | 6 oz/a<br>6 oz/a<br>10 oz/a<br>4 oz/a           |             | IN-FURROW<br>IN-FURROW<br>TASSEL<br>TASSEL | 179.6 |
| 37      | DKC 64-89<br>PRIAXOR<br>FRANCHISE                              | 4 oz/a<br>4 oz/a                                |             | V5<br>V5                                   | 174.6 |
| 38      | DKC 64-89<br>PRIAXOR<br>FRANCHISE<br>HEADLINE AMP<br>FRANCHISE | 4 oz/a<br>4 oz/a<br>4 oz/a<br>10 oz/a<br>4 oz/a |             | V5<br>V5<br>TASSEL<br>TASSEL               | 187.3 |
| 39      | DKC 64-99  |   |             |  | 172.9 |
| 40      | DKC 64-99<br>HEADLINE  | 6 oz/a  |             | IN-FURROW                                  | 169.6 |
| 41      | DKC 64-99<br>PRIAXOR<br>FRANCHISE                              | 4 oz/a<br>4 oz/a                                |             | V5<br>V5                                   | 178.7 |
| 42      | DKC 65-19  |   |             |  | 187.4 |
| 43      | DKC 65-19<br>HEADLINE  | 6 oz/a  |             | IN-FURROW                                  | 184.6 |
| 44      | DKC 65-19<br>PRIAXOR<br>FRANCHISE                              | 4 oz/a<br>4 oz/a                                |             | V5<br>V5                                   | 182.1 |
| 45      | P 1498   |   |             |  | 171.4 |
| 46      | P 1498<br>HEADLINE   | 6 oz/a  |             | IN-FURROW                                  | 181.0 |
| 47      | P 1498<br>PRIAXOR<br>FRANCHISE                                 | 4 oz/a<br>4 oz/a                                |             | V5<br>V5                                   | 191.7 |
| 48      | DKC 66-40  |   |             |  | 210.1 |
| 49      | DKC 66-40<br>HEADLINE  | 6 oz/a  |             | IN-FURROW                                  | 211.1 |
| 50      | DKC 66-40<br>PRIAXOR<br>FRANCHISE                              | 4 oz/a<br>4 oz/a                                |             | V5<br>V5                                   | 208.8 |
| 51      | P 1636   |   |             |  | 208.3 |
| 52      | P 1636<br>HEADLINE   | 6 oz/a  |             | IN-FURROW                                  | 203.6 |
| 53      | P 1636<br>PRIAXOR<br>FRANCHISE                                 | 4 oz/a<br>4 oz/a                                |             | V5<br>V5                                   | 193.7 |
| 54      | DKC 66-42  |   |             |  | 203.6 |
| 55      | DKC 66-42<br>HEADLINE  | 6 oz/a  |             | IN-FURROW                                  | 193.1 |

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Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code ZEAMX  
 BBCH Scale BCOR  
 Crop Scientific Name Zea mays  
 Crop Name Corn  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 10-30-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Days After First/Last Applic. 162 86

| Trt No. | Treatment Name     | Rate    | Growth Unit | Stage     |       |
|---------|--------------------|---------|-------------|-----------|-------|
|         |                    |         |             |           | 4     |
| 56      | DKC 66-42          |         |             |           | 204.1 |
|         | HEADLINE           | 6 oz/a  |             | IN-FURROW |       |
|         | HEADLINE AMP       | 10 oz/a |             | TASSEL    |       |
|         | FRANCHISE          | 4 oz/a  |             | TASSEL    |       |
| 57      | DKC 66-42          |         |             |           | 193.7 |
|         | PRIAXOR            | 4 oz/a  |             | V5        |       |
|         | FRANCHISE          | 4 oz/a  |             | V5        |       |
| 58      | DKC 66-42          |         |             |           | 187.5 |
|         | PRIAXOR            | 4 oz/a  |             | V5        |       |
|         | FRANCHISE          | 4 oz/a  |             | V5        |       |
|         | HEADLINE AMP       | 10 oz/a |             | TASSEL    |       |
|         | FRANCHISE          | 4 oz/a  |             | TASSEL    |       |
| 59      | DKC 67-58          |         |             |           | 187.6 |
| 60      | DKC 67-58          |         |             |           | 187.6 |
|         | HEADLINE           | 6 oz/a  |             | IN-FURROW |       |
| 61      | DKC 67-58          |         |             |           | 193.4 |
|         | PRIAXOR            | 4 oz/a  |             | V5        |       |
|         | FRANCHISE          | 4 oz/a  |             | V5        |       |
|         | LSD (P=.05)        |         |             |           | .     |
|         | Standard Deviation |         |             |           | .     |
|         | CV                 |         |             |           | .     |

Crop Code  
ZEAMX, BCOR, Zea mays, = US

Rating Type  
YIELD = yield

Rating Unit  
BU = bushel

ARM Action Codes  
TY1 = 1.178571\*[1]\*(100-[2])/84.5



Plant and Soil Science, U of KY  
Weed Science Research

Row Spacing, Unit: 30 IN

Emergence Date: 5-27-2014

Harvest Date: 10-30-2014

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 61 F

Harvested Length, Unit: 132 FT

Soil Moisture: GOOD good

Harvest Equipment: COMBINE

Seed Bed: SMOOTH smooth

% Standard Moisture: 15.5

Crop 2: ZEAM Zea mays

Corn

X

Variety: DKC 61-54

Planting Date: 5-20-2014

Planting Rate, Unit: 32000 S/A

Planting Method: PLANTD planted

Depth, Unit: 1.5 IN

Row Spacing, Unit: 30 IN

Emergence Date: 5-27-2014

Harvest Date: 10-30-2014

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 61 F

Harvested Length, Unit: 132 FT

Soil Moisture: GOOD good

Harvest Equipment: COMBINE

Seed Bed: SMOOTH smooth

% Standard Moisture: 15.5

Crop 3: ZEAM Zea mays

Corn

X

Variety: DKC 61-79

Planting Date: 5-20-2014

Planting Rate, Unit: 32000 S/A

Planting Method: PLANTD planted

Depth, Unit: 1.5 IN

Row Spacing, Unit: 30 IN

Emergence Date: 5-27-2014

Harvest Date: 10-30-2014

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 61 F

Harvested Length, Unit: 132 FT

Soil Moisture: GOOD good

Harvest Equipment: COMBINE

Seed Bed: SMOOTH smooth

% Standard Moisture: 15.5

Crop 4: ZEAM Zea mays

Corn

X

Variety: DKC 61-89

Planting Date: 5-20-2014

Planting Rate, Unit: 32000 S/A

Planting Method: PLANTD planted

Depth, Unit: 1.5 IN

Row Spacing, Unit: 30 IN

Emergence Date: 5-27-2014

Harvest Date: 10-30-2014

Harvested Width, Unit: 5 FT

Soil Temperature, Unit: 61 F

Harvested Length, Unit: 132 FT

Soil Moisture: GOOD good

Harvest Equipment: COMBINE

Seed Bed: SMOOTH smooth

% Standard Moisture: 15.5

Plant and Soil Science, U of KY  
Weed Science Research

**Crop 5:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 62-08

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 132 FT

**Soil Temperature, Unit:** 61 F

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** SMOOTH smooth **% Standard Moisture:** 15.5

**Crop 6:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 62-77

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 132 FT

**Soil Temperature, Unit:** 61 F

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** SMOOTH smooth **% Standard Moisture:** 15.5

**Crop 7:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 62-98

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 132 FT

**Soil Temperature, Unit:** 61 F

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** SMOOTH smooth **% Standard Moisture:** 15.5

**Crop 8:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 63-25

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014

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Weed Science Research

|                                       |  |
|---------------------------------------|--|
| <b>Soil Temperature, Unit:</b> 61 F   | <b>Harvested Width, Unit:</b> 5 FT     |
| <b>Soil Moisture:</b> GOOD good       | <b>Harvested Length, Unit:</b> 132 FT  |
| <b>Seed Bed:</b> SMOOTH smooth        | <b>Harvest Equipment:</b> COMBINE      |
|                                       | <b>% Standard Moisture:</b> 15.5       |
| <b>Crop 9:</b> ZEAM Zea mays          | Corn                                   |
| X                                     |  |
| <b>Variety:</b> DKC 63-35             |  |
| <b>Planting Rate, Unit:</b> 32000 S/A | <b>Planting Date:</b> 5-20-2014        |
| <b>Depth, Unit:</b> 1.5 IN            | <b>Planting Method:</b> PLANTD planted |
| <b>Row Spacing, Unit:</b> 30 IN       | <b>Emergence Date:</b> 5-27-2014       |
|                                       | <b>Harvest Date:</b> 10-30-2014        |
| <b>Soil Temperature, Unit:</b> 61 F   | <b>Harvested Width, Unit:</b> 5 FT     |
| <b>Soil Moisture:</b> GOOD good       | <b>Harvested Length, Unit:</b> 132 FT  |
| <b>Seed Bed:</b> SMOOTH smooth        | <b>Harvest Equipment:</b> COMBINE      |
|                                       | <b>% Standard Moisture:</b> 15.5       |
| <b>Crop 10:</b> ZEAM Zea mays         | Corn                                   |
| X                                     |  |
| <b>Variety:</b> DKC 64-89             |  |
| <b>Planting Rate, Unit:</b> 32000 S/A | <b>Planting Date:</b> 5-20-2014        |
| <b>Depth, Unit:</b> 1.5 IN            | <b>Planting Method:</b> PLANTD planted |
| <b>Row Spacing, Unit:</b> 30 IN       | <b>Emergence Date:</b> 5-27-2014       |
|                                       | <b>Harvest Date:</b> 10-30-2014        |
| <b>Soil Temperature, Unit:</b> 61 F   | <b>Harvested Width, Unit:</b> 5 FT     |
| <b>Soil Moisture:</b> GOOD good       | <b>Harvested Length, Unit:</b> 132 FT  |
| <b>Seed Bed:</b> SMOOTH smooth        | <b>Harvest Equipment:</b> COMBINE      |
|                                       | <b>% Standard Moisture:</b> 15.5       |
| <b>Crop 11:</b> ZEAM Zea mays         | Corn                                   |
| X                                     |  |
| <b>Variety:</b> DKC 64-99             |  |
| <b>Planting Rate, Unit:</b> 32000 S/A | <b>Planting Date:</b> 5-20-2014        |
| <b>Depth, Unit:</b> 1.5 IN            | <b>Planting Method:</b> PLANTD planted |
| <b>Row Spacing, Unit:</b> 30 IN       | <b>Emergence Date:</b> 5-27-2014       |
|                                       | <b>Harvest Date:</b> 10-30-2014        |
| <b>Soil Temperature, Unit:</b> 61 F   | <b>Harvested Width, Unit:</b> 5 FT     |
| <b>Soil Moisture:</b> GOOD good       | <b>Harvested Length, Unit:</b> 132 FT  |
| <b>Seed Bed:</b> SMOOTH smooth        | <b>Harvest Equipment:</b> COMBINE      |
|                                       | <b>% Standard Moisture:</b> 15.5       |
| <b>Crop 12:</b> ZEAM Zea mays         | Corn                                   |
| X                                     |  |
| <b>Variety:</b> DKC 65-19             |  |

Plant and Soil Science, U of KY  
Weed Science Research

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 132 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Crop 13:** ZEAM Zea mays Corn  
X  
**Variety:** P 1498

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 132 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Crop 14:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 66-40

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 132 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Crop 15:** ZEAM Zea mays Corn  
X  
**Variety:** P1636

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 132 FT  
**Harvest Equipment:** COMBINE

**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD good



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**Seed Bed:** SMOOTH smooth **% Standard Moisture:** 15.5

**Crop 16:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 66-42

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014

**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 132 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 17:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 67-58

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-30-2014

**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 132 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 132 FT  
**Treated Plot Area:** 1320 FT2  
**Replications:** 1

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)  
**Treatments:** 61

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 0.75 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  | <b>C</b>    |
|-----------------------------------|-----------|-----------|-------------|
| <b>Application Date:</b>          | 5-21-2014 | 6-12-2014 | 8-5-2014    |
| <b>Application Method:</b>        | SPRAY     | SPRAY     | SPRAY       |
| <b>Application Timing:</b>        | PRE       | V5        | TASSEL      |
| <b>Application Placement:</b>     | BROSOI    | BROFOL    | BROFOL      |
| <b>Applied By:</b>                | C H SLACK | C H SLACK | SARA LAWSON |
| <b>Air Temperature, Unit:</b>     | 78 F      | 78 F      | 80 F        |
| <b>% Relative Humidity:</b>       | 80        | 70        | 55          |
| <b>Wind Velocity, Unit:</b>       | 6 MPH     | 10 MPH    | 6 MPH       |
| <b>Wind Direction:</b>            | SSW       | NW        | SSW         |
| <b>Soil Temperature, Unit:</b>    | 61 F      | 68 F      | 74 F        |
| <b>Soil Moisture:</b>             | GOOD      | GOOD      | SLIDRY      |
| <b>% Cloud Cover:</b>             | 10        | 30        | 20          |
| <b>Next Moisture Occurred On:</b> | 5-22-2014 | 6-13-2014 | 8-6-2014    |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|---------------------------------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            | V5 90      | TASSLE 90  |
| <b>Height, Unit:</b>            |            | 20 IN      | 96 IN      |
| <b>Crop 2 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |            |
| <b>Stage Majority, Percent:</b> |            | V5 90      |            |
| <b>Height, Unit:</b>            |            | 20 IN      |            |
| <b>Crop 3 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |            |
| <b>Stage Majority, Percent:</b> |            | V5 90      |            |
| <b>Height, Unit:</b>            |            | 20 IN      |            |
| <b>Crop 4 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |            |
| <b>Stage Majority, Percent:</b> |            | V5 90      |            |
| <b>Height, Unit:</b>            |            | 20 IN      |            |
| <b>Crop 5 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            | V5 90      | TASSLE 90  |
| <b>Height, Unit:</b>            |            | 20 IN      | 96 IN      |
| <b>Crop 6 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            | V5 90      | TASSLE 90  |
| <b>Height, Unit:</b>            |            | 20 IN      | 96 IN      |
| <b>Crop 7 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |            |
| <b>Stage Majority, Percent:</b> |            | V5 90      |            |
| <b>Height, Unit:</b>            |            | 20 IN      |            |
| <b>Crop 8 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR | ZEAMX BCOR |

**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** V5 90  
**Height, Unit:** 20 IN  
**Crop 9 Code, BBCH Scale:** ZEAMX BCOR ZEAMX BCOR ZEAMX BCOR  
**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** V5 90  
**Height, Unit:** 20 IN  
**Crop10 Code, BBCH Scale:** ZEAMX BCOR ZEAMX BCOR ZEAMX BCOR  
**Stage Scale Used:** BBCH BBCH  
**Stage Majority, Percent:** V5 90 TASSLE 90  
**Height, Unit:** 20 IN 96 IN  
**Crop11 Code, BBCH Scale:** ZEAMX BCOR ZEAMX BCOR ZEAMX BCOR  
**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** V5 90  
**Height, Unit:** 20 IN  
**Crop12 Code, BBCH Scale:** ZEAMX BCOR ZEAMX BCOR ZEAMX BCOR  
**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** V5 90  
**Height, Unit:** 20 IN  
**Crop13 Code, BBCH Scale:** ZEAMX BCOR ZEAMX BCOR ZEAMX BCOR  
**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** V5 90  
**Height, Unit:** 20 IN  
**Crop14 Code, BBCH Scale:** ZEAMX BCOR ZEAMX BCOR ZEAMX BCOR  
**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** V5 90  
**Height, Unit:** 20 IN  
**Crop15 Code, BBCH Scale:** ZEAMX BCOR ZEAMX BCOR ZEAMX BCOR  
**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** V5 90  
**Height, Unit:** 20 IN  
**Crop16 Code, BBCH Scale:** ZEAMX BCOR ZEAMX BCOR ZEAMX BCOR  
**Stage Scale Used:** BBCH BBCH  
**Stage Majority, Percent:** V5 90 TASSLE 90  
**Height, Unit:** 20 IN 96 IN  
**Crop17 Code, BBCH Scale:** ZEAMX BCOR ZEAMX BCOR ZEAMX BCOR  
**Stage Scale Used:** BBCH  
**Stage Majority, Percent:** V5 90  
**Height, Unit:** 20 IN

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**Application Equipment**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      | BACKPACK |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   | BELSPR   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    | 25 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      | CO2      |

Plant and Soil Science, U of KY  
Weed Science Research

CORN VARIETIES STRIPS

Trial ID: C14021  
Protocol ID: CORN-VAR-STRIPS  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: MATT LIVESAY/GLEN MURPHY

Pest Type  
Pest Code  
Pest Scientific Name  
Pest Name  
Crop Code ZEAMX  
BBCH Scale BCOR  
Crop Scientific Name Zea mays  
Crop Name Corn  
Crop Variety  
Description  
Part Rated  
Rating Date 10-17-2014  
Rating Type YIELD  
Rating Unit BU  
Days After First/Last Applic.

| Trt No. | Treatment Name     | Rate   | Growth Unit | Stage | 5     |
|---------|--------------------|--------|-------------|-------|-------|
| 1       | DKC 60-67 HEADLINE | 6 oz/a | IN-FURROW   |       | 156.5 |
| 2       | DKC 61-54 HEADLINE | 6 oz/a | IN-FURROW   |       | 167.3 |
| 3       | DKC 61-79 HEADLINE | 6 oz/a | IN-FURROW   |       | 171.6 |
| 4       | DKC 61-89 HEADLINE | 6 oz/a | IN-FURROW   |       | 172.8 |
| 5       | DKC 52-08 HEADLINE | 6 oz/a | IN-FURROW   |       | 174.4 |
| 6       | DKC 62-77 HEADLINE | 6 oz/a | IN-FURROW   |       | 161.4 |
| 7       | DKC 62-98 HEADLINE | 6 oz/a | IN-FURROW   |       | 172.5 |
| 8       | DKC 63-25 HEADLINE | 6 oz/a | IN-FURROW   |       | 166.0 |
| 9       | DKC 63-35 HEADLINE | 6 oz/a | IN-FURROW   |       | 172.0 |
| 10      | DKC 64-89 HEADLINE | 6 oz/a | IN-FURROW   |       | 160.5 |
| 11      | DKC 64-99 HEADLINE | 6 oz/a | IN-FURROW   |       | 164.3 |
| 12      | DKC 65-19 HEADLINE | 6 oz/a | IN-FURROW   |       | 165.1 |
| 13      | P 1498 HEADLINE    | 6 oz/a | IN-FURROW   |       | 155.7 |
| 14      | DKC 66-40 HEADLINE | 6 oz/a | IN-FURROW   |       | 154.1 |
| 15      | P 1636 HEADLINE    | 6 oz/a | IN-FURROW   |       | 155.2 |
| 16      | DKC 66-42 HEADLINE | 6 oz/a | IN-FURROW   |       | 160.2 |
| 17      | DKC 67-58 HEADLINE | 6 oz/a | IN-FURROW   |       | 160.0 |
|         | LSD (P=.05)        |        |             |       | .     |
|         | Standard Deviation |        |             |       | .     |
|         | CV                 |        |             |       | .     |

Plant and Soil Science, U of KY  
Weed Science Research

CORN VARIETIES STRIPS

Trial ID: C14021  
Protocol ID: CORN-VAR-STRIPS  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: MATT LIVESAY/GLEN MURPHY

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

ARM Action Codes

TY2 =  $1.111225 * [1] * (100 - [2]) / 84.5$



Plant and Soil Science, U of KY  
Weed Science Research

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-27-2014

**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT

**Soil Temperature, Unit:** 59 F

**Harvested Length, Unit:** 140 FT

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** MEDIUM medium **% Standard Moisture:** 15.5

**Crop 2:** ZEAM Zea mays

Corn

X

**Variety:** DKC 61-54

**Planting Date:** 5-20-2014

**Planting Rate, Unit:** 32000 S/A

**Planting Method:** PLANTD planted

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-27-2014

**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT

**Soil Temperature, Unit:** 59 F

**Harvested Length, Unit:** 140 FT

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** MEDIUM medium **% Standard Moisture:** 15.5

**Crop 3:** ZEAM Zea mays

Corn

X

**Variety:** DKC 61-79

**Planting Date:** 5-20-2014

**Planting Rate, Unit:** 32000 S/A

**Planting Method:** PLANTD planted

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-27-2014

**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 10 FT

**Soil Temperature, Unit:** 59 F

**Harvested Length, Unit:** 140 FT

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** MEDIUM medium **% Standard Moisture:** 15.5

**Crop 4:** ZEAM Zea mays

Corn

X

**Variety:** DKC 61-89

**Planting Date:** 5-20-2014

**Planting Rate, Unit:** 32000 S/A

**Planting Method:** PLANTD planted

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-27-2014

**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT

**Soil Temperature, Unit:** 59 F

**Harvested Length, Unit:** 140 FT

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** MEDIUM medium **% Standard Moisture:** 15.5



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**Crop 5:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 62-08

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Harvested Width, Unit:** 10 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE

**% Standard Moisture:** 15.5

**Crop 6:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 62-77

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE

**% Standard Moisture:** 15.5

**Crop 7:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 62-98

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Harvested Width, Unit:** 10 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE

**% Standard Moisture:** 15.5

**Crop 8:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 63-25

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

Plant and Soil Science, U of KY  
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**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 9:** ZEAM Zea mays Corn  
 X  
**Variety:** DKC63-35

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 10:** ZEAM Zea mays Corn  
 X  
**Variety:** DKC64-89

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 11:** ZEAM Zea mays Corn  
 X  
**Variety:** DKC 64-99

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 12:** ZEAM Zea mays Corn  
 X  
**Variety:** DKC 65-19

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**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 13:** ZEAM Zea mays Corn  
X  
**Variety:** P1498

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 14:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 66-40

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 15:** ZEAM Zea mays Corn  
X  
**Variety:** P1636

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE

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**Seed Bed:** MEDIUM medium % **Standard Moisture:** 15.5

**Crop 16:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 66-42

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 17:** ZEAM Zea mays Corn  
X  
**Variety:** DKC 67-58

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-20-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-27-2014  
**Harvest Date:** 10-17-2014

**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT  
**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 140 FT

**Site Type:** FIELD field

**Treated Plot Area:** 1400 FT2  
**Replications:** 1

**Treatments:** 17  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB L Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY

**% Sand:** 6  
**% Silt:** 62  
**% Clay:** 32  
**% OM:** 2.6  
**pH:** 6.4  
**CEC:** 18

**Texture:** SIL silt loam  
**Soil Name:** MAURY SILT LOAM  
**Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP  
**Distance, Unit:** 2.5 MI

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**Crop Stage At Each Application**

**A**

**Crop 1 Code, BBCH Scale:** ZEAMX BCOR  
**Crop 2 Code, BBCH Scale:** ZEAMX BCOR  
**Crop 3 Code, BBCH Scale:** ZEAMX BCOR  
**Crop 4 Code, BBCH Scale:** ZEAMX BCOR  
**Crop 5 Code, BBCH Scale:** ZEAMX BCOR  
**Crop 6 Code, BBCH Scale:** ZEAMX BCOR  
**Crop 7 Code, BBCH Scale:** ZEAMX BCOR  
**Crop 8 Code, BBCH Scale:** ZEAMX BCOR  
**Crop 9 Code, BBCH Scale:** ZEAMX BCOR  
**Crop10 Code, BBCH Scale:** ZEAMX BCOR  
**Crop11 Code, BBCH Scale:** ZEAMX BCOR  
**Crop12 Code, BBCH Scale:** ZEAMX BCOR  
**Crop13 Code, BBCH Scale:** ZEAMX BCOR  
**Crop14 Code, BBCH Scale:** ZEAMX BCOR  
**Crop15 Code, BBCH Scale:** ZEAMX BCOR  
**Crop16 Code, BBCH Scale:** ZEAMX BCOR  
**Crop17 Code, BBCH Scale:** ZEAMX BCOR

Plant and Soil Science, U of KY  
Weed Science Research

CORN VARIETY II

Trial ID: C14022  
Protocol ID: SYN-CORN-STRIP  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: SCOTT CULLY&SARAH GEHANT

Pest Type  
Pest Code  
Pest Scientific Name  
Pest Name  
Crop Code ZEAMX  
BBCH Scale BCOR  
Crop Scientific Name Zea mays  
Crop Name Corn  
Crop Variety  
Description  
Part Rated  
Rating Date 10-17-2014  
Rating Type YIELD  
Rating Unit BU  
Rating Timing  
Days After First/Last Applic. 157 129

| Trt No. | Treatment Name   | Rate       | Growth Stage |       |
|---------|------------------|------------|--------------|-------|
|         |                  | Rate Unit  |              | 3     |
| 1       | LEXAR EZ         | 1.5 qt/a   | PRE          | 149.9 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       | 10.5 oz/a  | V5           |       |
|         | N61X-3110        |            |              |       |
| 2       | LEXAR EZ         | 1.5 qt/a   | PRE          | 131.8 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | N61X-3110        |            |              |       |
| 3       | LEXAR EZ         | 1.5 qt/a   | PRE          | 150.7 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       | 10.5 oz/a  | V5           |       |
|         | N68B-3111        |            |              |       |
| 4       | LEXAR EZ         | 1.5 qt/a   | PRE          | 134.0 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | N68B-3111        |            |              |       |
| 5       | LEXAR EZ         | 1.5 qt/a   | PRE          | 136.8 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       | 10.5 oz/a  | V5           |       |
|         | N70J-3011A       |            |              |       |

Plant and Soil Science, U of KY  
Weed Science Research

Pest Type  
Pest Code  
Pest Scientific Name  
Pest Name  
Crop Code ZEAMX  
BBCH Scale BCOR  
Crop Scientific Name Zea mays  
Crop Name Corn  
Crop Variety  
Description  
Part Rated  
Rating Date 10-17-2014  
Rating Type YIELD  
Rating Unit BU  
Rating Timing  
Days After First/Last Applic. 157 129

| Trt No. | Treatment Name   | Rate       | Growth Stage |       |
|---------|------------------|------------|--------------|-------|
| 6       | LEXAR EZ         | 1.5 qt/a   | PRE          | 90.9  |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | N70J-3011A       |            |              |       |
| 7       | LEXAR EZ         | 1.5 qt/a   | PRE          | 132.0 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       | 10.5 oz/a  | V5           |       |
|         | N72Q-3220-EZO    |            |              |       |
| 8       | LEXAR EZ         | 1.5 qt/a   | PRE          | 112.7 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | N72Q-3220-EZO    |            |              |       |
| 9       | LEXAR EZ         | 1.5 qt/a   | PRE          | 164.0 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       | 10.5 oz/a  | V5           |       |
|         | N74G-3000GT      |            |              |       |
| 10      | LEXAR EZ         | 1.5 qt/a   | PRE          | 159.1 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | N74G-3000GT      |            |              |       |
| 11      | LEXAR EZ         | 1.5 qt/a   | PRE          | 131.1 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       |            |              |       |
|         | N74R-3000GT      |            |              |       |
| 12      | LEXAR EZ         | 1.5 qt/a   | PRE          | 141.0 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | N74R-3000GT      |            |              |       |

Plant and Soil Science, U of KY  
Weed Science Research

Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code ZEAMX  
 BBCH Scale BCOR  
 Crop Scientific Name Zea mays  
 Crop Name Corn  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 10-17-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Rating Timing  
 Days After First/Last Applic. 157 129

| Trt No. | Treatment Name   | Rate       | Growth Stage |       |
|---------|------------------|------------|--------------|-------|
|         |                  | Rate Unit  |              | 3     |
| 13      | LEXAR EZ         | 1.5 qt/a   | PRE          | 145.9 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       | 10.5 oz/a  | V5           |       |
|         | N78S-3111        |            |              |       |
| 14      | LEXAR EZ         | 1.5 qt/a   | PRE          | 133.9 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | N78S-3111        |            |              |       |
| 15      | LEXAR EZ         | 1.5 qt/a   | PRE          | 143.9 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       | 10.5 oz/a  | V5           |       |
|         | N79T-3111        |            |              |       |
| 16      | LEXAR EZ         | 1.5 qt/a   | PRE          | 140.6 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | N79T-3111        |            |              |       |
| 17      | LEXAR EZ         | 1.5 qt/a   | PRE          | 154.2 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       | 10.5 oz/a  | V5           |       |
|         | N83D-3000GT      |            |              |       |
| 18      | LEXAR EZ         | 1.5 qt/a   | PRE          | 153.0 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | N83D-3000GT      |            |              |       |
| 19      | LEXAR EZ         | 1.5 qt/a   | PRE          | 160.4 |
|         | HALEX GT         | 3.5 pt/a   | V5           |       |
|         | AATREX           | 1 qt/a     | V5           |       |
|         | N-PAK AMS LIQUID | 2.5 % v/v  | V5           |       |
|         | NIS              | 0.25 % v/v | V5           |       |
|         | QUILT XCEL       | 10.5 oz/a  | V5           |       |
|         | SJ7381GR.0 GT    |            |              |       |



Plant and Soil Science, U of KY  
Weed Science Research

Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code ZEAMX  
 BBCH Scale BCOR  
 Crop Scientific Name Zea mays  
 Crop Name Corn  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 10-17-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Rating Timing  
 Days After First/Last Applic. 157 129

| Trt No. | Treatment Name     | Rate       | Unit | Growth Stage |       |
|---------|--------------------|------------|------|--------------|-------|
| 20      | LEXAR EZ           | 1.5 qt/a   |      | PRE          | 154.9 |
|         | HALEX GT           | 3.5 pt/a   |      | V5           |       |
|         | AATREX             | 1 qt/a     |      | V5           |       |
|         | N-PAK AMS LIQUID   | 2.5 % v/v  |      | V5           |       |
|         | NIS                | 0.25 % v/v |      | V5           |       |
|         | SJ7381GR.0 GT      |            |      |              |       |
|         | LSD (P=.05)        |            |      |              | .     |
|         | Standard Deviation |            |      |              | .     |
|         | CV                 |            |      |              | .     |

Crop Code  
 ZEAMX, BCOR, Zea mays, = US  
Rating Type  
 YIELD = yield  
Rating Unit  
 BU = bushel  
ARM Action Codes  
 TY1 = 1.111225\*[1]\*(100-[2])/84.5



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Weed Science Research

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-19-2014

**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT

**Soil Temperature, Unit:** 64 F

**Harvested Length, Unit:** 140 FT

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** MEDIUM medium **% Standard Moisture:** 15.5

**Crop 2:** ZEAM Zea mays

Corn

X

**Variety:** N68B-3111

**Planting Date:** 5-12-2014

**Planting Rate, Unit:** 32000 S/A

**Planting Method:** PLANTD planted

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-19-2014

**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT

**Soil Temperature, Unit:** 64 F

**Harvested Length, Unit:** 140 FT

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** MEDIUM medium **% Standard Moisture:** 15.5

**Crop 3:** ZEAM Zea mays

Corn

X

**Variety:** N70J-3011A

**Planting Date:** 5-12-2014

**Planting Rate, Unit:** 32000 S/A

**Planting Method:** PLANTD planted

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-19-2014

**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT

**Soil Temperature, Unit:** 64 F

**Harvested Length, Unit:** 140 FT

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** MEDIUM medium **% Standard Moisture:** 15.5

**Crop 4:** ZEAM Zea mays

Corn

X

**Variety:** N72Q-3220-EZO

**Planting Date:** 5-12-2014

**Planting Rate, Unit:** 32000 S/A

**Planting Method:** PLANTD planted

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-19-2014

**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT

**Soil Temperature, Unit:** 64 F

**Harvested Length, Unit:** 140 FT

**Soil Moisture:** GOOD good

**Harvest Equipment:** COMBINE

**Seed Bed:** MEDIUM medium **% Standard Moisture:** 15.5

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**Crop 5:** ZEAM Zea mays Corn  
X  
**Variety:** N74G-3000GT

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-12-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-19-2014  
**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT

**Soil Temperature, Unit:** 64 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 6:** ZEAM Zea mays Corn  
X  
**Variety:** N74R-3000GT

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-12-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-19-2014  
**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT

**Soil Temperature, Unit:** 64 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 7:** ZEAM Zea mays Corn  
X  
**Variety:** N78S-3111

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-12-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-19-2014  
**Harvest Date:** 10-17-2014

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 140 FT

**Soil Temperature, Unit:** 64 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Harvest Equipment:** COMBINE  
**% Standard Moisture:** 15.5

**Crop 8:** ZEAM Zea mays Corn  
X  
**Variety:** N79T-3111

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 5-12-2014  
**Planting Method:** PLANTD planted

**Emergence Date:** 5-19-2014  
**Harvest Date:** 10-17-2014

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Soil Temperature, Unit: 64 F  
Soil Moisture: GOOD good  
Seed Bed: MEDIUM medium  
Harvested Width, Unit: 5 FT  
Harvested Length, Unit: 140 FT  
Harvest Equipment: COMBINE  
% Standard Moisture: 15.5

Crop 9: ZEAM Zea mays  
X  
Variety: N83D-3000GT

Planting Rate, Unit: 32000 S/A  
Depth, Unit: 1.5 IN  
Row Spacing, Unit: 30 IN  
Planting Date: 5-12-2014  
Planting Method: PLANTD planted

Emergence Date: 5-19-2014  
Harvest Date: 10-17-2014

Soil Temperature, Unit: 64 F  
Soil Moisture: GOOD good  
Seed Bed: MEDIUM medium  
Harvested Width, Unit: 5 FT  
Harvested Length, Unit: 140 FT  
Harvest Equipment: COMBINE  
% Standard Moisture: 15.5

Crop 10: ZEAM Zea mays  
X  
Variety: SJ7381GR.0 GT

Planting Rate, Unit: 32000 S/A  
Depth, Unit: 1.5 IN  
Row Spacing, Unit: 30 IN  
Planting Date: 5-12-2014  
Planting Method: PLANTD planted

Emergence Date: 5-19-2014  
Harvest Date: 10-17-2014

Soil Temperature, Unit: 64 F  
Soil Moisture: GOOD good  
Seed Bed: MEDIUM medium  
Harvested Width, Unit: 5 FT  
Harvested Length, Unit: 140 FT  
Harvest Equipment: COMBINE  
% Standard Moisture: 15.5

Site and Design

Treated Plot Width: 15 FT  
Treated Plot Length: 150 FT  
Treated Plot Area: 2250 FT2  
Replications: 1  
Site Type: FIELD field  
Treatments: 20  
Tillage Type: NOTILL no-till  
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY  
% Sand: 6  
% Silt: 62  
% Clay: 32  
% OM: 2.6  
pH: 6.4  
CEC: 18  
Texture: SIL silt loam  
Soil Name: MAURY SILT LOAM  
Fert. Level: E excellent  
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: WEDRWE wet-dry-wet  
Closest Weather Station: SPINDLETOP  
Distance, Unit: 2.5 MI

**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-13-2014 | 6-10-2014 |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | V5        |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 75 F      | 80 F      |
| <b>% Relative Humidity:</b>       | 65        | 60        |
| <b>Wind Velocity, Unit:</b>       | 5 MPH     | 4 MPH     |
| <b>Wind Direction:</b>            | SSW       | SW        |
| <b>Soil Temperature, Unit:</b>    | 64 F      | 68 F      |
| <b>Soil Moisture:</b>             | GOOD      | SLIDRY    |
| <b>% Cloud Cover:</b>             | 20        | 50        |
| <b>Next Moisture Occurred On:</b> | 5-14-2014 | 6-10-2014 |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   |
|---------------------------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |
| <b>Crop 2 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |
| <b>Crop 3 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |
| <b>Crop 4 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |
| <b>Crop 5 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |
| <b>Crop 6 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |
| <b>Crop 7 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |
| <b>Crop 8 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |
| <b>Crop 9 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |
| <b>Crop10 Code, BBCH Scale:</b> | ZEAMX BCOR | ZEAMX BCOR |
| <b>Stage Scale Used:</b>        |            | BBCH       |
| <b>Stage Majority, Percent:</b> | V5         | 90         |
| <b>Height, Unit:</b>            | 14         | IN         |

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**Application Equipment**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      |

| <b>Date</b> | <b>By</b>   | <b>Notes</b>                     |
|-------------|-------------|----------------------------------|
| 7-27-2014   | SARA LAWSON | SIGNIFICANT HAIL DAMAGE OCCURRED |





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|                               |             |                 |                 |                 |
|-------------------------------|-------------|-----------------|-----------------|-----------------|
| Pest Type                     |             | W Weed          | W Weed          | W Weed          |
| Pest Code                     |             | STEME           | LAMPU           | TAROF           |
| Pest Scientific Name          |             | Stellaria media | Lamium purpure> | Taraxacum offi> |
| Pest Name                     |             | Common chickwe> | Purple deadnet> | Common dandeli> |
| Crop Code                     | GLXMA       |                 |                 |                 |
| BBCH Scale                    | BSOY        |                 |                 |                 |
| Crop Scientific Name          | Glycine max |                 |                 |                 |
| Crop Name                     | Soybean     |                 |                 |                 |
| Crop Variety                  |             |                 |                 |                 |
| Description                   |             |                 |                 |                 |
| Part Rated                    |             |                 |                 |                 |
| Rating Date                   | 5-21-2014   | 5-21-2014       | 5-21-2014       | 5-21-2014       |
| Rating Type                   | INJURY      | CONTROL         | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT     | PERCENT         | PERCENT         | PERCENT         |
| Rating Timing                 | 2 WEEK      | 2 WEEK          | 2 WEEK          | 2 WEEK          |
| Days After First/Last Applic. | 14 14       | 14 14           | 14 14           | 14 14           |
| Trt Treatment                 | Rate        | Growth          |                 |                 |
| No. Name                      | Rate Unit   | Stage           | 1               | 2               |
| 14 PREFIX                     | 32 oz/a     | PRE             | 0               | 100             |
| ROUNDUP POWERMAX              | 22 fl oz/a  | 45DAY           |                 | 100             |
| LSD (P=.05)                   |             |                 | 0.0             | 0.0             |
| Standard Deviation            |             |                 | 0.0             | 0.0             |
| CV                            |             |                 | 0.0             | 0.0             |
| Replicate F                   |             |                 | 0.000           | 0.000           |
| Replicate Prob(F)             |             |                 | 1.0000          | 1.0000          |
| Treatment F                   |             |                 | 0.000           | 0.000           |
| Treatment Prob(F)             |             |                 | 1.0000          | 1.0000          |

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|                               |                |                 |                  |             |
|-------------------------------|----------------|-----------------|------------------|-------------|
| Pest Type                     | W Weed         | W Weed          | W Weed           |             |
| Pest Code                     | SETFA          | AMBTR           | ERICA            |             |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Conyza canadens> |             |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Marestail        |             |
| Crop Code                     |                |                 |                  | GLXMA       |
| BBCH Scale                    |                |                 |                  | BSOY        |
| Crop Scientific Name          |                |                 |                  | Glycine max |
| Crop Name                     |                |                 |                  | Soybean     |
| Crop Variety                  |                |                 |                  |             |
| Description                   |                |                 |                  |             |
| Part Rated                    |                |                 |                  |             |
| Rating Date                   | 5-21-2014      | 5-21-2014       | 5-21-2014        | 6-6-2014    |
| Rating Type                   | CONTROL        | CONTROL         | CONTROL          | INJURY      |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT          | PERCENT     |
| Rating Timing                 | 2 WEEK         | 2 WEEK          | 2 WEEK           | 4 WEEK      |
| Days After First/Last Applic. | 14 14          | 14 14           | 14 14            | 30 30       |

| Trt No. | Treatment Name   | Rate       | Growth Stage | 5  | 6  | 7  | 8 |
|---------|------------------|------------|--------------|----|----|----|---|
| 1       | UNTREATED CHECK  |            |              | 0  | 0  | 0  | 0 |
| 2       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 99 | 99 | 99 | 0 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 3       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 99 | 99 | 0 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 4       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 99 | 99 | 0 |
|         | AUTHORITY MAXX   | 5 oz/a     | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 5       | AUTHORITY MTZ    | 14 oz/a    | PRE          | 99 | 99 | 99 | 0 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 6       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 99 | 99 | 0 |
|         | AUTHORITY MTZ    | 14 oz/a    | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 7       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 99 | 99 | 99 | 0 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 8       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 99 | 99 | 99 | 0 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 9       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 99 | 99 | 0 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 10      | AUTHORITY MTZ    | 14 oz/a    | PRE          | 99 | 99 | 99 | 0 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 11      | FIERCE           | 3 oz/a     | PRE          | 99 | 99 | 99 | 0 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 12      | ZIDUA            | 2 oz/a     | PRE          | 99 | 99 | 99 | 0 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |
| 13      | VALOR XLT        | 3 oz/a     | PRE          | 99 | 99 | 99 | 0 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |   |

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|                               |                |                 |                 |             |
|-------------------------------|----------------|-----------------|-----------------|-------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          |             |
| Pest Code                     | SETFA          | AMBTR           | ERICA           |             |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Conyza canaden> |             |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Marestail       |             |
| Crop Code                     |                |                 |                 | GLXMA       |
| BBCH Scale                    |                |                 |                 | BSOY        |
| Crop Scientific Name          |                |                 |                 | Glycine max |
| Crop Name                     |                |                 |                 | Soybean     |
| Crop Variety                  |                |                 |                 |             |
| Description                   |                |                 |                 |             |
| Part Rated                    |                |                 |                 |             |
| Rating Date                   | 5-21-2014      | 5-21-2014       | 5-21-2014       | 6-6-2014    |
| Rating Type                   | CONTROL        | CONTROL         | CONTROL         | INJURY      |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         | PERCENT     |
| Rating Timing                 | 2 WEEK         | 2 WEEK          | 2 WEEK          | 4 WEEK      |
| Days After First/Last Applic. | 14 14          | 14 14           | 14 14           | 30 30       |
| Trt Treatment                 | Rate           | Growth          |                 |             |
| No. Name                      | Rate Unit      | Stage           | 5               | 6           |
| 14 PREFIX                     | 32 oz/a        | PRE             | 99              | 99          |
| ROUNDUP POWERMAX              | 22 fl oz/a     | 45DAY           |                 | 99          |
| LSD (P=.05)                   |                |                 | 0.0             | 0.0         |
| Standard Deviation            |                |                 | 0.0             | 0.0         |
| CV                            |                |                 | 0.0             | 0.0         |
| Replicate F                   |                |                 | 0.000           | 0.000       |
| Replicate Prob(F)             |                |                 | 1.0000          | 1.0000      |
| Treatment F                   |                |                 | 0.000           | 0.000       |
| Treatment Prob(F)             |                |                 | 1.0000          | 1.0000      |

|                               |                |                  |                   |               |
|-------------------------------|----------------|------------------|-------------------|---------------|
| Pest Type                     | W Weed         | W Weed           | W Weed            | W Weed        |
| Pest Code                     | SETFA          | AMBTR            | ERICA             | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifida | Conyza canadensis | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed    | Marestail         | Morning glory |
| Crop Code                     |                |                  |                   |               |
| BBCH Scale                    |                |                  |                   |               |
| Crop Scientific Name          |                |                  |                   |               |
| Crop Name                     |                |                  |                   |               |
| Crop Variety                  |                |                  |                   |               |
| Description                   |                |                  |                   |               |
| Part Rated                    |                |                  |                   |               |
| Rating Date                   | 6-6-2014       | 6-6-2014         | 6-6-2014          | 6-6-2014      |
| Rating Type                   | CONTROL        | CONTROL          | CONTROL           | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT          | PERCENT           | PERCENT       |
| Rating Timing                 | 4 WEEK         | 4 WEEK           | 4 WEEK            | 4 WEEK        |
| Days After First/Last Applic. | 30 30          | 30 30            | 30 30             | 30 30         |

| Trt No. | Treatment Name   | Rate       | Growth Stage | 9  | 10 | 11 | 12 |
|---------|------------------|------------|--------------|----|----|----|----|
| 1       | UNTREATED CHECK  |            |              | 0  | 0  | 0  | 0  |
| 2       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 99 | 96 | 99 | 98 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 3       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 85 | 82 | 85 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 4       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 95 | 95 | 96 |
|         | AUTHORITY MAXX   | 5 oz/a     | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 5       | AUTHORITY MTZ    | 14 oz/a    | PRE          | 99 | 82 | 93 | 92 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 6       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 75 | 81 | 77 |
|         | AUTHORITY MTZ    | 14 oz/a    | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 7       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 99 | 83 | 88 | 85 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 8       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 99 | 98 | 98 | 96 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 9       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 90 | 93 | 92 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 10      | AUTHORITY MTZ    | 14 oz/a    | PRE          | 99 | 94 | 96 | 93 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 11      | FIERCE           | 3 oz/a     | PRE          | 99 | 88 | 88 | 88 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 12      | ZIDUA            | 2 oz/a     | PRE          | 99 | 85 | 85 | 87 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 13      | VALOR XLT        | 3 oz/a     | PRE          | 99 | 93 | 95 | 95 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |

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|                               |                |                 |                 |               |
|-------------------------------|----------------|-----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | ERICA           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Conyza canaden> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Marestail       | Morning glory |
| Crop Code                     |                |                 |                 |               |
| BBCH Scale                    |                |                 |                 |               |
| Crop Scientific Name          |                |                 |                 |               |
| Crop Name                     |                |                 |                 |               |
| Crop Variety                  |                |                 |                 |               |
| Description                   |                |                 |                 |               |
| Part Rated                    |                |                 |                 |               |
| Rating Date                   | 6-6-2014       | 6-6-2014        | 6-6-2014        | 6-6-2014      |
| Rating Type                   | CONTROL        | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 4 WEEK         | 4 WEEK          | 4 WEEK          | 4 WEEK        |
| Days After First/Last Applic. | 30 30          | 30 30           | 30 30           | 30 30         |
| Trt Treatment                 | Rate           | Growth          |                 |               |
| No. Name                      | Rate Unit      | Stage           | 9               | 10            |
| 14 PREFIX                     | 32 oz/a        | PRE             | 99              | 95            |
| ROUNDUP POWERMAX              | 22 fl oz/a     | 45DAY           |                 |               |
| LSD (P=.05)                   |                |                 | 0.0             | 13.6          |
| Standard Deviation            |                |                 | 0.0             | 8.1           |
| CV                            |                |                 | 0.0             | 9.79          |
| Replicate F                   |                |                 | 0.000           | 0.763         |
| Replicate Prob(F)             |                |                 | 1.0000          | 0.4762        |
| Treatment F                   |                |                 | 0.000           | 27.915        |
| Treatment Prob(F)             |                |                 | 1.0000          | 0.0001        |
|                               |                |                 |                 | 11            |
|                               |                |                 |                 | 12            |
|                               |                |                 |                 | 90            |
|                               |                |                 |                 | 88            |
|                               |                |                 |                 | 14.2          |
|                               |                |                 |                 | 7.6           |
|                               |                |                 |                 | 9.99          |
|                               |                |                 |                 | 9.11          |
|                               |                |                 |                 | 3.315         |
|                               |                |                 |                 | 0.0522        |
|                               |                |                 |                 | 26.200        |
|                               |                |                 |                 | 31.605        |
|                               |                |                 |                 | 0.0001        |
|                               |                |                 |                 | 0.0001        |

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|                               |             |                |                 |                 |
|-------------------------------|-------------|----------------|-----------------|-----------------|
| Pest Type                     |             | W Weed         | W Weed          | W Weed          |
| Pest Code                     |             | SETFA          | AMBTR           | ERICA           |
| Pest Scientific Name          |             | Setaria faberi | Ambrosia trifi> | Conyza canaden> |
| Pest Name                     |             | Giant foxtail  | Giant ragweed   | Marestail       |
| Crop Code                     | GLXMA       |                |                 |                 |
| BBCH Scale                    | BSOY        |                |                 |                 |
| Crop Scientific Name          | Glycine max |                |                 |                 |
| Crop Name                     | Soybean     |                |                 |                 |
| Crop Variety                  |             |                |                 |                 |
| Description                   | POST 45DAP  | POST 45DAP     | POST 45DAP      | POST 45DAP      |
| Part Rated                    |             |                |                 |                 |
| Rating Date                   | 6-18-2014   | 6-18-2014      | 6-18-2014       | 6-18-2014       |
| Rating Type                   | INJURY      | CONTROL        | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT     | PERCENT        | PERCENT         | PERCENT         |
| Rating Timing                 | 7 WEEK      | 7 WEEK         | 7 WEEK          | 7 WEEK          |
| Days After First/Last Applic. | 42 42       | 42 42          | 42 42           | 42 42           |

| Trt No. | Treatment Name   | Rate       | Growth Stage | 13 | 14 | 15 | 16 |
|---------|------------------|------------|--------------|----|----|----|----|
| 1       | UNTREATED CHECK  |            |              | 0  | 0  | 0  | 0  |
| 2       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 0  | 99 | 86 | 89 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 3       | ANTHEM           | 6.5 oz/a   | PRE          | 0  | 99 | 82 | 83 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 4       | ANTHEM           | 6.5 oz/a   | PRE          | 0  | 99 | 86 | 95 |
|         | AUTHORITY MAXX   | 5 oz/a     | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 5       | AUTHORITY MTZ    | 14 oz/a    | PRE          | 0  | 99 | 73 | 93 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 6       | ANTHEM           | 6.5 oz/a   | PRE          | 0  | 99 | 65 | 81 |
|         | AUTHORITY MTZ    | 14 oz/a    | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 7       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 0  | 99 | 83 | 90 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 8       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 0  | 99 | 92 | 98 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 9       | ANTHEM           | 6.5 oz/a   | PRE          | 0  | 99 | 83 | 93 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 10      | AUTHORITY MTZ    | 14 oz/a    | PRE          | 0  | 99 | 88 | 96 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 11      | FIERCE           | 3 oz/a     | PRE          | 0  | 99 | 88 | 86 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 12      | ZIDUA            | 2 oz/a     | PRE          | 0  | 99 | 69 | 85 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |
| 13      | VALOR XLT        | 3 oz/a     | PRE          | 0  | 96 | 92 | 95 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |    |    |    |

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|                               |             |                |                 |                 |
|-------------------------------|-------------|----------------|-----------------|-----------------|
| Pest Type                     |             | W Weed         | W Weed          | W Weed          |
| Pest Code                     |             | SETFA          | AMBTR           | ERICA           |
| Pest Scientific Name          |             | Setaria faberi | Ambrosia trifi> | Conyza canaden> |
| Pest Name                     |             | Giant foxtail  | Giant ragweed   | Marestail       |
| Crop Code                     | GLXMA       |                |                 |                 |
| BBCH Scale                    | BSOY        |                |                 |                 |
| Crop Scientific Name          | Glycine max |                |                 |                 |
| Crop Name                     | Soybean     |                |                 |                 |
| Crop Variety                  |             |                |                 |                 |
| Description                   | POST 45DAP  | POST 45DAP     | POST 45DAP      | POST 45DAP      |
| Part Rated                    |             |                |                 |                 |
| Rating Date                   | 6-18-2014   | 6-18-2014      | 6-18-2014       | 6-18-2014       |
| Rating Type                   | INJURY      | CONTROL        | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT     | PERCENT        | PERCENT         | PERCENT         |
| Rating Timing                 | 7 WEEK      | 7 WEEK         | 7 WEEK          | 7 WEEK          |
| Days After First/Last Applic. | 42 42       | 42 42          | 42 42           | 42 42           |
| Trt Treatment                 | Rate        | Growth         |                 |                 |
| No. Name                      | Rate Unit   | Stage          | 13              | 14              |
| 14 PREFIX                     | 32 oz/a     | PRE            | 0               | 99              |
| ROUNDUP POWERMAX              | 22 fl oz/a  | 45DAY          |                 | 87              |
| LSD (P=.05)                   |             |                | 0.0             | 2.3             |
| Standard Deviation            |             |                | 0.0             | 1.4             |
| CV                            |             |                | 0.0             | 1.51            |
|                               |             |                |                 | 17.1            |
|                               |             |                |                 | 10.2            |
|                               |             |                |                 | 13.25           |
|                               |             |                |                 | 12.16           |
| Replicate F                   |             |                | 0.000           | 1.000           |
| Replicate Prob(F)             |             |                | 1.0000          | 0.3816          |
| Treatment F                   |             |                | 0.000           | 1084.923        |
| Treatment Prob(F)             |             |                | 1.0000          | 0.0001          |
|                               |             |                |                 | 16.065          |
|                               |             |                |                 | 17.492          |
|                               |             |                |                 | 0.0001          |



Pest Type W Weed  
 Pest Code IPOSS  
 Pest Scientific Name Ipomoea sp.  
 Pest Name Morning glory  
 Crop Code  
 BBCH Scale  
 Crop Scientific Name  
 Crop Name  
 Crop Variety  
 Description POST 45DAP  
 Part Rated  
 Rating Date 6-18-2014  
 Rating Type CONTROL  
 Rating Unit PERCENT  
 Rating Timing 7 WEEK  
 Days After First/Last Applic. 42 42

| Trt No. | Treatment Name   | Rate       | Growth Stage |    |
|---------|------------------|------------|--------------|----|
|         |                  | Rate Unit  |              | 17 |
| 1       | UNTREATED CHECK  |            |              | 0  |
| 2       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 86 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 3       | ANTHEM           | 6.5 oz/a   | PRE          | 80 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 4       | ANTHEM           | 6.5 oz/a   | PRE          | 93 |
|         | AUTHORITY MAXX   | 5 oz/a     | PRE          |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 5       | AUTHORITY MTZ    | 14 oz/a    | PRE          | 83 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 6       | ANTHEM           | 6.5 oz/a   | PRE          | 72 |
|         | AUTHORITY MTZ    | 14 oz/a    | PRE          |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 7       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 83 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 8       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 92 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 9       | ANTHEM           | 6.5 oz/a   | PRE          | 83 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 10      | AUTHORITY MTZ    | 14 oz/a    | PRE          | 87 |
|         | ACCOLADE         | 0.89 oz/a  | PRE          |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 11      | FIERCE           | 3 oz/a     | PRE          | 87 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 12      | ZIDUA            | 2 oz/a     | PRE          | 77 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |
| 13      | VALOR XLT        | 3 oz/a     | PRE          | 95 |
|         | ROUNDUP POWERMAX | 22 fl oz/a | 45DAY        |    |

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Pest Type W Weed  
 Pest Code IPOSS  
 Pest Scientific Name Ipomoea sp.  
 Pest Name Morning glory  
 Crop Code  
 BBCH Scale  
 Crop Scientific Name  
 Crop Name  
 Crop Variety  
 Description POST 45DAP  
 Part Rated  
 Rating Date 6-18-2014  
 Rating Type CONTROL  
 Rating Unit PERCENT  
 Rating Timing 7 WEEK  
 Days After First/Last Applic. 42 42

| Trt No. | Treatment Name     | Rate       | Growth Unit | Stage  |
|---------|--------------------|------------|-------------|--------|
| 14      | PREFIX             | 32 oz/a    | PRE         | 88     |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | 45DAY       |        |
|         | LSD (P=.05)        |            |             | 16.0   |
|         | Standard Deviation |            |             | 9.5    |
|         | CV                 |            |             | 12.09  |
|         | Replicate F        |            |             | 1.178  |
|         | Replicate Prob(F)  |            |             | 0.3239 |
|         | Treatment F        |            |             | 18.266 |
|         | Treatment Prob(F)  |            |             | 0.0001 |



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NO TILL SOYBEAN

Trial ID: S14020                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: FMC-SOY-PRE            Investigator: Charles H Slack  
Project ID:                              Study Director: CHARLES SLACK  
Sponsor Contact: RUSTY MITCHELL

**General Trial Information**

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Investigator:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-6-2014  
**Completion Date:** 10-1-2014

**Trial Location**

**City:** LEXINGTON                    **Country:** USA United States  
**State/Prov.:** KENTUCKY  
**Postal Code:** 40511

**Contacts**

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY            **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                    **E-mail:** cslack@uky.edu

**Investigator:** CHARLES SLACK        **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY            **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                    **E-mail:** cslack@uky.edu

**Other Contacts**

| <b>Name</b> | <b>Role</b>      | <b>Other</b>        |
|-------------|------------------|---------------------|
| SARA LAWSON | RESEARCH ANALYST | sara.lawson@uky.edu |

**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 7.5 IN  
**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Planting Date:** 5-6-2014  
**Planting Method:** DRILLE drilled  
**Emergence Date:** 5-14-2014

**Pest Description**

- Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed
- Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel
- Pest 3 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion
- Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail
- Pest 5 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed
- Pest 6 Type:** W **Code:** ERICA *Conyza canadensis*  
**Common Name:** Marestalk
- Pest 7 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 8.5 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 374 FT2  
**Replications:** 3

**Site Type:** FIELD field  
**Treatments:** 14  
**Tillage Type:** NOTILL no-till  
**Study Design:** RAOBL Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** LANTON  
**% Sand:** 7  
**% Silt:** 63  
**% Clay:** 30

**% OM:** 4  
**pH:** 6.5  
**CEC:** 22  
**Texture:** SIL silt loam  
**Soil Name:** LANTON SILT LOAM  
**Fert. Level:** E excellent  
**Soil Drainage:** E excellent

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**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet

**Closest Weather Station:** SPINDLETOP

**Distance, Unit:** 2 MI

**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-7-2014  | 6-18-2014 |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | 45DAY     |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 84 F      | 88 F      |
| <b>% Relative Humidity:</b>       | 38        | 52        |
| <b>Wind Velocity, Unit:</b>       | 6 MPH     | 6 MPH     |
| <b>Wind Direction:</b>            | SW        | SW        |
| <b>Soil Temperature, Unit:</b>    | 61 F      | 73 F      |
| <b>Soil Moisture:</b>             | GOOD      | DRY       |
| <b>% Cloud Cover:</b>             | 20        | 30        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 6-19-2014 |

**Crop Stage At Each Application**

|                                 | <b>A</b> | <b>B</b>        |
|---------------------------------|----------|-----------------|
| <b>Crop 1 Code, BBCH Scale:</b> | GLXMA    | BSOY GLXMA BSOY |
| <b>Height, Unit:</b>            |          | 6 IN            |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | STEME W  | STEME W  |
| <b>Height, Unit:</b>             | 3 IN     |          |
| <b>Pest 2 Code, Type, Scale:</b> | LAMPU W  | LAMPU W  |
| <b>Height, Unit:</b>             | 4 IN     |          |
| <b>Pest 3 Code, Type, Scale:</b> | TAROF W  | TAROF W  |
| <b>Diameter, Unit:</b>           | 3 IN     |          |
| <b>Pest 4 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             | 1 IN     | 4 IN     |
| <b>Pest 5 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             | 1 IN     | 4 IN     |
| <b>Pest 6 Code, Type, Scale:</b> | ERICA W  | ERICA W  |
| <b>Height, Unit:</b>             | 2 IN     | 3 IN     |
| <b>Pest 7 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 2 IN     |

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**Application Equipment**

|                                  | <b>A</b>   | <b>B</b>   |
|----------------------------------|------------|------------|
| <b>Appl. Equipment:</b>          | ATV        | ATV        |
| <b>Equipment Type:</b>           | ALTEVE     | ALTEVE     |
| <b>Operation Pressure, Unit:</b> | 30 PSI     | 30 PSI     |
| <b>Nozzle Type:</b>              | FLAT FAN   | FLAT FAN   |
| <b>Nozzle Size:</b>              | 8004 DG    | 8004 DG    |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN      | 20 IN      |
| <b>Boom Length, Unit:</b>        | 8.5 FT     | 8.5 FT     |
| <b>Boom Height, Unit:</b>        | 30 IN      | 30 IN      |
| <b>Ground Speed, Unit:</b>       | 4 MPH      | 4 MPH      |
| <b>Carrier:</b>                  | WATER      | WATER      |
| <b>Spray Volume, Unit:</b>       | 24 GPA     | 24 GPA     |
| <b>Mix Size, Unit:</b>           | 2.7 liters | 2.7 liters |
| <b>Propellant:</b>               | CO2        | CO2        |





| Pest Type                     | W Weed             | W Weed          | W Weed          | W Weed         |        |        |        |        |
|-------------------------------|--------------------|-----------------|-----------------|----------------|--------|--------|--------|--------|
| Pest Code                     | SETFA              | AMBTR           | ERICA           | SETFA          |        |        |        |        |
| Pest Scientific Name          | Setaria faberi     | Ambrosia trifi> | Conyza canaden> | Setaria faberi |        |        |        |        |
| Pest Name                     | Giant foxtail      | Giant ragweed   | Marestail       | Giant foxtail  |        |        |        |        |
| Crop Code                     |                    |                 |                 | GLXMA          |        |        |        |        |
| BBCH Scale                    |                    |                 |                 | BSOY           |        |        |        |        |
| Crop Scientific Name          |                    |                 |                 | Glycine max    |        |        |        |        |
| Crop Name                     |                    |                 |                 | Soybean        |        |        |        |        |
| Crop Variety                  |                    |                 |                 |                |        |        |        |        |
| Description                   |                    |                 |                 | AT POST        |        |        |        |        |
| Part Rated                    |                    |                 |                 | AT POST        |        |        |        |        |
| Rating Date                   | 5-21-2014          | 5-21-2014       | 5-21-2014       | 6-2-2014       |        |        |        |        |
| Rating Type                   | CONTROL            | CONTROL         | CONTROL         | INJURY         |        |        |        |        |
| Rating Unit                   | PERCENT            | PERCENT         | PERCENT         | PERCENT        |        |        |        |        |
| Rating Timing                 | 2 WEEK             | 2 WEEK          | 2 WEEK          | 4 WEEK         |        |        |        |        |
| Days After First/Last Applic. | 14 14              | 14 14           | 14 14           | 26 26          |        |        |        |        |
| Trt No.                       | Treatment Name     | Rate            | Growth Stage    | 5              | 6      | 7      | 8      | 9      |
|                               |                    | Rate Unit       |                 |                |        |        |        |        |
| 1                             | SONIC              | 3 oz/a          | PRE             | 99             | 99     | 99     | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a      | MP              |                |        |        |        |        |
|                               | AMS                | 2.5 % v/v       | MP              |                |        |        |        |        |
| 2                             | SONIC              | 4.5 oz/a        | PRE             | 99             | 99     | 99     | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a      | MP              |                |        |        |        |        |
|                               | AMS                | 2.5 % v/v       | MP              |                |        |        |        |        |
| 3                             | SONIC              | 6 oz/a          | PRE             | 99             | 99     | 99     | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a      | MP              |                |        |        |        |        |
|                               | AMS                | 2.5 % v/v       | MP              |                |        |        |        |        |
| 4                             | SONIC              | 3 oz/a          | PRE             | 99             | 99     | 99     | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a      | MP              |                |        |        |        |        |
|                               | FIRSTRATE          | 0.3 oz/a        | MP              |                |        |        |        |        |
|                               | AMS                | 2.5 % v/v       | MP              |                |        |        |        |        |
| 5                             | SURVEIL CO-PACK    | 3.6 oz/a        | PRE             | 99             | 99     | 99     | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a      | MP              |                |        |        |        |        |
|                               | AMS                | 2.5 % v/v       | MP              |                |        |        |        |        |
| 6                             | CHECK UNTREATED    |                 |                 | 0              | 0      | 0      | 0      | 0      |
|                               | LSD (P=.05)        |                 |                 | 0.0            | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | Standard Deviation |                 |                 | 0.0            | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | CV                 |                 |                 | 0.0            | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | Replicate F        |                 |                 | 0.000          | 0.000  | 0.000  | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                 |                 | 1.0000         | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|                               | Treatment F        |                 |                 | 0.000          | 0.000  | 0.000  | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                 |                 | 1.0000         | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| Pest Type                     | W Weed             | W Weed            | W Weed        | W Weed      | W Weed          |         |        |        |
|-------------------------------|--------------------|-------------------|---------------|-------------|-----------------|---------|--------|--------|
| Pest Code                     | AMBTR              | ERICA             | IPOSS         | GLXMA       | SETFA           |         |        |        |
| Pest Scientific Name          | Ambrosia trifida   | Conyza canadensis | Ipomoea sp.   | Glycine max | Setaria faberii |         |        |        |
| Pest Name                     | Giant ragweed      | Marestail         | Morning glory | GLXMA       | Giant foxtail   |         |        |        |
| Crop Code                     |                    |                   |               | BSOY        |                 |         |        |        |
| BBCH Scale                    |                    |                   |               | Glycine max |                 |         |        |        |
| Crop Scientific Name          |                    |                   |               | Soybean     |                 |         |        |        |
| Crop Name                     |                    |                   |               |             |                 |         |        |        |
| Crop Variety                  |                    |                   |               |             |                 |         |        |        |
| Description                   | AT POST            | AT POST           | AT POST       |             |                 |         |        |        |
| Part Rated                    |                    |                   |               |             |                 |         |        |        |
| Rating Date                   | 6-2-2014           | 6-2-2014          | 6-2-2014      | 7-2-2014    | 7-2-2014        |         |        |        |
| Rating Type                   | CONTROL            | CONTROL           | CONTROL       | INJURY      | CONTROL         |         |        |        |
| Rating Unit                   | PERCENT            | PERCENT           | PERCENT       | PERCENT     | PERCENT         |         |        |        |
| Rating Timing                 | 4 WEEK             | 4 WEEK            | 4 WEEK        | 8 WEEK      | 8 WEEK          |         |        |        |
| Days After First/Last Applic. | 26 26              | 26 26             | 26 26         | 56 30       | 56 30           |         |        |        |
| Trt No.                       | Treatment Name     | Rate              | Growth Stage  | 10          | 11              | 12      | 13     | 14     |
| 1                             | SONIC              | 3 oz/a            | PRE           | 92          | 88              | 89      | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a        | MP            |             |                 |         |        |        |
|                               | AMS                | 2.5 % v/v         | MP            |             |                 |         |        |        |
| 2                             | SONIC              | 4.5 oz/a          | PRE           | 95          | 92              | 92      | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a        | MP            |             |                 |         |        |        |
|                               | AMS                | 2.5 % v/v         | MP            |             |                 |         |        |        |
| 3                             | SONIC              | 6 oz/a            | PRE           | 93          | 90              | 92      | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a        | MP            |             |                 |         |        |        |
|                               | AMS                | 2.5 % v/v         | MP            |             |                 |         |        |        |
| 4                             | SONIC              | 3 oz/a            | PRE           | 91          | 89              | 92      | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a        | MP            |             |                 |         |        |        |
|                               | FIRSTRATE          | 0.3 oz/a          | MP            |             |                 |         |        |        |
|                               | AMS                | 2.5 % v/v         | MP            |             |                 |         |        |        |
| 5                             | SURVEIL CO-PACK    | 3.6 oz/a          | PRE           | 95          | 95              | 95      | 0      | 99     |
|                               | DURANGO DMA        | 24 fl oz/a        | MP            |             |                 |         |        |        |
|                               | AMS                | 2.5 % v/v         | MP            |             |                 |         |        |        |
| 6                             | CHECK UNTREATED    |                   |               | 0           | 0               | 0       | 0      | 0      |
|                               | LSD (P=.05)        |                   |               | 5.6         | 7.2             | 4.7     | 0.0    | 0.0    |
|                               | Standard Deviation |                   |               | 3.1         | 4.0             | 2.6     | 0.0    | 0.0    |
|                               | CV                 |                   |               | 3.99        | 5.23            | 3.37    | 0.0    | 0.0    |
|                               | Replicate F        |                   |               | 4.303       | 0.650           | 2.035   | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                   |               | 0.0448      | 0.5426          | 0.1813  | 1.0000 | 1.0000 |
|                               | Treatment F        |                   |               | 452.749     | 264.631         | 636.518 | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                   |               | 0.0001      | 0.0001          | 0.0001  | 1.0000 | 1.0000 |

|                               |                 |                   |               |
|-------------------------------|-----------------|-------------------|---------------|
| Pest Type                     | W Weed          | W Weed            | W Weed        |
| Pest Code                     | AMBTR           | ERICA             | IPOSS         |
| Pest Scientific Name          | Ambrosia trifid | Conyza canadensis | Ipomoea sp.   |
| Pest Name                     | Giant ragweed   | Marestail         | Morning glory |
| Crop Code                     |                 |                   |               |
| BBCH Scale                    |                 |                   |               |
| Crop Scientific Name          |                 |                   |               |
| Crop Name                     |                 |                   |               |
| Crop Variety                  |                 |                   |               |
| Description                   |                 |                   |               |
| Part Rated                    |                 |                   |               |
| Rating Date                   | 7-2-2014        | 7-2-2014          | 7-2-2014      |
| Rating Type                   | CONTROL         | CONTROL           | CONTROL       |
| Rating Unit                   | PERCENT         | PERCENT           | PERCENT       |
| Rating Timing                 | 8 WEEK          | 8 WEEK            | 8 WEEK        |
| Days After First/Last Applic. | 56 30           | 56 30             | 56 30         |

| Trt No. | Treatment Name     | Rate       | Growth Stage | 15      | 16      | 17      |
|---------|--------------------|------------|--------------|---------|---------|---------|
| 1       | SONIC              | 3 oz/a     | PRE          | 92      | 88      | 89      |
|         | DURANGO DMA        | 24 fl oz/a | MP           |         |         |         |
|         | AMS                | 2.5 % v/v  | MP           |         |         |         |
| 2       | SONIC              | 4.5 oz/a   | PRE          | 95      | 92      | 92      |
|         | DURANGO DMA        | 24 fl oz/a | MP           |         |         |         |
|         | AMS                | 2.5 % v/v  | MP           |         |         |         |
| 3       | SONIC              | 6 oz/a     | PRE          | 93      | 90      | 92      |
|         | DURANGO DMA        | 24 fl oz/a | MP           |         |         |         |
|         | AMS                | 2.5 % v/v  | MP           |         |         |         |
| 4       | SONIC              | 3 oz/a     | PRE          | 91      | 89      | 92      |
|         | DURANGO DMA        | 24 fl oz/a | MP           |         |         |         |
|         | FIRSTRATE          | 0.3 oz/a   | MP           |         |         |         |
|         | AMS                | 2.5 % v/v  | MP           |         |         |         |
| 5       | SURVEIL CO-PACK    | 3.6 oz/a   | PRE          | 95      | 95      | 95      |
|         | DURANGO DMA        | 24 fl oz/a | MP           |         |         |         |
|         | AMS                | 2.5 % v/v  | MP           |         |         |         |
| 6       | CHECK UNTREATED    |            |              | 0       | 0       | 0       |
|         | LSD (P=.05)        |            |              | 5.6     | 7.2     | 4.7     |
|         | Standard Deviation |            |              | 3.1     | 4.0     | 2.6     |
|         | CV                 |            |              | 3.99    | 5.23    | 3.37    |
|         | Replicate F        |            |              | 4.303   | 0.650   | 2.035   |
|         | Replicate Prob(F)  |            |              | 0.0448  | 0.5426  | 0.1813  |
|         | Treatment F        |            |              | 452.749 | 264.631 | 636.518 |
|         | Treatment Prob(F)  |            |              | 0.0001  | 0.0001  | 0.0001  |

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Weed Science Research

NO TILL SOYBEAN II

Trial ID: S14021                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: DOW-SOY                Investigator: Charles H Slack  
Project ID:                              Study Director: CHARLES SLACK  
Sponsor Contact: LAURA CAMPBELL

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

STEME, *Stellaria media*, = US  
LAMPU, *Lamium purpureum*, = US  
TAROF, *Taraxacum officinale*, = US  
SETFA, *Setaria faberi*, = US  
AMBTR, *Ambrosia trifida*, = US  
ERICA, *Conyza canadensis*, = US  
IPOSS, *Ipomoea sp.*, = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Rating Unit

PERCENT = percent

Plant and Soil Science, U of KY  
Weed Science Research

NO TILL SOYBEAN II

Trial ID: S14021                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: DOW-SOY              Investigator: Charles H Slack  
Project ID:                              Study Director: CHARLES SLACK  
Sponsor Contact: LAURA CAMPBELL

**General Trial Information**

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Investigator:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-6-2014  
**Completion Date:** 10-1-2014

**Trial Location**

**City:** LEXINGTON                      **Country:** USA United States  
**State/Prov.:** KENTUCKY  
**Postal Code:** 40511

**Contacts**

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY                      **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu

**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY                      **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu

**Other Contacts**

| <b>Name</b> | <b>Role</b>      | <b>Other</b>        |
|-------------|------------------|---------------------|
| SARA LAWSON | RESEARCH ANALYST | sara.lawson@uky.edu |

**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 7.5 IN  
**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Planting Date:** 5-6-2014  
**Planting Method:** DRILLE drilled  
**Emergence Date:** 5-13-2014

**Pest Description**

- Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed
- Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel
- Pest 3 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion
- Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail
- Pest 5 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed
- Pest 6 Type:** W **Code:** ERICA *Conyza canadensis*  
**Common Name:** Canada horseweed
- Pest 7 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 8.5 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 374 FT2  
**Replications:** 3

**Site Type:** FIELD field  
**Treatments:** 6  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** LANTON  
**% Sand:** 7  
**% Silt:** 63  
**% Clay:** 30

**% OM:** 4  
**pH:** 6.5  
**CEC:** 22  
**Texture:** SIL silt loam  
**Soil Name:** LANTON SILT LOAM  
**Fert. Level:** E excellent  
**Soil Drainage:** E excellent

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**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

**Application Description**

|                                   | <b>A</b>  | <b>B</b>  |
|-----------------------------------|-----------|-----------|
| <b>Application Date:</b>          | 5-7-2014  | 6-2-2014  |
| <b>Appl. Start Time:</b>          |           | 1 PM      |
| <b>Application Method:</b>        | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | MP        |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 84 F      | 76 F      |
| <b>% Relative Humidity:</b>       | 38        | 70        |
| <b>Wind Velocity, Unit:</b>       | 6 MPH     | 10 MPH    |
| <b>Wind Direction:</b>            | SW        | WNW       |
| <b>Soil Temperature, Unit:</b>    | 61 F      | 71 F      |
| <b>Soil Moisture:</b>             | GOOD      | NORMAL    |
| <b>% Cloud Cover:</b>             | 20        | 50        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 6-4-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b> | <b>B</b>        |
|---------------------------------|----------|-----------------|
| <b>Crop 1 Code, BBCH Scale:</b> | GLXMA    | BSOY GLXMA BSOY |
| <b>Height, Unit:</b>            |          | 6 IN            |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> |
|----------------------------------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | STEME W  | STEME W  |
| <b>Pest 2 Code, Type, Scale:</b> | LAMPU W  | LAMPU W  |
| <b>Height, Unit:</b>             |          | 4 IN     |
| <b>Pest 3 Code, Type, Scale:</b> | TAROF W  | TAROF W  |
| <b>Height, Unit:</b>             |          | 4 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 2 IN     |
| <b>Pest 5 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 4 IN     |
| <b>Pest 6 Code, Type, Scale:</b> | ERICA W  | ERICA W  |
| <b>Height, Unit:</b>             |          | 3 IN     |
| <b>Pest 7 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 1 IN     |

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**Application Equipment**

|                                  | <b>A</b>   | <b>B</b>   |
|----------------------------------|------------|------------|
| <b>Appl. Equipment:</b>          | ATV        | ATV        |
| <b>Equipment Type:</b>           | ALTEVE     | ALTEVE     |
| <b>Operation Pressure, Unit:</b> | 30 PSI     | 30 PSI     |
| <b>Nozzle Type:</b>              | FLAT FAN   | FLAT FAN   |
| <b>Nozzle Size:</b>              | 8004 DG    | 8004 DG    |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN      | 20 IN      |
| <b>Boom Length, Unit:</b>        | 8.5 FT     | 8.5 FT     |
| <b>Boom Height, Unit:</b>        | 20 IN      | 20 IN      |
| <b>Ground Speed, Unit:</b>       | 4 MPH      | 4 MPH      |
| <b>Carrier:</b>                  | WATER      | WATER      |
| <b>Spray Volume, Unit:</b>       | 24 GPA     | 24 GPA     |
| <b>Mix Size, Unit:</b>           | 2.7 liters | 2.7 liters |
| <b>Propellant:</b>               | CO2        | CO2        |





| Pest Type                     | W Weed             | W Weed          | W Weed           | W Weed         |        |        |        |        |        |
|-------------------------------|--------------------|-----------------|------------------|----------------|--------|--------|--------|--------|--------|
| Pest Code                     | SETFA              | AMBTR           | ERICA            | SETFA          |        |        |        |        |        |
| Pest Scientific Name          | Setaria faberi     | Ambrosia trifi> | Conyza canadens> | Setaria faberi |        |        |        |        |        |
| Pest Name                     | Giant foxtail      | Giant ragweed   | Marestail        | Giant foxtail  |        |        |        |        |        |
| Crop Code                     |                    |                 |                  | GLXMA          |        |        |        |        |        |
| BBCH Scale                    |                    |                 |                  | BSOY           |        |        |        |        |        |
| Crop Scientific Name          |                    |                 |                  | Glycine max    |        |        |        |        |        |
| Crop Name                     |                    |                 |                  | Soybean        |        |        |        |        |        |
| Crop Variety                  |                    |                 |                  |                |        |        |        |        |        |
| Description                   |                    |                 |                  |                |        |        |        |        |        |
| Part Rated                    |                    |                 |                  |                |        |        |        |        |        |
| Rating Date                   | 5-21-2014          | 5-21-2014       | 5-21-2014        | 6-6-2014       |        |        |        |        |        |
| Rating Type                   | CONTROL            | CONTROL         | CONTROL          | INJURY         |        |        |        |        |        |
| Rating Unit                   | PERCENT            | PERCENT         | PERCENT          | PERCENT        |        |        |        |        |        |
| Rating Timing                 | 2 WEEK             | 2 WEEK          | 2 WEEK           | 4 WEEK         |        |        |        |        |        |
| Days After First/Last Applic. | 14 14              | 14 14           | 14 14            | 30 30          |        |        |        |        |        |
| Trt No.                       | Treatment Name     | Rate            | Unit             | Growth Stage   | 5      | 6      | 7      | 8      | 9      |
| 1                             | UNTREATED CHECK    |                 |                  |                | 0      | 0      | 0      | 0      | 0      |
| 2                             | AUTHORITY FIRST    | 3.2 oz          | wt/a PRE         |                | 99     | 99     | 99     | 0      | 99     |
| 3                             | AUTHORITY FIRST    | 6.450 oz        | wt/a PRE         |                | 99     | 99     | 99     | 0      | 99     |
| 4                             | FIERCE             | 3 oz            | wt/a PRE         |                | 99     | 99     | 99     | 0      | 99     |
|                               | GANGSTER FR        | 0.300 oz        | wt/a PRE         |                |        |        |        |        |        |
| 5                             | FIERCE             | 4.5 oz          | wt/a PRE         |                | 99     | 99     | 99     | 0      | 99     |
|                               | GANGSTER FR        | 0.450 oz        | wt/a PRE         |                |        |        |        |        |        |
| 6                             | ENVIVE             | 3 oz            | wt/a PRE         |                | 99     | 99     | 99     | 0      | 99     |
|                               | LSD (P=.05)        |                 |                  |                | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | Standard Deviation |                 |                  |                | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | CV                 |                 |                  |                | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | Replicate F        |                 |                  |                | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                 |                  |                | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|                               | Treatment F        |                 |                  |                | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                 |                  |                | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| Pest Type                     | W Weed             | W Weed            | W Weed        | W Weed          |         |         |          |        |        |
|-------------------------------|--------------------|-------------------|---------------|-----------------|---------|---------|----------|--------|--------|
| Pest Code                     | AMBTR              | ERICA             | IPOSS         | SETFA           |         |         |          |        |        |
| Pest Scientific Name          | Ambrosia trifida   | Conyza canadensis | Ipomoea sp.   | Setaria faberii |         |         |          |        |        |
| Pest Name                     | Giant ragweed      | Marestail         | Morning glory | Giant foxtail   |         |         |          |        |        |
| Crop Code                     |                    |                   |               | GLXMA           |         |         |          |        |        |
| BBCH Scale                    |                    |                   |               | BSOY            |         |         |          |        |        |
| Crop Scientific Name          |                    |                   |               | Glycine max     |         |         |          |        |        |
| Crop Name                     |                    |                   |               | Soybean         |         |         |          |        |        |
| Crop Variety                  |                    |                   |               |                 |         |         |          |        |        |
| Description                   |                    |                   |               |                 |         |         |          |        |        |
| Part Rated                    |                    |                   |               |                 |         |         |          |        |        |
| Rating Date                   | 6-6-2014           | 6-6-2014          | 6-6-2014      | 7-2-2014        |         |         |          |        |        |
| Rating Type                   | CONTROL            | CONTROL           | CONTROL       | INJURY          |         |         |          |        |        |
| Rating Unit                   | PERCENT            | PERCENT           | PERCENT       | PERCENT         |         |         |          |        |        |
| Rating Timing                 | 4 WEEK             | 4 WEEK            | 4 WEEK        | 8 WEEK          |         |         |          |        |        |
| Days After First/Last Applic. | 30 30              | 30 30             | 30 30         | 56 56           |         |         |          |        |        |
| Trt No.                       | Treatment Name     | Rate              | Unit          | Growth Stage    | 10      | 11      | 12       | 13     | 14     |
| 1                             | UNTREATED CHECK    |                   |               |                 | 0       | 0       | 0.0      | 0      | 0      |
| 2                             | AUTHORITY FIRST    | 3.2 oz wt/a       | PRE           |                 | 89      | 89      | 88.7     | 0      | 99     |
| 3                             | AUTHORITY FIRST    | 6.450 oz wt/a     | PRE           |                 | 96      | 96      | 90.0     | 0      | 99     |
| 4                             | FIERCE             | 3 oz wt/a         | PRE           |                 | 92      | 93      | 89.3     | 0      | 99     |
|                               | GANGSTER FR        | 0.300 oz wt/a     | PRE           |                 |         |         |          |        |        |
| 5                             | FIERCE             | 4.5 oz wt/a       | PRE           |                 | 90      | 90      | 90.0     | 0      | 99     |
|                               | GANGSTER FR        | 0.450 oz wt/a     | PRE           |                 |         |         |          |        |        |
| 6                             | ENVIVE             | 3 oz wt/a         | PRE           |                 | 88      | 90      | 87.7     | 0      | 99     |
|                               | LSD (P=.05)        |                   |               |                 | 6.7     | 6.0     | 2.29     | 0.0    | 0.0    |
|                               | Standard Deviation |                   |               |                 | 3.7     | 3.3     | 1.26     | 0.0    | 0.0    |
|                               | CV                 |                   |               |                 | 4.86    | 4.35    | 1.7      | 0.0    | 0.0    |
|                               | Replicate F        |                   |               |                 | 0.078   | 0.020   | 0.664    | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                   |               |                 | 0.9258  | 0.9801  | 0.5359   | 1.0000 | 1.0000 |
|                               | Treatment F        |                   |               |                 | 306.208 | 382.892 | 2501.574 | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                   |               |                 | 0.0001  | 0.0001  | 0.0001   | 1.0000 | 1.0000 |

| Pest Type                     | W Weed            | W Weed            | W Weed        |
|-------------------------------|-------------------|-------------------|---------------|
| Pest Code                     | AMBTR             | ERICA             | IPOSS         |
| Pest Scientific Name          | Ambrosia trifida  | Conyza canadensis | Ipomoea sp.   |
| Pest Name                     | Giant ragweed     | Marestail         | Morning glory |
| Crop Code                     |                   |                   |               |
| BBCH Scale                    |                   |                   |               |
| Crop Scientific Name          |                   |                   |               |
| Crop Name                     |                   |                   |               |
| Crop Variety                  |                   |                   |               |
| Description                   |                   |                   |               |
| Part Rated                    |                   |                   |               |
| Rating Date                   | 7-2-2014          | 7-2-2014          | 7-2-2014      |
| Rating Type                   | CONTROL           | CONTROL           | CONTROL       |
| Rating Unit                   | PERCENT           | PERCENT           | PERCENT       |
| Rating Timing                 | 8 WEEK            | 8 WEEK            | 8 WEEK        |
| Days After First/Last Applic. | 56 56             | 56 56             | 56 56         |
| Trt Treatment                 | Rate              | Growth            |               |
| No. Name                      | Rate Unit         | Stage             |               |
|                               |                   | 15                | 16            |
|                               |                   | 17                |               |
| 1 UNTREATED CHECK             |                   | 0                 | 0             |
| 2 AUTHORITY FIRST             | 3.2 oz wt/a PRE   | 79                | 89            |
| 3 AUTHORITY FIRST             | 6.450 oz wt/a PRE | 93                | 96            |
| 4 FIERCE                      | 3 oz wt/a PRE     | 85                | 89            |
| GANGSTER FR                   | 0.300 oz wt/a PRE |                   |               |
| 5 FIERCE                      | 4.5 oz wt/a PRE   | 84                | 90            |
| GANGSTER FR                   | 0.450 oz wt/a PRE |                   |               |
| 6 ENVIVE                      | 3 oz wt/a PRE     | 83                | 90            |
| LSD (P=.05)                   |                   | 10.0              | 3.7           |
| Standard Deviation            |                   | 5.5               | 2.0           |
| CV                            |                   | 7.73              | 2.66          |
| Replicate F                   |                   | 1.313             | 2.315         |
| Replicate Prob(F)             |                   | 0.3115            | 0.1492        |
| Treatment F                   |                   | 122.746           | 1024.263      |
| Treatment Prob(F)             |                   | 0.0001            | 0.0001        |





**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Date:** 5-6-2014  
**Planting Method:** DRILLE drilled

**Planting Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 7.5 IN  
**Emergence Date:** 5-14-2014

**Soil Temperature, Unit:** 64 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Pest Description**

**Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion

**Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 5 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 6 Type:** W **Code:** ERICA *Conyza canadensis*  
**Common Name:** Marestalk

**Pest 7 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 8.5 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 374 FT2  
**Replications:** 3

**Site Type:** FIELD field

**Treatments:** 6  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** LANTON  
**% Sand:** 7 **% OM:** 4 **Texture:** SIL silt loam  
**% Silt:** 63 **pH:** 6.5 **Soil Name:** LANTON SILT LOAM  
**% Clay:** 30 **CEC:** 22 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

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**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet

**Closest Weather Station:** SPINDLETOP

**Distance, Unit:** 2 MI

**Application Description**

**Application Date:** 5-7-2014  
**Application Method:** SPRAY  
**Application Timing:** PRE  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 84 F  
**% Relative Humidity:** 38  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** SW  
**Soil Temperature, Unit:** 63 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 20  
**Next Moisture Occurred On:** 5-9-2014

**Crop Stage At Each Application**

**A**  
**Crop 1 Code, BBCH Scale:** GLXMA BSOY

**Pest Stage At Each Application**

**A**  
**Pest 1 Code, Type, Scale:** STEME W  
**Pest 2 Code, Type, Scale:** LAMPU W  
**Pest 3 Code, Type, Scale:** TAROF W  
**Pest 4 Code, Type, Scale:** SETFA W  
**Pest 5 Code, Type, Scale:** AMBTR W  
**Pest 6 Code, Type, Scale:** ERICA W  
**Pest 7 Code, Type, Scale:** IPOSS W



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**Application Equipment**

**A**

**Appl. Equipment:** ATV  
**Equipment Type:** ALTEVE  
**Operation Pressure, Unit:** 30 PSI  
**Nozzle Type:** FLAT FAN  
**Nozzle Size:** 8004 DG  
**Nozzle Spacing, Unit:** 20 IN  
**Boom Length, Unit:** 8.5 FT  
**Boom Height, Unit:** 20 IN  
**Ground Speed, Unit:** 4 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 24 GPA  
**Mix Size, Unit:** 2.7 liters  
**Propellant:** CO2

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NOTILL SOYBEAN EARLY PREPLANT

Trial ID: S14023  
Protocol ID: HGLXMARIMTHI1401  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: THOMAS HAYDEN

| Pest Type                     | W Weed          | W Weed          | W Weed          | W Weed          |        |        |        |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|--------|--------|--------|
| Pest Code                     | STEME           | LAMPU           | AMBTR           | STEME           |        |        |        |
| Pest Scientific Name          | Stellaria media | Lamium purpure> | Ambrosia trifi> | Stellaria media |        |        |        |
| Pest Name                     | Common chickwe> | Purple deadnet> | Giant ragweed   | Common chickwe> |        |        |        |
| Crop Code                     |                 |                 |                 |                 |        |        |        |
| BBCH Scale                    |                 |                 |                 |                 |        |        |        |
| Crop Scientific Name          |                 |                 |                 |                 |        |        |        |
| Crop Name                     |                 |                 |                 |                 |        |        |        |
| Crop Variety                  |                 |                 |                 |                 |        |        |        |
| Description                   |                 |                 |                 |                 |        |        |        |
| Part Rated                    |                 |                 |                 |                 |        |        |        |
| Rating Date                   | 4-16-2014       | 4-16-2014       | 4-16-2014       | 4-30-2014       |        |        |        |
| Rating Type                   | CONTROL         | CONTROL         | CONTROL         | CONTROL         |        |        |        |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT         | PERCENT         |        |        |        |
| Rating Timing                 | 2 WEEK          | 2 WEEK          | 2 WEEK          | 4 WEEK          |        |        |        |
| Days After First/Last Applic. | 14 14           | 14 14           | 14 14           | 28 28           |        |        |        |
| Trt Treatment No. Name        | Rate            | Unit            | Growth Stage    | 1               | 2      | 3      | 4      |
| 1 CRUSHER                     | 0.0313 lb ai/a  |                 | 30D EPP         | 99              | 99     | 99     | 99     |
| GLYFOS X-TRA                  | 0.75 lb ae/a    |                 | 30D EPP         |                 |        |        |        |
| NIS                           | 0.25 % v/v      |                 | 30D EPP         |                 |        |        |        |
| 2 LEADOFF                     | 0.0313 lb ai/a  |                 | 30D EPP         | 99              | 99     | 99     | 99     |
| GLYFOS X-TRA                  | 0.75 lb ae/a    |                 | 30D EPP         |                 |        |        |        |
| NIS                           | 0.25 % v/v      |                 | 30D EPP         |                 |        |        |        |
| 3 CHECK                       |                 |                 |                 | 0               | 0      | 0      | 0      |
| LSD (P=.05)                   |                 |                 |                 | 0.0             | 0.0    | 0.0    | 0.0    |
| Standard Deviation            |                 |                 |                 | 0.0             | 0.0    | 0.0    | 0.0    |
| CV                            |                 |                 |                 | 0.0             | 0.0    | 0.0    | 0.0    |
| Replicate F                   |                 |                 |                 | 0.000           | 0.000  | 0.000  | 0.000  |
| Replicate Prob(F)             |                 |                 |                 | 1.0000          | 1.0000 | 1.0000 | 1.0000 |
| Treatment F                   |                 |                 |                 | 0.000           | 0.000  | 0.000  | 0.000  |
| Treatment Prob(F)             |                 |                 |                 | 1.0000          | 1.0000 | 1.0000 | 1.0000 |

| Trt No. | Treatment Name     | Rate           | Unit | Growth Stage | 5      | 6       | 7      | 8      |
|---------|--------------------|----------------|------|--------------|--------|---------|--------|--------|
|         | 1 CRUSHER          | 0.0313 lb ai/a |      | 30D EPP      | 99     | 73      | 0.0    | 99     |
|         | GLYFOS X-TRA       | 0.75 lb ae/a   |      | 30D EPP      |        |         |        |        |
|         | NIS                | 0.25 % v/v     |      | 30D EPP      |        |         |        |        |
|         | 2 LEADOFF          | 0.0313 lb ai/a |      | 30D EPP      | 99     | 73      | 0.0    | 99     |
|         | GLYFOS X-TRA       | 0.75 lb ae/a   |      | 30D EPP      |        |         |        |        |
|         | NIS                | 0.25 % v/v     |      | 30D EPP      |        |         |        |        |
|         | 3 CHECK            |                |      |              | 0      | 0       | 0.0    | 0      |
|         | LSD (P=.05)        |                |      |              | 0.0    | 11.9    | 0.00   | 0.0    |
|         | Standard Deviation |                |      |              | 0.0    | 5.3     | 0.00   | 0.0    |
|         | CV                 |                |      |              | 0.0    | 10.78   | 0.0    | 0.0    |
|         | Replicate F        |                |      |              | 0.000  | 0.400   | 0.000  | 0.000  |
|         | Replicate Prob(F)  |                |      |              | 1.0000 | 0.6944  | 1.0000 | 1.0000 |
|         | Treatment F        |                |      |              | 0.000  | 193.600 | 0.000  | 0.000  |
|         | Treatment Prob(F)  |                |      |              | 1.0000 | 0.0001  | 1.0000 | 1.0000 |

Pest Type  
Pest Code  
Pest Scientific Name  
Pest Name  
Crop Code  
BBCH Scale  
Crop Scientific Name  
Crop Name  
Crop Variety  
Description  
Part Rated  
Rating Date  
Rating Type  
Rating Unit  
Rating Timing  
Days After First/Last Applic.

W Weed LAMPU  
Lamium purpure>  
Purple deadnet>

W Weed AMBTR  
Ambrosia trifi>  
Giant ragweed

W Weed STEME  
Stellaria media  
Common chickwe>

GLXMA  
BSOY  
Glycine max  
Soybean

4-30-2014 CONTROL PERCENT 4 WEEK 28 28  
4-30-2014 CONTROL PERCENT 4 WEEK 28 28  
5-28-2014 INJURY PERCENT 8 WEEK 56 56  
5-28-2014 CONTROL PERCENT 8 WEEK 56 56

|                               |                    |                |                 |                 |
|-------------------------------|--------------------|----------------|-----------------|-----------------|
| Pest Type                     |                    |                | W Weed          | W Weed          |
| Pest Code                     |                    |                | LAMPU           | AMBTR           |
| Pest Scientific Name          |                    |                | Lamium purpure> | Ambrosia trifi> |
| Pest Name                     |                    |                | Purple deadnet> | Giant ragweed   |
| Crop Code                     |                    |                |                 |                 |
| BBCH Scale                    |                    |                |                 |                 |
| Crop Scientific Name          |                    |                |                 |                 |
| Crop Name                     |                    |                |                 |                 |
| Crop Variety                  |                    |                |                 |                 |
| Description                   |                    |                |                 |                 |
| Part Rated                    |                    |                |                 |                 |
| Rating Date                   |                    |                | 5-28-2014       | 5-28-2014       |
| Rating Type                   |                    |                | CONTROL         | CONTROL         |
| Rating Unit                   |                    |                | PERCENT         | PERCENT         |
| Rating Timing                 |                    |                | 8 WEEK          | 8 WEEK          |
| Days After First/Last Applic. |                    |                | 56 56           | 56 56           |
| Trt No.                       | Treatment Name     | Rate           | Growth Unit     | Stage           |
|                               |                    |                | 9               | 10              |
| 1                             | CRUSHER            | 0.0313 lb ai/a | 30D EPP         | 99 73           |
|                               | GLYFOS X-TRA       | 0.75 lb ae/a   | 30D EPP         |                 |
|                               | NIS                | 0.25 % v/v     | 30D EPP         |                 |
| 2                             | LEADOFF            | 0.0313 lb ai/a | 30D EPP         | 99 73           |
|                               | GLYFOS X-TRA       | 0.75 lb ae/a   | 30D EPP         |                 |
|                               | NIS                | 0.25 % v/v     | 30D EPP         |                 |
| 3                             | CHECK              |                |                 | 0 0             |
|                               | LSD (P=.05)        |                |                 | 0.0 11.9        |
|                               | Standard Deviation |                |                 | 0.0 5.3         |
|                               | CV                 |                |                 | 0.0 10.78       |
|                               | Replicate F        |                |                 | 0.000 0.400     |
|                               | Replicate Prob(F)  |                |                 | 1.0000 0.6944   |
|                               | Treatment F        |                |                 | 0.000 193.600   |
|                               | Treatment Prob(F)  |                |                 | 1.0000 0.0001   |

Plant and Soil Science, U of KY  
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NOTILL SOYBEAN EARLY PREPLANT

Trial ID: S14023  
Protocol ID: HGLXMARIMTHI1401  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: THOMAS HAYDEN

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

STEME, Stellaria media, = US

LAMPU, Lamium purpureum, = US

AMBTR, Ambrosia trifida, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Unit

PERCENT = percent



**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Date:** 5-6-2014

**Planting Rate, Unit:** 200000 S/A

**Depth, Unit:** 1.5 IN

**Planting Equipment:** DRILLE

**Row Spacing, Unit:** 7.5 IN

**Emergence Date:** 5-12-2014

**Soil Temperature, Unit:** 60 F

**Soil Moisture:** GOOD good

**Seed Bed:** SMOOTH smooth

**Pest Description**

**Pest 1 Type:** W **Code:** STEME Stellaria media  
**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU Lamium purpureum  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed

**Site and Design**

**Treated Plot Width:** 8.5 FT

**Site Type:** FIELD field

**Treated Plot Length:** 44 FT

**Treated Plot Area:** 374 FT2 **Treatments:** 3  
**Replications:** 3

**Tillage Type:** NOTILL no-till

**Study Design:** RACOB L Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** LANTON

**% Sand:** 7 **% OM:** 4 **Texture:** SIL silt loam

**% Silt:** 63 **pH:** 6.5 **Soil Name:** LANTON SILT LOAM

**% Clay:** 30 **CEC:** 22 **Fert. Level:** E excellent

**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet

**Closest Weather Station:** SPINDLETOP

**Distance, Unit:** 2 MI

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**Application Description**

**A**

**Application Date:** 4-2-2014  
**Application Method:** SPRAY  
**Application Timing:** 30DEPP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 63 F  
**% Relative Humidity:** 50  
**Wind Velocity, Unit:** 10 MPH  
**Wind Direction:** ESE  
**Soil Temperature, Unit:** 50 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 60  
**Next Moisture Occurred On:** 4-3-2014

**Crop Stage At Each Application**

**A**

**Crop 1 Code, BBCH Scale:** GLXMA BSOY

**Pest Stage At Each Application**

**A**

**Pest 1 Code, Type, Scale:** STEME W  
**Pest 2 Code, Type, Scale:** LAMPU W  
**Pest 3 Code, Type, Scale:** AMBTR W

**Application Equipment**

**A**

**Appl. Equipment:** ATV  
**Equipment Type:** ALTEVE  
**Operation Pressure, Unit:** 30 PSI  
**Nozzle Type:** FLAT FAN  
**Nozzle Size:** 8003 DG  
**Nozzle Spacing, Unit:** 20 IN  
**Boom Length, Unit:** 8.5 FT  
**Boom Height, Unit:** 20 IN  
**Ground Speed, Unit:** 4 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 15 GPA  
**Mix Size, Unit:** 1.8 liters  
**Propellant:** CO2



Plant and Soil Science, U of KY  
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NOTILL SOYBEAN EARLY PREPLANT II

Trial ID: S14024  
Protocol ID: DUPONT-SB-USA-14-118  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: KELLY BARNETT

|                               |                 |                 |                 |                 |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|
| Pest Type                     | W Weed          | W Weed          | W Weed          | W Weed          |
| Pest Code                     | STEME           | LAMPU           | AMBTR           | STEME           |
| Pest Scientific Name          | Stellaria media | Lamium purpure> | Ambrosia trifi> | Stellaria media |
| Pest Name                     | Common chickwe> | Purple deadnet> | Giant ragweed   | Common chickwe> |
| Crop Code                     |                 |                 |                 |                 |
| BBCH Scale                    |                 |                 |                 |                 |
| Crop Scientific Name          |                 |                 |                 |                 |
| Crop Name                     |                 |                 |                 |                 |
| Crop Variety                  |                 |                 |                 |                 |
| Description                   |                 |                 |                 |                 |
| Part Rated                    |                 |                 |                 |                 |
| Rating Date                   |                 |                 |                 | 5-7-2014        |
| Rating Type                   | CONTROL         | CONTROL         | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT         | PERCENT         |
| Rating Timing                 | 2 WEEK          | 2 WEEK          | 2 WEEK          | AT PLANTING     |
| Days After First/Last Applic. |                 |                 |                 | 35 12           |

| Trt No. | Treatment Name | Rate       | Growth Stage | 1   | 2   | 3   | 4   |
|---------|----------------|------------|--------------|-----|-----|-----|-----|
| 1       | LEADOFF        | 1.5 oz/a   | 30DEPP       | 100 | 100 | 100 | 100 |
|         | 2,4-D ESTER    | 2 pt/a     | 30DEPP       |     |     |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |     |     |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |     |     |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |     |     |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |     |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |     |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |     |     |
| 2       | LEADOFF        | 1.5 oz/a   | 30DEPP       | 100 | 100 | 100 | 100 |
|         | 2,4-D ESTER    | 2 pt/a     | 30DEPP       |     |     |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |     |     |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |     |     |     |
|         | CANOPY         | 6 oz/a     | PRE          |     |     |     |     |
|         | CINCH          | 1 pt/a     | PRE          |     |     |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |     |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |     |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |     |     |
| 3       | LEADOFF        | 1.5 oz/a   | 30DEPP       | 100 | 100 | 100 | 100 |
|         | 2,4-D ESTER    | 2 pt/a     | 30DEPP       |     |     |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |     |     |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |     |     |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |     |     |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |     |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |     |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |     |     |
| 4       | CANOPY EX      | 1.5 oz/a   | 10DEPP       | 0   | 0   | 0   | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |     |     |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |     |     |     |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |     |     |     |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |     |     |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |     |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |     |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |     |     |

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|                      |                 |                 |                 |                 |
|----------------------|-----------------|-----------------|-----------------|-----------------|
| Pest Type            | W Weed          | W Weed          | W Weed          | W Weed          |
| Pest Code            | STEME           | LAMPU           | AMBTR           | STEME           |
| Pest Scientific Name | Stellaria media | Lamium purpure> | Ambrosia trifi> | Stellaria media |
| Pest Name            | Common chickwe> | Purple deadnet> | Giant ragweed   | Common chickwe> |

Crop Code  
BBCH Scale  
Crop Scientific Name  
Crop Name  
Crop Variety  
Description  
Part Rated  
Rating Date  
Rating Type  
Rating Unit  
Rating Timing  
Days After First/Last Applic.

|         |         |         |         |             |
|---------|---------|---------|---------|-------------|
|         |         |         |         | 5-7-2014    |
| CONTROL | CONTROL | CONTROL | CONTROL | CONTROL     |
| PERCENT | PERCENT | PERCENT | PERCENT | PERCENT     |
| 2 WEEK  | 2 WEEK  | 2 WEEK  | 2 WEEK  | AT PLANTING |
|         |         |         |         | 35 12       |

| Trt No. | Treatment Name | Rate       | Growth Stage | 1 | 2 | 3 | 4   |
|---------|----------------|------------|--------------|---|---|---|-----|
| 5       | CANOPY EX      | 1.5 oz/a   | 30DEPP       |   |   |   |     |
|         | 2,4-D ESTER    | 1 pt/a     | 30DEPP       | 0 | 0 | 0 | 100 |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |   |   |   |     |
|         | CANOPY         | 6 oz/a     | PRE          |   |   |   |     |
|         | CINCH          | 1 pt/a     | PRE          |   |   |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |   |   |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |   |   |   |     |
| 6       | CANOPY EX      | 1.5 oz/a   | 30DEPP       | 0 | 0 | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 30DEPP       |   |   |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |   |   |   |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |   |   |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |   |   |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |   |   |   |     |
| 7       | FIRSTSHOT      | 0.8 oz/a   | 10DEPP       | 0 | 0 | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |   |   |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |   |   |   |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |   |   |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |   |   |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |   |   |   |     |
| 8       | AFFORIA        | 2.5 oz/a   | 10DEPP       | 0 | 0 | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |   |   |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |   |   |   |     |
|         | CANOPY         | 6 oz/a     | PRE          |   |   |   |     |
|         | CINCH          | 1 pt/a     | PRE          |   |   |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |   |   |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |   |   |   |     |
| 9       | FIRSTSHOT      | 0.8 oz/a   | 10DEPP       | 0 | 0 | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |   |   |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |   |   |   |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |   |   |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |   |   |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |   |   |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |   |   |   |     |

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Weed Science Research

|                      |   |                 |               |                 |
|----------------------|---|-----------------|---------------|-----------------|
| Pest Type            | W Weed  | W Weed          | W Weed        | W Weed          |
| Pest Code            | STEME   | LAMPU           | AMBTR         | STEME           |
| Pest Scientific Name | Stellaria media Lamium purpure> Ambrosia trifi> |                 |               | Stellaria media |
| Pest Name            | Common chickwe>                                 | Purple deadnet> | Giant ragweed | Common chickwe> |

Crop Code  
BBCH Scale  
Crop Scientific Name  
Crop Name  
Crop Variety  
Description  
Part Rated  
Rating Date  
Rating Type  
Rating Unit  
Rating Timing  
Days After First/Last Applic.

|  |         |         |         |             |
|--|---------|---------|---------|-------------|
|  | CONTROL | CONTROL | CONTROL | 5-7-2014    |
|  | PERCENT | PERCENT | PERCENT | CONTROL     |
|  | 2 WEEK  | 2 WEEK  | 2 WEEK  | PERCENT     |
|  |         |         |         | AT PLANTING |
|  |         |         |         | 35 12       |

| Trt No. | Treatment Name     | Rate Unit  | Growth Stage | 1      | 2      | 3      | 4      |
|---------|--------------------|------------|--------------|--------|--------|--------|--------|
| 10      | FIRSTSHOT          | 0.8 oz/a   | 10DEPP       | 0      | 0      | 0      | 100    |
|         | 2,4-D ESTER        | 1 pt/a     | 10DEPP       |        |        |        |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 10DEPP       |        |        |        |        |
|         | AMS                | 3.7 % v/v  | 10DEPP       |        |        |        |        |
|         | BOUNDARY           | 1.5 pt/a   | PRE          |        |        |        |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 35DAP        |        |        |        |        |
|         | PREFIX             | 2 pt/a     | 35DAP        |        |        |        |        |
|         | AMS                | 3.7 % v/v  | 35DAP        |        |        |        |        |
| 11      | FIRSTSHOT          | 0.8 oz/a   | 10DEPP       | 0      | 0      | 0      | 100    |
|         | 2,4-D ESTER        | 1 pt/a     | 10DEPP       |        |        |        |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 10DEPP       |        |        |        |        |
|         | AMS                | 3.7 % v/v  | 10DEPP       |        |        |        |        |
|         | FIERCE             | 3 oz/a     | PRE          |        |        |        |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 35DAP        |        |        |        |        |
|         | PREFIX             | 2 pt/a     | 35DAP        |        |        |        |        |
|         | AMS                | 3.7 % v/v  | 35DAP        |        |        |        |        |
| 12      | UNTREATED          |            |              | 0      | 0      | 0      | 0      |
|         | LSD (P=.05)        |            |              | 0.0    | 0.0    | 0.0    | 0.0    |
|         | Standard Deviation |            |              | 0.0    | 0.0    | 0.0    | 0.0    |
|         | CV                 |            |              | 0.0    | 0.0    | 0.0    | 0.0    |
|         | Replicate F        |            |              | 0.000  | 0.000  | 0.000  | 0.000  |
|         | Replicate Prob(F)  |            |              | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|         | Treatment F        |            |              | 0.000  | 0.000  | 0.000  | 0.000  |
|         | Treatment Prob(F)  |            |              | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

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|                               |                 |                |                 |                |
|-------------------------------|-----------------|----------------|-----------------|----------------|
| Pest Type                     | W Weed          | W Weed         | W Weed          | W Weed         |
| Pest Code                     | LAMPU           | SETFA          | AMBTR           | SETFA          |
| Pest Scientific Name          | Lamium purpure> | Setaria faberi | Ambrosia trifi> | Setaria faberi |
| Pest Name                     | Purple deadnet> | Giant foxtail  | Giant ragweed   | Giant foxtail  |
| Crop Code                     |                 |                |                 | GLXMA          |
| BBCH Scale                    |                 |                |                 | BSOY           |
| Crop Scientific Name          |                 |                |                 | Glycine max    |
| Crop Name                     |                 |                |                 | Soybean        |
| Crop Variety                  |                 |                |                 |                |
| Description                   |                 |                |                 | AT POST        |
| Part Rated                    |                 |                |                 | AT POST        |
| Rating Date                   | 5-7-2014        | 5-7-2014       | 5-7-2014        | 6-2-2014       |
| Rating Type                   | CONTROL         | CONTROL        | CONTROL         | CONTROL        |
| Rating Unit                   | PERCENT         | PERCENT        | PERCENT         | PERCENT        |
| Rating Timing                 | AT PLANTING     | AT PLANTING    | AT PLANTING     | 4 WEEK         |
| Days After First/Last Applic. | 35 12           | 35 12          | 35 12           | 61 26          |

| Trt No. | Treatment Name | Rate       | Growth Stage | 5   | 6   | 7  | 8 | 9   |
|---------|----------------|------------|--------------|-----|-----|----|---|-----|
| 1       | LEADOFF        | 1.5 oz/a   | 30DEPP       | 100 | 100 | 93 | 0 | 100 |
|         | 2,4-D ESTER    | 2 pt/a     | 30DEPP       |     |     |    |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |     |    |   |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |     |    |   |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |     |     |    |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |    |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |    |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |    |   |     |
| 2       | LEADOFF        | 1.5 oz/a   | 30DEPP       | 100 | 100 | 93 | 0 | 100 |
|         | 2,4-D ESTER    | 2 pt/a     | 30DEPP       |     |     |    |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |     |    |   |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |     |    |   |     |
|         | CANOPY         | 6 oz/a     | PRE          |     |     |    |   |     |
|         | CINCH          | 1 pt/a     | PRE          |     |     |    |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |    |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |    |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |    |   |     |
| 3       | LEADOFF        | 1.5 oz/a   | 30DEPP       | 100 | 100 | 94 | 0 | 100 |
|         | 2,4-D ESTER    | 2 pt/a     | 30DEPP       |     |     |    |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |     |    |   |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |     |    |   |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |     |     |    |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |    |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |    |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |    |   |     |
| 4       | CANOPY EX      | 1.5 oz/a   | 10DEPP       | 100 | 100 | 92 | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |     |     |    |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |     |     |    |   |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |     |     |    |   |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |     |     |    |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |    |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |    |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |    |   |     |

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|                               |                 |                |                 |                |
|-------------------------------|-----------------|----------------|-----------------|----------------|
| Pest Type                     | W Weed          | W Weed         | W Weed          | W Weed         |
| Pest Code                     | LAMPU           | SETFA          | AMBTR           | SETFA          |
| Pest Scientific Name          | Lamium purpure> | Setaria faberi | Ambrosia trifi> | Setaria faberi |
| Pest Name                     | Purple deadnet> | Giant foxtail  | Giant ragweed   | Giant foxtail  |
| Crop Code                     |                 |                |                 | GLXMA          |
| BBCH Scale                    |                 |                |                 | BSOY           |
| Crop Scientific Name          |                 |                |                 | Glycine max    |
| Crop Name                     |                 |                |                 | Soybean        |
| Crop Variety                  |                 |                |                 |                |
| Description                   |                 |                |                 | AT POST        |
| Part Rated                    |                 |                |                 | AT POST        |
| Rating Date                   | 5-7-2014        | 5-7-2014       | 5-7-2014        | 6-2-2014       |
| Rating Type                   | CONTROL         | CONTROL        | CONTROL         | CONTROL        |
| Rating Unit                   | PERCENT         | PERCENT        | PERCENT         | PERCENT        |
| Rating Timing                 | AT PLANTING     | AT PLANTING    | AT PLANTING     | 4 WEEK         |
| Days After First/Last Applic. | 35 12           | 35 12          | 35 12           | 61 26          |

| Trt No. | Treatment Name | Rate       | Growth Stage | 5   | 6   | 7   | 8 | 9   |
|---------|----------------|------------|--------------|-----|-----|-----|---|-----|
| 5       | CANOPY EX      | 1.5 oz/a   | 30DEPP       | 100 | 100 | 88  | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 30DEPP       |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |     |     |   |     |
|         | CANOPY         | 6 oz/a     | PRE          |     |     |     |   |     |
|         | CINCH          | 1 pt/a     | PRE          |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |     |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |     |   |     |
| 6       | CANOPY EX      | 1.5 oz/a   | 30DEPP       | 100 | 100 | 89  | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 30DEPP       |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |     |     |   |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |     |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |     |   |     |
| 7       | FIRSTSHOT      | 0.8 oz/a   | 10DEPP       | 100 | 100 | 92  | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |     |     |     |   |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |     |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |     |   |     |
| 8       | AFFORIA        | 2.5 oz/a   | 10DEPP       | 100 | 100 | 97  | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |     |     |     |   |     |
|         | CANOPY         | 6 oz/a     | PRE          |     |     |     |   |     |
|         | CINCH          | 1 pt/a     | PRE          |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |     |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |     |   |     |
| 9       | FIRSTSHOT      | 0.8 oz/a   | 10DEPP       | 100 | 100 | 100 | 0 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |     |     |     |   |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |     |     |     |   |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |     |     |   |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |     |     |   |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |     |     |   |     |

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|                               |                 |                |                 |                |
|-------------------------------|-----------------|----------------|-----------------|----------------|
| Pest Type                     | W Weed          | W Weed         | W Weed          | W Weed         |
| Pest Code                     | LAMPU           | SETFA          | AMBTR           | SETFA          |
| Pest Scientific Name          | Lamium purpure> | Setaria faberi | Ambrosia trifi> | Setaria faberi |
| Pest Name                     | Purple deadnet> | Giant foxtail  | Giant ragweed   | Giant foxtail  |
| Crop Code                     |                 |                |                 | GLXMA          |
| BBCH Scale                    |                 |                |                 | BSOY           |
| Crop Scientific Name          |                 |                |                 | Glycine max    |
| Crop Name                     |                 |                |                 | Soybean        |
| Crop Variety                  |                 |                |                 |                |
| Description                   |                 |                |                 | AT POST        |
| Part Rated                    |                 |                |                 | AT POST        |
| Rating Date                   | 5-7-2014        | 5-7-2014       | 5-7-2014        | 6-2-2014       |
| Rating Type                   | CONTROL         | CONTROL        | CONTROL         | CONTROL        |
| Rating Unit                   | PERCENT         | PERCENT        | PERCENT         | PERCENT        |
| Rating Timing                 | AT PLANTING     | AT PLANTING    | AT PLANTING     | 4 WEEK         |
| Days After First/Last Applic. | 35 12           | 35 12          | 35 12           | 61 26          |

| Trt No. | Treatment Name     | Rate Unit  | Growth Stage | 5      | 6      | 7      | 8      | 9      |
|---------|--------------------|------------|--------------|--------|--------|--------|--------|--------|
| 10      | FIRSTSHOT          | 0.8 oz/a   | 10DEPP       | 100    | 100    | 100    | 0      | 100    |
|         | 2,4-D ESTER        | 1 pt/a     | 10DEPP       |        |        |        |        |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 10DEPP       |        |        |        |        |        |
|         | AMS                | 3.7 % v/v  | 10DEPP       |        |        |        |        |        |
|         | BOUNDARY           | 1.5 pt/a   | PRE          |        |        |        |        |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 35DAP        |        |        |        |        |        |
|         | PREFIX             | 2 pt/a     | 35DAP        |        |        |        |        |        |
|         | AMS                | 3.7 % v/v  | 35DAP        |        |        |        |        |        |
| 11      | FIRSTSHOT          | 0.8 oz/a   | 10DEPP       | 100    | 100    | 92     | 0      | 100    |
|         | 2,4-D ESTER        | 1 pt/a     | 10DEPP       |        |        |        |        |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 10DEPP       |        |        |        |        |        |
|         | AMS                | 3.7 % v/v  | 10DEPP       |        |        |        |        |        |
|         | FIERCE             | 3 oz/a     | PRE          |        |        |        |        |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 35DAP        |        |        |        |        |        |
|         | PREFIX             | 2 pt/a     | 35DAP        |        |        |        |        |        |
|         | AMS                | 3.7 % v/v  | 35DAP        |        |        |        |        |        |
| 12      | UNTREATED          |            |              | 0      | 0      | 0      | 0      | 0      |
|         | LSD (P=.05)        |            |              | 0.0    | 0.0    | 11.5   | 0.0    | 0.0    |
|         | Standard Deviation |            |              | 0.0    | 0.0    | 8.0    | 0.0    | 0.0    |
|         | CV                 |            |              | 0.0    | 0.0    | 9.3    | 0.0    | 0.0    |
|         | Replicate F        |            |              | 0.000  | 0.000  | 9.373  | 0.000  | 0.000  |
|         | Replicate Prob(F)  |            |              | 1.0000 | 1.0000 | 0.0001 | 1.0000 | 1.0000 |
|         | Treatment F        |            |              | 0.000  | 0.000  | 46.760 | 0.000  | 0.000  |
|         | Treatment Prob(F)  |            |              | 1.0000 | 1.0000 | 0.0001 | 1.0000 | 1.0000 |

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| Pest Type                     | W Weed          | W Weed        | W Weed         | W Weed          |     |    |     |     |
|-------------------------------|-----------------|---------------|----------------|-----------------|-----|----|-----|-----|
| Pest Code                     | AMBTR           | IPOSS         | SETFA          | AMBTR           |     |    |     |     |
| Pest Scientific Name          | Ambrosia trifi> | Ipomoea sp.   | Setaria faberi | Ambrosia trifi> |     |    |     |     |
| Pest Name                     | Giant ragweed   | Morning glory | Giant foxtail  | Giant ragweed   |     |    |     |     |
| Crop Code                     |                 |               | GLXMA          |                 |     |    |     |     |
| BBCH Scale                    |                 |               | BSOY           |                 |     |    |     |     |
| Crop Scientific Name          |                 |               | Glycine max    |                 |     |    |     |     |
| Crop Name                     |                 |               | Soybean        |                 |     |    |     |     |
| Crop Variety                  |                 |               |                |                 |     |    |     |     |
| Description                   | AT POST         | AT POST       |                |                 |     |    |     |     |
| Part Rated                    |                 |               |                |                 |     |    |     |     |
| Rating Date                   | 6-2-2014        | 6-2-2014      | 7-2-2014       | 7-2-2014        |     |    |     |     |
| Rating Type                   | CONTROL         | CONTROL       | CONTROL        | CONTROL         |     |    |     |     |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT        | PERCENT         |     |    |     |     |
| Rating Timing                 | 4 WEEK          | 4 WEEK        | 8 WEEK         | 8 WEEK          |     |    |     |     |
| Days After First/Last Applic. | 61 26           | 61 26         | 91 30          | 91 30           |     |    |     |     |
| Trt No.                       | Treatment Name  | Rate          | Growth Stage   | 10              | 11  | 12 | 13  | 14  |
|                               |                 | Rate Unit     |                |                 |     |    |     |     |
| 1                             | LEADOFF         | 1.5 oz/a      | 30DEPP         | 86              | 100 | 0  | 100 | 93  |
|                               | 2,4-D ESTER     | 2 pt/a        | 30DEPP         |                 |     |    |     |     |
|                               | ABUNDIT EXTRA   | 32 fl oz/a    | 30DEPP         |                 |     |    |     |     |
|                               | AMS             | 3.7 % v/v     | 30DEPP         |                 |     |    |     |     |
|                               | ENVIVE          | 3.5 oz/a      | PRE            |                 |     |    |     |     |
|                               | ABUNDIT EXTRA   | 32 fl oz/a    | 35DAP          |                 |     |    |     |     |
|                               | PREFIX          | 2 pt/a        | 35DAP          |                 |     |    |     |     |
|                               | AMS             | 3.7 % v/v     | 35DAP          |                 |     |    |     |     |
| 2                             | LEADOFF         | 1.5 oz/a      | 30DEPP         | 88              | 100 | 0  | 100 | 100 |
|                               | 2,4-D ESTER     | 2 pt/a        | 30DEPP         |                 |     |    |     |     |
|                               | ABUNDIT EXTRA   | 32 fl oz/a    | 30DEPP         |                 |     |    |     |     |
|                               | AMS             | 3.7 % v/v     | 30DEPP         |                 |     |    |     |     |
|                               | CANOPY          | 6 oz/a        | PRE            |                 |     |    |     |     |
|                               | CINCH           | 1 pt/a        | PRE            |                 |     |    |     |     |
|                               | ABUNDIT EXTRA   | 32 fl oz/a    | 35DAP          |                 |     |    |     |     |
|                               | PREFIX          | 2 pt/a        | 35DAP          |                 |     |    |     |     |
|                               | AMS             | 3.7 % v/v     | 35DAP          |                 |     |    |     |     |
| 3                             | LEADOFF         | 1.5 oz/a      | 30DEPP         | 87              | 100 | 0  | 100 | 97  |
|                               | 2,4-D ESTER     | 2 pt/a        | 30DEPP         |                 |     |    |     |     |
|                               | ABUNDIT EXTRA   | 32 fl oz/a    | 30DEPP         |                 |     |    |     |     |
|                               | AMS             | 3.7 % v/v     | 30DEPP         |                 |     |    |     |     |
|                               | TRIVENCE        | 8 oz/a        | PRE            |                 |     |    |     |     |
|                               | ABUNDIT EXTRA   | 32 fl oz/a    | 35DAP          |                 |     |    |     |     |
|                               | PREFIX          | 2 pt/a        | 35DAP          |                 |     |    |     |     |
|                               | AMS             | 3.7 % v/v     | 35DAP          |                 |     |    |     |     |
| 4                             | CANOPY EX       | 1.5 oz/a      | 10DEPP         | 97              | 100 | 0  | 100 | 100 |
|                               | 2,4-D ESTER     | 1 pt/a        | 10DEPP         |                 |     |    |     |     |
|                               | ABUNDIT EXTRA   | 32 fl oz/a    | 10DEPP         |                 |     |    |     |     |
|                               | AMS             | 3.7 % v/v     | 10DEPP         |                 |     |    |     |     |
|                               | ENVIVE          | 3.5 oz/a      | PRE            |                 |     |    |     |     |
|                               | ABUNDIT EXTRA   | 32 fl oz/a    | 35DAP          |                 |     |    |     |     |
|                               | PREFIX          | 2 pt/a        | 35DAP          |                 |     |    |     |     |
|                               | AMS             | 3.7 % v/v     | 35DAP          |                 |     |    |     |     |

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|                               |                 |               |                |                 |
|-------------------------------|-----------------|---------------|----------------|-----------------|
| Pest Type                     | W Weed          | W Weed        | W Weed         | W Weed          |
| Pest Code                     | AMBTR           | IPOSS         | SETFA          | AMBTR           |
| Pest Scientific Name          | Ambrosia trifi> | Ipomoea sp.   | Setaria faberi | Ambrosia trifi> |
| Pest Name                     | Giant ragweed   | Morning glory | Giant foxtail  | Giant ragweed   |
| Crop Code                     |                 |               | GLXMA          |                 |
| BBCH Scale                    |                 |               | BSOY           |                 |
| Crop Scientific Name          |                 |               | Glycine max    |                 |
| Crop Name                     |                 |               | Soybean        |                 |
| Crop Variety                  |                 |               |                |                 |
| Description                   | AT POST         | AT POST       |                |                 |
| Part Rated                    |                 |               |                |                 |
| Rating Date                   | 6-2-2014        | 6-2-2014      | 7-2-2014       | 7-2-2014        |
| Rating Type                   | CONTROL         | CONTROL       | CONTROL        | CONTROL         |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT        | PERCENT         |
| Rating Timing                 | 4 WEEK          | 4 WEEK        | 8 WEEK         | 8 WEEK          |
| Days After First/Last Applic. | 61 26           | 61 26         | 91 30          | 91 30           |

| Trt No. | Treatment Name | Rate       | Growth Stage | 10 | 11  | 12 | 13  | 14  |
|---------|----------------|------------|--------------|----|-----|----|-----|-----|
| 5       | CANOPY EX      | 1.5 oz/a   | 30DEPP       | 83 | 100 | 0  | 100 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 30DEPP       |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |    |     |    |     |     |
|         | CANOPY         | 6 oz/a     | PRE          |    |     |    |     |     |
|         | CINCH          | 1 pt/a     | PRE          |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |    |     |    |     |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |    |     |    |     |     |
| 6       | CANOPY EX      | 1.5 oz/a   | 30DEPP       | 81 | 100 | 0  | 100 | 95  |
|         | 2,4-D ESTER    | 1 pt/a     | 30DEPP       |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |    |     |    |     |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |    |     |    |     |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |    |     |    |     |     |
| 7       | FIRSTSHOT      | 0.8 oz/a   | 10DEPP       | 96 | 100 | 0  | 100 | 99  |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |    |     |    |     |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |    |     |    |     |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |    |     |    |     |     |
| 8       | AFFORIA        | 2.5 oz/a   | 10DEPP       | 97 | 100 | 0  | 100 | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |    |     |    |     |     |
|         | CANOPY         | 6 oz/a     | PRE          |    |     |    |     |     |
|         | CINCH          | 1 pt/a     | PRE          |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |    |     |    |     |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |    |     |    |     |     |
| 9       | FIRSTSHOT      | 0.8 oz/a   | 10DEPP       | 95 | 100 | 0  | 100 | 97  |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |    |     |    |     |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |    |     |    |     |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |    |     |    |     |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |    |     |    |     |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |    |     |    |     |     |



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|                               |                 |               |                |                 |
|-------------------------------|-----------------|---------------|----------------|-----------------|
| Pest Type                     | W Weed          | W Weed        | W Weed         | W Weed          |
| Pest Code                     | AMBTR           | IPOSS         | SETFA          | AMBTR           |
| Pest Scientific Name          | Ambrosia trifi> | Ipomoea sp.   | Setaria faberi | Ambrosia trifi> |
| Pest Name                     | Giant ragweed   | Morning glory | Giant foxtail  | Giant ragweed   |
| Crop Code                     |                 |               | GLXMA          |                 |
| BBCH Scale                    |                 |               | BSOY           |                 |
| Crop Scientific Name          |                 |               | Glycine max    |                 |
| Crop Name                     |                 |               | Soybean        |                 |
| Crop Variety                  |                 |               |                |                 |
| Description                   | AT POST         | AT POST       |                |                 |
| Part Rated                    |                 |               |                |                 |
| Rating Date                   | 6-2-2014        | 6-2-2014      | 7-2-2014       | 7-2-2014        |
| Rating Type                   | CONTROL         | CONTROL       | CONTROL        | CONTROL         |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT        | PERCENT         |
| Rating Timing                 | 4 WEEK          | 4 WEEK        | 8 WEEK         | 8 WEEK          |
| Days After First/Last Applic. | 61 26           | 61 26         | 91 30          | 91 30           |

| Trt No. | Treatment Name     | Rate Unit  | Growth Stage | 10      | 11     | 12     | 13     | 14      |
|---------|--------------------|------------|--------------|---------|--------|--------|--------|---------|
| 10      | FIRSTSHOT          | 0.8 oz/a   | 10DEPP       | 91      | 100    | 0      | 100    | 94      |
|         | 2,4-D ESTER        | 1 pt/a     | 10DEPP       |         |        |        |        |         |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 10DEPP       |         |        |        |        |         |
|         | AMS                | 3.7 % v/v  | 10DEPP       |         |        |        |        |         |
|         | BOUNDARY           | 1.5 pt/a   | PRE          |         |        |        |        |         |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 35DAP        |         |        |        |        |         |
|         | PREFIX             | 2 pt/a     | 35DAP        |         |        |        |        |         |
|         | AMS                | 3.7 % v/v  | 35DAP        |         |        |        |        |         |
| 11      | FIRSTSHOT          | 0.8 oz/a   | 10DEPP       | 84      | 100    | 0      | 100    | 95      |
|         | 2,4-D ESTER        | 1 pt/a     | 10DEPP       |         |        |        |        |         |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 10DEPP       |         |        |        |        |         |
|         | AMS                | 3.7 % v/v  | 10DEPP       |         |        |        |        |         |
|         | FIERCE             | 3 oz/a     | PRE          |         |        |        |        |         |
|         | ABUNDIT EXTRA      | 32 fl oz/a | 35DAP        |         |        |        |        |         |
|         | PREFIX             | 2 pt/a     | 35DAP        |         |        |        |        |         |
|         | AMS                | 3.7 % v/v  | 35DAP        |         |        |        |        |         |
| 12      | UNTREATED          |            |              | 0       | 0      | 0      | 0      | 0       |
|         | LSD (P=.05)        |            |              | 7.5     | 0.0    | 0.0    | 0.0    | 6.5     |
|         | Standard Deviation |            |              | 5.2     | 0.0    | 0.0    | 0.0    | 4.5     |
|         | CV                 |            |              | 6.35    | 0.0    | 0.0    | 0.0    | 5.07    |
|         | Replicate F        |            |              | 0.641   | 0.000  | 0.000  | 0.000  | 8.391   |
|         | Replicate Prob(F)  |            |              | 0.5940  | 1.0000 | 1.0000 | 1.0000 | 0.0003  |
|         | Treatment F        |            |              | 103.637 | 0.000  | 0.000  | 0.000  | 155.342 |
|         | Treatment Prob(F)  |            |              | 0.0001  | 1.0000 | 1.0000 | 1.0000 | 0.0001  |

Pest Type W Weed  
 Pest Code IPOSS  
 Pest Scientific Name Ipomoea sp.  
 Pest Name Morning glory  
 Crop Code  
 BBCH Scale  
 Crop Scientific Name  
 Crop Name  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 7-2-2014  
 Rating Type CONTROL  
 Rating Unit PERCENT  
 Rating Timing 8 WEEK  
 Days After First/Last Applic. 91 30

| Trt No. | Treatment Name | Rate       | Growth Stage |     |
|---------|----------------|------------|--------------|-----|
|         |                | Rate Unit  |              | 15  |
| 1       | LEADOFF        | 1.5 oz/a   | 30DEPP       | 100 |
|         | 2,4-D ESTER    | 2 pt/a     | 30DEPP       |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |
| 2       | LEADOFF        | 1.5 oz/a   | 30DEPP       | 100 |
|         | 2,4-D ESTER    | 2 pt/a     | 30DEPP       |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |
|         | CANOPY         | 6 oz/a     | PRE          |     |
|         | CINCH          | 1 pt/a     | PRE          |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |
| 3       | LEADOFF        | 1.5 oz/a   | 30DEPP       | 100 |
|         | 2,4-D ESTER    | 2 pt/a     | 30DEPP       |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |
| 4       | CANOPY EX      | 1.5 oz/a   | 10DEPP       | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |

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Pest Type W Weed  
 Pest Code IPOSS  
 Pest Scientific Name Ipomoea sp.  
 Pest Name Morning glory  
 Crop Code  
 BBCH Scale  
 Crop Scientific Name  
 Crop Name  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 7-2-2014  
 Rating Type CONTROL  
 Rating Unit PERCENT  
 Rating Timing 8 WEEK  
 Days After First/Last Applic. 91 30

| Trt No. | Treatment Name | Rate       | Growth Stage |     |
|---------|----------------|------------|--------------|-----|
|         |                | Rate Unit  |              | 15  |
| 5       | CANOPY EX      | 1.5 oz/a   | 30DEPP       | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 30DEPP       |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |
|         | CANOPY         | 6 oz/a     | PRE          |     |
|         | CINCH          | 1 pt/a     | PRE          |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |
| 6       | CANOPY EX      | 1.5 oz/a   | 30DEPP       | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 30DEPP       |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 30DEPP       |     |
|         | AMS            | 3.7 % v/v  | 30DEPP       |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |
| 7       | FIRSTSHOT      | 0.8 oz/a   | 10DEPP       | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |     |
|         | ENVIVE         | 3.5 oz/a   | PRE          |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |
| 8       | AFFORIA        | 2.5 oz/a   | 10DEPP       | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |     |
|         | CANOPY         | 6 oz/a     | PRE          |     |
|         | CINCH          | 1 pt/a     | PRE          |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |
| 9       | FIRSTSHOT      | 0.8 oz/a   | 10DEPP       | 100 |
|         | 2,4-D ESTER    | 1 pt/a     | 10DEPP       |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 10DEPP       |     |
|         | AMS            | 3.7 % v/v  | 10DEPP       |     |
|         | TRIVENCE       | 8 oz/a     | PRE          |     |
|         | ABUNDIT EXTRA  | 32 fl oz/a | 35DAP        |     |
|         | PREFIX         | 2 pt/a     | 35DAP        |     |
|         | AMS            | 3.7 % v/v  | 35DAP        |     |

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Pest Type W Weed  
 Pest Code IPOSS  
 Pest Scientific Name Ipomoea sp.  
 Pest Name Morning glory  
 Crop Code  
 BBCH Scale  
 Crop Scientific Name  
 Crop Name  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 7-2-2014  
 Rating Type CONTROL  
 Rating Unit PERCENT  
 Rating Timing 8 WEEK  
 Days After First/Last Applic. 91 30

| Trt No. | Treatment Name     | Rate       | Unit | Growth Stage |        |
|---------|--------------------|------------|------|--------------|--------|
|         |                    |            |      |              | 15     |
| 10      | FIRSTSHOT          | 0.8 oz/a   |      | 10DEPP       | 100    |
|         | 2,4-D ESTER        | 1 pt/a     |      | 10DEPP       |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a |      | 10DEPP       |        |
|         | AMS                | 3.7 % v/v  |      | 10DEPP       |        |
|         | BOUNDARY           | 1.5 pt/a   |      | PRE          |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a |      | 35DAP        |        |
|         | PREFIX             | 2 pt/a     |      | 35DAP        |        |
|         | AMS                | 3.7 % v/v  |      | 35DAP        |        |
| 11      | FIRSTSHOT          | 0.8 oz/a   |      | 10DEPP       | 100    |
|         | 2,4-D ESTER        | 1 pt/a     |      | 10DEPP       |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a |      | 10DEPP       |        |
|         | AMS                | 3.7 % v/v  |      | 10DEPP       |        |
|         | FIERCE             | 3 oz/a     |      | PRE          |        |
|         | ABUNDIT EXTRA      | 32 fl oz/a |      | 35DAP        |        |
|         | PREFIX             | 2 pt/a     |      | 35DAP        |        |
|         | AMS                | 3.7 % v/v  |      | 35DAP        |        |
| 12      | UNTREATED          |            |      |              | 0      |
|         | LSD (P=.05)        |            |      |              | 0.0    |
|         | Standard Deviation |            |      |              | 0.0    |
|         | CV                 |            |      |              | 0.0    |
|         | Replicate F        |            |      |              | 0.000  |
|         | Replicate Prob(F)  |            |      |              | 1.0000 |
|         | Treatment F        |            |      |              | 0.000  |
|         | Treatment Prob(F)  |            |      |              | 1.0000 |

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NOTILL SOYBEAN EARLY PREPLANT II

Trial ID: S14024  
Protocol ID: DUPONT-SB-USA-14-118  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: KELLY BARNETT

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

STEME, *Stellaria media*, = US  
LAMPU, *Lamium purpureum*, = US  
AMBTR, *Ambrosia trifida*, = US  
SETFA, *Setaria faberi*, = US  
IPOSS, *Ipomoea* sp., = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Rating Unit

PERCENT = percent



**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Date:** 5-6-2014  
**Planting Method:** DRILLE drilled

**Planting Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 7.5 IN  
**Emergence Date:** 5-12-2014

**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Pest Description**

**Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 5 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 8.5 FT  
**Treated Plot Length:** 33 FT  
**Treated Plot Area:** 280.5 FT<sup>2</sup> **Treatments:** 12  
**Replications:** 4  
**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** LANTON  
**% Sand:** 7 **% OM:** 4 **Texture:** SIL silt loam  
**% Silt:** 63 **pH:** 6.5 **Soil Name:** LANTON SILT LOAM  
**% Clay:** 30 **CEC:** 22 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEWEDR wet-wet-dry  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  | <b>C</b>  | <b>D</b>  |
|-----------------------------------|-----------|-----------|-----------|-----------|
| <b>Application Date:</b>          | 4-2-2014  | 4-25-2014 | 5-7-2014  | 6-2-2014  |
| <b>Appl. Start Time:</b>          |           |           |           | 1 PM      |
| <b>Application Method:</b>        | SPRAY     | SPRAY     | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | 30DEPP    | 10D EPP   | PRE       | 35DAP     |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 63 F      | 62 F      | 84 F      | 76 F      |
| <b>% Relative Humidity:</b>       | 50        | 65        | 38        | 75        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 8 MPH     | 6 MPH     | 10 MPH    |
| <b>Wind Direction:</b>            | ESE       |           | SW        | WNW       |
| <b>Soil Temperature, Unit:</b>    | 50 F      | 56 F      | 61 F      | 71 F      |
| <b>Soil Moisture:</b>             | NORMAL    | GOOD      | GOOD      | NORMAL    |
| <b>% Cloud Cover:</b>             | 60        | 70        | 20        | 50        |
| <b>Next Moisture Occurred On:</b> | 4-3-2014  | 4-28-2014 | 5-9-2014  | 6-4-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b> | <b>B</b>   | <b>C</b>   | <b>D</b>   |
|---------------------------------|----------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | GLXMA    | BSOY GLXMA | BSOY GLXMA | BSOY GLXMA |
| <b>Height, Unit:</b>            |          |            | 8          | IN         |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> |
|----------------------------------|----------|----------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | STEME W  | STEME W  | STEME W  | STEME W  |
| <b>Height, Unit:</b>             | 2 IN     | 3 IN     | 4 IN     |          |
| <b>Pest 2 Code, Type, Scale:</b> | LAMPU W  | LAMPU W  | LAMPU W  | LAMPU W  |
| <b>Height, Unit:</b>             | 2 IN     | 3 IN     | 4 IN     |          |
| <b>Pest 3 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             | 1 IN     | 2 IN     | 4 IN     | 6 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | SETFA W  | SETFA W  | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 1 IN     | 2 IN     | 4 IN     |
| <b>Pest 5 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          |          | 2 IN     | 3 IN     |



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**Application Equipment**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> |
|----------------------------------|----------|----------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 8.5 FT   | 8.5 FT   | 8.5 FT   | 8.5 FT   |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      | CO2      | CO2      |



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|                               |                |                 |                  |             |
|-------------------------------|----------------|-----------------|------------------|-------------|
| Pest Type                     | W Weed         | W Weed          | W Weed           |             |
| Pest Code                     | SETFA          | AMBTR           | ERICA            |             |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Conyza canadens> |             |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Marestail        |             |
| Crop Code                     |                |                 |                  | GLXMA       |
| BBCH Scale                    |                |                 |                  | BSOY        |
| Crop Scientific Name          |                |                 |                  | Glycine max |
| Crop Name                     |                |                 |                  | Soybean     |
| Crop Variety                  |                |                 |                  |             |
| Description                   |                |                 |                  |             |
| Part Rated                    |                |                 |                  |             |
| Rating Date                   | 5-21-2014      | 5-21-2014       | 5-21-2014        | 6-6-2014    |
| Rating Type                   | CONTROL        | CONTROL         | CONTROL          | INJURY      |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT          | PERCENT     |
| Rating Timing                 | 2 WEEK         | 2 WEEK          | 2 WEEK           | 4 WEEK      |
| Days After First/Last Applic. | 14 14          | 14 14           | 14 14            | 30 30       |

| Trt No.            | Treatment Name  | Rate   | Unit    | Growth Stage | 5      | 6      | 7      | 8      |
|--------------------|-----------------|--------|---------|--------------|--------|--------|--------|--------|
| 1                  | WARRANT         | 1.125  | lb ai/a | PRE          | 66     | 53     | 50     | 0      |
| 2                  | VALOR SX        | 0.064  | lb ai/a | PRE          | 76     | 67     | 99     | 0      |
| 3                  | VALOR SX        | 0.094  | lb ai/a | PRE          | 73     | 53     | 99     | 0      |
| 4                  | VALOR XLT       | 0.076  | lb ai/a | PRE          | 96     | 90     | 99     | 0      |
| 5                  | VALOR XLT       | 0.113  | lb ai/a | PRE          | 99     | 77     | 99     | 0      |
| 6                  | AUTHORITY MAXX  | 0.29   | lb ai/a | PRE          | 99     | 88     | 99     | 0      |
| 7                  | TRICOR DF       | 0.25   | lb ai/a | PRE          | 83     | 70     | 99     | 0      |
| 8                  | WARRANT         | 1.125  | lb ai/a | PRE          | 96     | 73     | 75     | 0      |
|                    | VALOR SX        | 0.064  | lb ai/a | PRE          |        |        |        |        |
| 9                  | WARRANT         | 1.125  | lb ai/a | PRE          | 95     | 79     | 63     | 0      |
|                    | VALOR SX        | 0.094  | lb ai/a | PRE          |        |        |        |        |
| 10                 | WARRANT         | 1.125  | lb ai/a | PRE          | 99     | 73     | 63     | 0      |
|                    | VALOR XLT       | 0.076  | lb ai/a | PRE          |        |        |        |        |
| 11                 | WARRANT         | 1.125  | lb ai/a | PRE          | 99     | 80     | 63     | 0      |
|                    | VALOR XLT       | 0.113  | lb ai/a | PRE          |        |        |        |        |
| 12                 | WARRANT         | 1.125  | lb ai/a | PRE          | 99     | 82     | 57     | 0      |
|                    | AUTHORITY MAXX  | 0.29   | lb ai/a | PRE          |        |        |        |        |
| 13                 | WARRANT         | 1.125  | lb ai/a | PRE          | 96     | 63     | 63     | 0      |
|                    | TRICOR DF       | 0.25   | lb ai/a | PRE          |        |        |        |        |
| 14                 | FIERCE          | 0.1781 | lb ai/a | PRE          | 56     | 86     | 57     | 0      |
| 15                 | PREFIX          | 1.32   | lb ai/a | PRE          | 95     | 77     | 53     | 0      |
| 16                 | CHECK UNTREATED |        |         |              | 0      | 0      | 0      | 0      |
| LSD (P=.05)        |                 |        |         |              | 32.3   | 13.6   | 9.3    | 0.0    |
| Standard Deviation |                 |        |         |              | 19.4   | 8.1    | 5.6    | 0.0    |
| CV                 |                 |        |         |              | 23.39  | 11.71  | 7.86   | 0.0    |
| Replicate F        |                 |        |         |              | 3.337  | 3.014  | 10.838 | 0.000  |
| Replicate Prob(F)  |                 |        |         |              | 0.0491 | 0.0641 | 0.0003 | 1.0000 |
| Treatment F        |                 |        |         |              | 5.373  | 20.945 | 71.342 | 0.000  |
| Treatment Prob(F)  |                 |        |         |              | 0.0001 | 0.0001 | 0.0001 | 1.0000 |

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| Pest Type                     | W Weed          | W Weed          | W Weed          | W Weed         |        |        |        |        |
|-------------------------------|-----------------|-----------------|-----------------|----------------|--------|--------|--------|--------|
| Pest Code                     | STEME           | LAMPU           | TAROF           | SETFA          |        |        |        |        |
| Pest Scientific Name          | Stellaria media | Lamium purpure> | Taraxacum offi> | Setaria faberi |        |        |        |        |
| Pest Name                     | Common chickwe> | Purple deadnet> | Common dandel>  | Giant foxtail  |        |        |        |        |
| Crop Code                     |                 |                 |                 |                |        |        |        |        |
| BBCH Scale                    |                 |                 |                 |                |        |        |        |        |
| Crop Scientific Name          |                 |                 |                 |                |        |        |        |        |
| Crop Name                     |                 |                 |                 |                |        |        |        |        |
| Crop Variety                  |                 |                 |                 |                |        |        |        |        |
| Description                   |                 |                 |                 |                |        |        |        |        |
| Part Rated                    |                 |                 |                 |                |        |        |        |        |
| Rating Date                   | 6-6-2014        | 6-6-2014        | 6-6-2014        | 6-6-2014       |        |        |        |        |
| Rating Type                   | CONTROL         | CONTROL         | CONTROL         | CONTROL        |        |        |        |        |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT         | PERCENT        |        |        |        |        |
| Rating Timing                 | 4 WEEK          | 4 WEEK          | 4 WEEK          | 4 WEEK         |        |        |        |        |
| Days After First/Last Applic. | 30 30           | 30 30           | 30 30           | 30 30          |        |        |        |        |
| Trt No.                       | Treatment Name  | Rate            | Unit            | Growth Stage   | 9      | 10     | 11     | 12     |
| 1                             | WARRANT         | 1.125 lb ai/a   | PRE             |                | 99     | 99     | 99     | 66     |
| 2                             | VALOR SX        | 0.064 lb ai/a   | PRE             |                | 99     | 99     | 99     | 76     |
| 3                             | VALOR SX        | 0.094 lb ai/a   | PRE             |                | 99     | 99     | 99     | 73     |
| 4                             | VALOR XLT       | 0.076 lb ai/a   | PRE             |                | 99     | 99     | 99     | 96     |
| 5                             | VALOR XLT       | 0.113 lb ai/a   | PRE             |                | 99     | 99     | 99     | 99     |
| 6                             | AUTHORITY MAXX  | 0.29 lb ai/a    | PRE             |                | 99     | 99     | 99     | 99     |
| 7                             | TRICOR DF       | 0.25 lb ai/a    | PRE             |                | 99     | 99     | 99     | 83     |
| 8                             | WARRANT         | 1.125 lb ai/a   | PRE             |                | 99     | 99     | 99     | 96     |
|                               | VALOR SX        | 0.064 lb ai/a   | PRE             |                |        |        |        |        |
| 9                             | WARRANT         | 1.125 lb ai/a   | PRE             |                | 99     | 99     | 99     | 95     |
|                               | VALOR SX        | 0.094 lb ai/a   | PRE             |                |        |        |        |        |
| 10                            | WARRANT         | 1.125 lb ai/a   | PRE             |                | 99     | 99     | 99     | 99     |
|                               | VALOR XLT       | 0.076 lb ai/a   | PRE             |                |        |        |        |        |
| 11                            | WARRANT         | 1.125 lb ai/a   | PRE             |                | 99     | 99     | 99     | 99     |
|                               | VALOR XLT       | 0.113 lb ai/a   | PRE             |                |        |        |        |        |
| 12                            | WARRANT         | 1.125 lb ai/a   | PRE             |                | 99     | 99     | 99     | 99     |
|                               | AUTHORITY MAXX  | 0.29 lb ai/a    | PRE             |                |        |        |        |        |
| 13                            | WARRANT         | 1.125 lb ai/a   | PRE             |                | 99     | 99     | 99     | 96     |
|                               | TRICOR DF       | 0.25 lb ai/a    | PRE             |                |        |        |        |        |
| 14                            | FIERCE          | 0.1781 lb ai/a  | PRE             |                | 99     | 99     | 99     | 56     |
| 15                            | PREFIX          | 1.32 lb ai/a    | PRE             |                | 99     | 99     | 99     | 95     |
| 16                            | CHECK UNTREATED |                 |                 |                | 0      | 0      | 0      | 0      |
| LSD (P=.05)                   |                 |                 |                 |                | 0.0    | 0.0    | 0.0    | 32.3   |
| Standard Deviation            |                 |                 |                 |                | 0.0    | 0.0    | 0.0    | 19.4   |
| CV                            |                 |                 |                 |                | 0.0    | 0.0    | 0.0    | 23.39  |
| Replicate F                   |                 |                 |                 |                | 0.000  | 0.000  | 0.000  | 3.337  |
| Replicate Prob(F)             |                 |                 |                 |                | 1.0000 | 1.0000 | 1.0000 | 0.0491 |
| Treatment F                   |                 |                 |                 |                | 0.000  | 0.000  | 0.000  | 5.373  |
| Treatment Prob(F)             |                 |                 |                 |                | 1.0000 | 1.0000 | 1.0000 | 0.0001 |

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|                               |                 |               |                 |             |
|-------------------------------|-----------------|---------------|-----------------|-------------|
| Pest Type                     | W Weed          | W Weed        | W Weed          |             |
| Pest Code                     | AMBTR           | IPOSS         | ERICA           |             |
| Pest Scientific Name          | Ambrosia trifi> | Ipomoea sp.   | Conyza canaden> |             |
| Pest Name                     | Giant ragweed   | Morning glory | Marestail       |             |
| Crop Code                     |                 |               |                 | GLXMA       |
| BBCH Scale                    |                 |               |                 | BSOY        |
| Crop Scientific Name          |                 |               |                 | Glycine max |
| Crop Name                     |                 |               |                 | Soybean     |
| Crop Variety                  |                 |               |                 |             |
| Description                   |                 |               |                 |             |
| Part Rated                    |                 |               |                 |             |
| Rating Date                   | 6-6-2014        | 6-6-2014      | 6-6-2014        | 7-2-2014    |
| Rating Type                   | CONTROL         | CONTROL       | CONTROL         | INJURY      |
| Rating Unit                   | PERCENT         | PERCENT       | PERCENT         | PERCENT     |
| Rating Timing                 | 4 WEEK          | 4 WEEK        | 4 WEEK          | 8 WEEK      |
| Days After First/Last Applic. | 30 30           | 30 30         | 30 30           | 56 56       |

| Trt No.            | Treatment Name  | Rate   | Unit    | Growth Stage | 13     | 14     | 15     | 16     |
|--------------------|-----------------|--------|---------|--------------|--------|--------|--------|--------|
| 1                  | WARRANT         | 1.125  | lb ai/a | PRE          | 53     | 43     | 50     | 0      |
| 2                  | VALOR SX        | 0.064  | lb ai/a | PRE          | 67     | 43     | 99     | 0      |
| 3                  | VALOR SX        | 0.094  | lb ai/a | PRE          | 53     | 37     | 99     | 0      |
| 4                  | VALOR XLT       | 0.076  | lb ai/a | PRE          | 90     | 89     | 99     | 0      |
| 5                  | VALOR XLT       | 0.113  | lb ai/a | PRE          | 77     | 89     | 99     | 0      |
| 6                  | AUTHORITY MAXX  | 0.29   | lb ai/a | PRE          | 88     | 90     | 99     | 0      |
| 7                  | TRICOR DF       | 0.25   | lb ai/a | PRE          | 70     | 68     | 99     | 0      |
| 8                  | WARRANT         | 1.125  | lb ai/a | PRE          | 73     | 73     | 75     | 0      |
|                    | VALOR SX        | 0.064  | lb ai/a | PRE          |        |        |        |        |
| 9                  | WARRANT         | 1.125  | lb ai/a | PRE          | 79     | 73     | 63     | 0      |
|                    | VALOR SX        | 0.094  | lb ai/a | PRE          |        |        |        |        |
| 10                 | WARRANT         | 1.125  | lb ai/a | PRE          | 73     | 90     | 63     | 0      |
|                    | VALOR XLT       | 0.076  | lb ai/a | PRE          |        |        |        |        |
| 11                 | WARRANT         | 1.125  | lb ai/a | PRE          | 80     | 85     | 63     | 0      |
|                    | VALOR XLT       | 0.113  | lb ai/a | PRE          |        |        |        |        |
| 12                 | WARRANT         | 1.125  | lb ai/a | PRE          | 82     | 88     | 57     | 0      |
|                    | AUTHORITY MAXX  | 0.29   | lb ai/a | PRE          |        |        |        |        |
| 13                 | WARRANT         | 1.125  | lb ai/a | PRE          | 63     | 70     | 63     | 0      |
|                    | TRICOR DF       | 0.25   | lb ai/a | PRE          |        |        |        |        |
| 14                 | FIERCE          | 0.1781 | lb ai/a | PRE          | 86     | 57     | 57     | 0      |
| 15                 | PREFIX          | 1.32   | lb ai/a | PRE          | 77     | 73     | 53     | 0      |
| 16                 | CHECK UNTREATED |        |         |              | 0      | 0      | 0      | 0      |
| LSD (P=.05)        |                 |        |         |              | 13.6   | 16.0   | 9.3    | 0.0    |
| Standard Deviation |                 |        |         |              | 8.1    | 9.6    | 5.6    | 0.0    |
| CV                 |                 |        |         |              | 11.71  | 14.36  | 7.86   | 0.0    |
| Replicate F        |                 |        |         |              | 3.014  | 0.826  | 10.838 | 0.000  |
| Replicate Prob(F)  |                 |        |         |              | 0.0641 | 0.4476 | 0.0003 | 1.0000 |
| Treatment F        |                 |        |         |              | 20.945 | 20.735 | 71.342 | 0.000  |
| Treatment Prob(F)  |                 |        |         |              | 0.0001 | 0.0001 | 0.0001 | 1.0000 |

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|                               |                |                 |               |                  |
|-------------------------------|----------------|-----------------|---------------|------------------|
| Pest Type                     | W Weed         | W Weed          | W Weed        | W Weed           |
| Pest Code                     | SETFA          | AMBTR           | IPOSS         | ERICA            |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Ipomoea sp.   | Conyza canadens> |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Morning glory | Marestail        |
| Crop Code                     |                |                 |               |                  |
| BBCH Scale                    |                |                 |               |                  |
| Crop Scientific Name          |                |                 |               |                  |
| Crop Name                     |                |                 |               |                  |
| Crop Variety                  |                |                 |               |                  |
| Description                   |                |                 |               |                  |
| Part Rated                    |                |                 |               |                  |
| Rating Date                   | 7-2-2014       | 7-2-2014        | 7-2-2014      | 7-2-2014         |
| Rating Type                   | CONTROL        | CONTROL         | CONTROL       | CONTROL          |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT       | PERCENT          |
| Rating Timing                 | 8 WEEK         | 8 WEEK          | 8 WEEK        | 8 WEEK           |
| Days After First/Last Applic. | 56 56          | 56 56           | 56 56         | 56 56            |

| Trt                | Treatment       | Rate           | Rate Unit | Growth Stage | 17     | 18     | 19     | 20     |
|--------------------|-----------------|----------------|-----------|--------------|--------|--------|--------|--------|
| 1                  | WARRANT         | 1.125 lb ai/a  | PRE       |              | 66     | 43     | 43     | 50     |
| 2                  | VALOR SX        | 0.064 lb ai/a  | PRE       |              | 76     | 40     | 43     | 99     |
| 3                  | VALOR SX        | 0.094 lb ai/a  | PRE       |              | 73     | 37     | 37     | 73     |
| 4                  | VALOR XLT       | 0.076 lb ai/a  | PRE       |              | 96     | 91     | 89     | 93     |
| 5                  | VALOR XLT       | 0.113 lb ai/a  | PRE       |              | 99     | 89     | 89     | 89     |
| 6                  | AUTHORITY MAXX  | 0.29 lb ai/a   | PRE       |              | 99     | 91     | 90     | 95     |
| 7                  | TRICOR DF       | 0.25 lb ai/a   | PRE       |              | 83     | 68     | 68     | 76     |
| 8                  | WARRANT         | 1.125 lb ai/a  | PRE       |              | 96     | 73     | 73     | 63     |
|                    | VALOR SX        | 0.064 lb ai/a  | PRE       |              |        |        |        |        |
| 9                  | WARRANT         | 1.125 lb ai/a  | PRE       |              | 95     | 73     | 73     | 63     |
|                    | VALOR SX        | 0.094 lb ai/a  | PRE       |              |        |        |        |        |
| 10                 | WARRANT         | 1.125 lb ai/a  | PRE       |              | 99     | 92     | 90     | 70     |
|                    | VALOR XLT       | 0.076 lb ai/a  | PRE       |              |        |        |        |        |
| 11                 | WARRANT         | 1.125 lb ai/a  | PRE       |              | 99     | 85     | 85     | 73     |
|                    | VALOR XLT       | 0.113 lb ai/a  | PRE       |              |        |        |        |        |
| 12                 | WARRANT         | 1.125 lb ai/a  | PRE       |              | 99     | 88     | 88     | 65     |
|                    | AUTHORITY MAXX  | 0.29 lb ai/a   | PRE       |              |        |        |        |        |
| 13                 | WARRANT         | 1.125 lb ai/a  | PRE       |              | 96     | 67     | 70     | 57     |
|                    | TRICOR DF       | 0.25 lb ai/a   | PRE       |              |        |        |        |        |
| 14                 | FIERCE          | 0.1781 lb ai/a | PRE       |              | 56     | 47     | 57     | 57     |
| 15                 | PREFIX          | 1.32 lb ai/a   | PRE       |              | 95     | 73     | 73     | 43     |
| 16                 | CHECK UNTREATED |                |           |              | 0      | 0      | 0      | 0      |
| LSD (P=.05)        |                 |                |           |              | 32.3   | 17.8   | 16.0   | 25.5   |
| Standard Deviation |                 |                |           |              | 19.4   | 10.7   | 9.6    | 15.3   |
| CV                 |                 |                |           |              | 23.39  | 16.14  | 14.36  | 22.98  |
| Replicate F        |                 |                |           |              | 3.337  | 0.672  | 0.826  | 4.596  |
| Replicate Prob(F)  |                 |                |           |              | 0.0491 | 0.5182 | 0.4476 | 0.0181 |
| Treatment F        |                 |                |           |              | 5.373  | 18.009 | 20.735 | 7.437  |
| Treatment Prob(F)  |                 |                |           |              | 0.0001 | 0.0001 | 0.0001 | 0.0001 |







**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Date:** 5-6-2014  
**Planting Method:** DRILLE drilled

**Planting Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 7.5 IN  
**Emergence Date:** 5-14-2014

**Soil Temperature, Unit:** 62 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Pest Description**

**Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion

**Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 5 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 6 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Pest 7 Type:** W **Code:** ERICA *Conyza canadensis*  
**Common Name:** Marestalk

**Site and Design**

**Treated Plot Width:** 8.5 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 374 FT2  
**Replications:** 3  
**Site Type:** FIELD field  
**Treatments:** 16  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOBL Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6  
**% Silt:** 62  
**% Clay:** 32  
**% OM:** 2.6  
**pH:** 6.4  
**CEC:** 18  
**Texture:** SIL silt loam  
**Soil Name:** MAURY SILT LOAM  
**Fert. Level:** E excellent  
**Soil Drainage:** E excellent

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**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.25 MI

**Application Description**

**Application Date:** 5-7-2014  
**Application Method:** SPRAY  
**Application Timing:** PRE  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 84 F  
**% Relative Humidity:** 38  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** SW  
**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 20  
**Next Moisture Occurred On:** 5-9-2014

**Crop Stage At Each Application**

**A**  
**Crop 1 Code, BBCH Scale:** GLXMA BSOY

**Pest Stage At Each Application**

**A**  
**Pest 1 Code, Type, Scale:** STEME W  
**Pest 2 Code, Type, Scale:** LAMPU W  
**Pest 3 Code, Type, Scale:** TAROF W  
**Pest 4 Code, Type, Scale:** SETFA W  
**Pest 5 Code, Type, Scale:** AMBTR W  
**Pest 6 Code, Type, Scale:** IPOSS W  
**Pest 7 Code, Type, Scale:** ERICA W

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**Application Equipment**

**A**

**Appl. Equipment:** ATV  
**Equipment Type:** ALTEVE  
**Operation Pressure, Unit:** 30 PSI  
**Nozzle Type:** FLAT FAN  
**Nozzle Size:** 8004 DG  
**Nozzle Spacing, Unit:** 20 IN  
**Boom Length, Unit:** 8.5 FT  
**Boom Height, Unit:** 20 IN  
**Ground Speed, Unit:** 4 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 24 GPA  
**Mix Size, Unit:** 2.7 liters  
**Propellant:** CO2

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NO TILL SOYBEAN V

Trial ID: S14026  
Protocol ID: FMC-SOY-PRE-POST  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: RUSTY MITCHELL

|                               |             |                 |                 |                 |
|-------------------------------|-------------|-----------------|-----------------|-----------------|
| Pest Type                     |             | W Weed          | W Weed          | W Weed          |
| Pest Code                     |             | STEME           | LAMPU           | TAROF           |
| Pest Scientific Name          |             | Stellaria media | Lamium purpure> | Taraxacum offi> |
| Pest Name                     |             | Common chickwe> | Purple deadnet> | Common dandeli> |
| Crop Code                     | GLXMA       |                 |                 |                 |
| BBCH Scale                    | BSOY        |                 |                 |                 |
| Crop Scientific Name          | Glycine max |                 |                 |                 |
| Crop Name                     | Soybean     |                 |                 |                 |
| Crop Variety                  |             |                 |                 |                 |
| Description                   |             |                 |                 |                 |
| Part Rated                    |             |                 |                 |                 |
| Rating Date                   | 5-21-2014   | 5-21-2014       | 5-21-2014       | 5-21-2014       |
| Rating Type                   | INJURY      | CONTROL         | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT     | PERCENT         | PERCENT         | PERCENT         |
| Rating Timing                 | 2 WEEK      | 2 WEEK          | 2 WEEK          | 2 WEEK          |
| Days After First/Last Applic. | 14 14       | 14 14           | 14 14           | 14 14           |

| Trt No. | Treatment Name       | Rate       | Growth Stage | 1 | 2  | 3  | 4  |
|---------|----------------------|------------|--------------|---|----|----|----|
| 1       | UNTREATED CHECK      |            |              | 0 | 0  | 0  | 0  |
| 2       | ROUNDUP POWERMAX NIS | 22 oz/a    | V2           | 0 | 0  | 0  | 0  |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |   |    |    |    |
| 3       | AUTHORITY ELITE      | 22 fl oz/a | V5           | 0 | 99 | 99 | 99 |
|         | ANTHEM               | 24 oz/a    | PRE          |   |    |    |    |
|         | ROUNDUP POWERMAX NIS | 6.5 oz/a   | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |   |    |    |    |
| 4       | AUTHORITY ELITE      | 24 oz/a    | PRE          | 0 | 99 | 99 | 99 |
|         | MARVEL               | 7 oz/a     | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |   |    |    |    |
| 5       | AUTHORITY MAXX       | 5 oz/a     | PRE          | 0 | 99 | 99 | 99 |
|         | ANTHEM               | 6.5 oz/a   | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |   |    |    |    |
| 6       | AUTHORITY MAXX       | 5 oz/a     | PRE          | 0 | 99 | 99 | 99 |
|         | MARVEL               | 7 oz/a     | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |   |    |    |    |
| 7       | ANTHEM               | 6.5 oz/a   | PRE          | 0 | 99 | 99 | 99 |
|         | AUTHORITY MAXX       | 5 oz/a     | PRE          |   |    |    |    |
|         | CADET                | 0.6 oz/a   | V2           |   |    |    |    |
|         | ACCOLADE             | 0.12 oz/a  | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |   |    |    |    |
| 8       | AUTHORITY MTZ        | 14 oz/a    | PRE          | 0 | 99 | 99 | 99 |
|         | ANTHEM               | 6.5 oz/a   | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |   |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |   |    |    |    |

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| Pest Type                     | W Weed             | W Weed          | W Weed          |        |        |        |        |
|-------------------------------|--------------------|-----------------|-----------------|--------|--------|--------|--------|
| Pest Code                     | STEME              | LAMPU           | TAROF           |        |        |        |        |
| Pest Scientific Name          | Stellaria media    | Lamium purpure> | Taraxacum offi> |        |        |        |        |
| Pest Name                     | Common chickwe>    | Purple deadnet> | Common dandeli> |        |        |        |        |
| Crop Code                     | GLXMA              |                 |                 |        |        |        |        |
| BBCH Scale                    | BSOY               |                 |                 |        |        |        |        |
| Crop Scientific Name          | Glycine max        |                 |                 |        |        |        |        |
| Crop Name                     | Soybean            |                 |                 |        |        |        |        |
| Crop Variety                  |                    |                 |                 |        |        |        |        |
| Description                   |                    |                 |                 |        |        |        |        |
| Part Rated                    |                    |                 |                 |        |        |        |        |
| Rating Date                   | 5-21-2014          | 5-21-2014       | 5-21-2014       |        |        |        |        |
| Rating Type                   | INJURY             | CONTROL         | CONTROL         |        |        |        |        |
| Rating Unit                   | PERCENT            | PERCENT         | PERCENT         |        |        |        |        |
| Rating Timing                 | 2 WEEK             | 2 WEEK          | 2 WEEK          |        |        |        |        |
| Days After First/Last Applic. | 14 14              | 14 14           | 14 14           |        |        |        |        |
| Trt No.                       | Treatment Name     | Rate            | Growth Stage    | 1      | 2      | 3      | 4      |
| 9                             | AUTHORITY MTZ      | 14 oz/a         | PRE             | 0      | 99     | 99     | 99     |
|                               | MARVEL             | 7 oz/a          | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |        |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |        |        |        |        |
| 10                            | ANTHEM             | 6.5 oz/a        | PRE             | 0      | 99     | 99     | 99     |
|                               | AUTHORITY MTZ      | 14 oz/a         | PRE             |        |        |        |        |
|                               | CADET              | 0.6 oz/a        | V2              |        |        |        |        |
|                               | ACCOLADE           | 0.12 oz/a       | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |        |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |        |        |        |        |
| 11                            | FIERCE             | 3 oz/a          | PRE             | 0      | 99     | 99     | 99     |
|                               | PREFIX             | 32 oz/a         | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |        |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |        |        |        |        |
| 12                            | BOUNDARY           | 32 oz/a         | PRE             | 0      | 99     | 99     | 99     |
|                               | PREFIX             | 32 oz/a         | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |        |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |        |        |        |        |
| 13                            | VALOR XLT          | 3 oz/a          | PRE             | 0      | 99     | 99     | 99     |
|                               | PREFIX             | 32 oz/a         | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |        |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |        |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |        |        |        |        |
|                               | LSD (P=.05)        |                 |                 | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | Standard Deviation |                 |                 | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | CV                 |                 |                 | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | Replicate F        |                 |                 | 0.000  | 0.000  | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                 |                 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|                               | Treatment F        |                 |                 | 0.000  | 0.000  | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                 |                 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

|                               |                |                  |                   |             |
|-------------------------------|----------------|------------------|-------------------|-------------|
| Pest Type                     | W Weed         | W Weed           | W Weed            |             |
| Pest Code                     | SETFA          | AMBTR            | ERICA             |             |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifida | Conyza canadensis |             |
| Pest Name                     | Giant foxtail  | Giant ragweed    | Marestail         |             |
| Crop Code                     |                |                  |                   | GLXMA       |
| BBCH Scale                    |                |                  |                   | BSOY        |
| Crop Scientific Name          |                |                  |                   | Glycine max |
| Crop Name                     |                |                  |                   | Soybean     |
| Crop Variety                  |                |                  |                   |             |
| Description                   |                |                  |                   | AT POST V2  |
| Part Rated                    |                |                  |                   |             |
| Rating Date                   | 5-21-2014      | 5-21-2014        | 5-21-2014         | 6-2-2014    |
| Rating Type                   | CONTROL        | CONTROL          | CONTROL           | INJURY      |
| Rating Unit                   | PERCENT        | PERCENT          | PERCENT           | PERCENT     |
| Rating Timing                 | 2 WEEK         | 2 WEEK           | 2 WEEK            | 4 WEEK      |
| Days After First/Last Applic. | 14 14          | 14 14            | 14 14             | 26 26       |

| Trt No. | Treatment Name   | Rate       | Growth Stage | 5  | 6  | 7  | 8 |
|---------|------------------|------------|--------------|----|----|----|---|
| 1       | UNTREATED CHECK  |            |              | 0  | 0  | 0  | 0 |
| 2       | ROUNDUP POWERMAX | 22 oz/a    | V2           | 0  | 0  | 0  | 0 |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |   |
| 3       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 99 | 85 | 82 | 0 |
|         | ANTHEM           | 6.5 oz/a   | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |   |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |   |
| 4       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 99 | 90 | 78 | 0 |
|         | MARVEL           | 7 oz/a     | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |   |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |   |
| 5       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 99 | 95 | 90 | 0 |
|         | ANTHEM           | 6.5 oz/a   | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |   |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |   |
| 6       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 99 | 99 | 87 | 0 |
|         | MARVEL           | 7 oz/a     | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |   |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |   |
| 7       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 99 | 83 | 0 |
|         | AUTHORITY MAXX   | 5 oz/a     | PRE          |    |    |    |   |
|         | CADET            | 0.6 oz/a   | V2           |    |    |    |   |
|         | ACCOLADE         | 0.12 oz/a  | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |   |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |   |
| 8       | AUTHORITY MTZ    | 14 oz/a    | PRE          | 99 | 73 | 73 | 0 |
|         | ANTHEM           | 6.5 oz/a   | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |   |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |   |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |   |

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| Pest Type                     | W Weed   | W Weed     | W Weed       |             |         |        |        |
|-------------------------------|--|------------|--------------|-------------|---------|--------|--------|
| Pest Code                     | SETFA  | AMBTR      | ERICA        |             |         |        |        |
| Pest Scientific Name          | Setaria faberi Ambrosia trifi> Conyza canaden> |            |              |             |         |        |        |
| Pest Name                     | Giant foxtail Giant ragweed Marestalk          |            |              |             |         |        |        |
| Crop Code                     |  |            |              | GLXMA       |         |        |        |
| BBCH Scale                    |  |            |              | BSOY        |         |        |        |
| Crop Scientific Name          |  |            |              | Glycine max |         |        |        |
| Crop Name                     |  |            |              | Soybean     |         |        |        |
| Crop Variety                  |  |            |              |             |         |        |        |
| Description                   |  |            |              | AT POST V2  |         |        |        |
| Part Rated                    |  |            |              |             |         |        |        |
| Rating Date                   | 5-21-2014                                      | 5-21-2014  | 5-21-2014    | 6-2-2014    |         |        |        |
| Rating Type                   | CONTROL  | CONTROL    | CONTROL      | INJURY      |         |        |        |
| Rating Unit                   | PERCENT  | PERCENT    | PERCENT      | PERCENT     |         |        |        |
| Rating Timing                 | 2 WEEK   | 2 WEEK     | 2 WEEK       | 4 WEEK      |         |        |        |
| Days After First/Last Applic. | 14 14  | 14 14      | 14 14        | 26 26       |         |        |        |
| Trt No.                       | Treatment Name                                 | Rate       | Growth Stage | 5           | 6       | 7      | 8      |
| 9                             | AUTHORITY MTZ                                  | 14 oz/a    | PRE          | 99          | 87      | 76     | 0      |
|                               | MARVEL   | 7 oz/a     | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V2           |             |         |        |        |
|                               | NIS  | 0.25 % v/v | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V5           |             |         |        |        |
| 10                            | ANTHEM   | 6.5 oz/a   | PRE          | 99          | 82      | 83     | 0      |
|                               | AUTHORITY MTZ                                  | 14 oz/a    | PRE          |             |         |        |        |
|                               | CADET  | 0.6 oz/a   | V2           |             |         |        |        |
|                               | ACCOLADE                                       | 0.12 oz/a  | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V2           |             |         |        |        |
|                               | NIS  | 0.25 % v/v | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V5           |             |         |        |        |
| 11                            | FIERCE   | 3 oz/a     | PRE          | 99          | 85      | 80     | 0      |
|                               | PREFIX   | 32 oz/a    | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V2           |             |         |        |        |
|                               | NIS  | 0.25 % v/v | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V5           |             |         |        |        |
| 12                            | BOUNDARY                                       | 32 oz/a    | PRE          | 99          | 87      | 99     | 0      |
|                               | PREFIX   | 32 oz/a    | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V2           |             |         |        |        |
|                               | NIS  | 0.25 % v/v | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V5           |             |         |        |        |
| 13                            | VALOR XLT                                      | 3 oz/a     | PRE          | 99          | 99      | 91     | 0      |
|                               | PREFIX   | 32 oz/a    | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V2           |             |         |        |        |
|                               | NIS  | 0.25 % v/v | V2           |             |         |        |        |
|                               | ROUNDUP POWERMAX                               | 22 fl oz/a | V5           |             |         |        |        |
| LSD (P=.05)                   |  |            |              | 0.0         | 6.3     | 12.4   | 0.0    |
| Standard Deviation            |  |            |              | 0.0         | 3.8     | 7.4    | 0.0    |
| CV                            |  |            |              | 0.0         | 4.98    | 10.38  | 0.0    |
| Replicate F                   |  |            |              | 0.000       | 1.045   | 4.613  | 0.000  |
| Replicate Prob(F)             |  |            |              | 1.0000      | 0.3671  | 0.0202 | 1.0000 |
| Treatment F                   |  |            |              | 0.000       | 250.035 | 57.401 | 0.000  |
| Treatment Prob(F)             |  |            |              | 1.0000      | 0.0001  | 0.0001 | 1.0000 |

|                               |                 |                 |                 |                |
|-------------------------------|-----------------|-----------------|-----------------|----------------|
| Pest Type                     | W Weed          | W Weed          | W Weed          | W Weed         |
| Pest Code                     | STEME           | LAMPU           | TAROF           | SETFA          |
| Pest Scientific Name          | Stellaria media | Lamium purpure> | Taraxacum offi> | Setaria faberi |
| Pest Name                     | Common chickwe> | Purple deadnet> | Common dandel>  | Giant foxtail  |
| Crop Code                     |                 |                 |                 |                |
| BBCH Scale                    |                 |                 |                 |                |
| Crop Scientific Name          |                 |                 |                 |                |
| Crop Name                     |                 |                 |                 |                |
| Crop Variety                  |                 |                 |                 |                |
| Description                   | AT POST V2      | AT POST V2      | AT POST V2      | AT POST V2     |
| Part Rated                    |                 |                 |                 |                |
| Rating Date                   | 6-2-2014        | 6-2-2014        | 6-2-2014        | 6-2-2014       |
| Rating Type                   | CONTROL         | CONTROL         | CONTROL         | CONTROL        |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT         | PERCENT        |
| Rating Timing                 | 4 WEEK          | 4 WEEK          | 4 WEEK          | 4 WEEK         |
| Days After First/Last Applic. | 26 26           | 26 26           | 26 26           | 26 26          |

| Trt No. | Treatment Name   | Rate       | Growth Stage | 9  | 10 | 11 | 12 |
|---------|------------------|------------|--------------|----|----|----|----|
|         |                  | Rate Unit  |              |    |    |    |    |
| 1       | UNTREATED CHECK  |            |              | 0  | 0  | 0  | 0  |
| 2       | ROUNDUP POWERMAX | 22 oz/a    | V2           | 0  | 0  | 0  | 0  |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 3       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 99 | 99 | 99 | 99 |
|         | ANTHEM           | 6.5 oz/a   | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 4       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 99 | 99 | 99 | 99 |
|         | MARVEL           | 7 oz/a     | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 5       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 99 | 99 | 99 | 99 |
|         | ANTHEM           | 6.5 oz/a   | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 6       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 99 | 99 | 99 | 99 |
|         | MARVEL           | 7 oz/a     | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 7       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 99 | 99 | 99 |
|         | AUTHORITY MAXX   | 5 oz/a     | PRE          |    |    |    |    |
|         | CADET            | 0.6 oz/a   | V2           |    |    |    |    |
|         | ACCOLADE         | 0.12 oz/a  | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 8       | AUTHORITY MTZ    | 14 oz/a    | PRE          | 99 | 99 | 99 | 99 |
|         | ANTHEM           | 6.5 oz/a   | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |



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| Pest Type                     | W Weed             | W Weed          | W Weed          | W Weed         |        |        |        |
|-------------------------------|--------------------|-----------------|-----------------|----------------|--------|--------|--------|
| Pest Code                     | STEME              | LAMPU           | TAROF           | SETFA          |        |        |        |
| Pest Scientific Name          | Stellaria media    | Lamium purpure> | Taraxacum offi> | Setaria faberi |        |        |        |
| Pest Name                     | Common chickwe>    | Purple deadnet> | Common dandel>  | Giant foxtail  |        |        |        |
| Crop Code                     |                    |                 |                 |                |        |        |        |
| BBCH Scale                    |                    |                 |                 |                |        |        |        |
| Crop Scientific Name          |                    |                 |                 |                |        |        |        |
| Crop Name                     |                    |                 |                 |                |        |        |        |
| Crop Variety                  |                    |                 |                 |                |        |        |        |
| Description                   | AT POST V2         | AT POST V2      | AT POST V2      | AT POST V2     |        |        |        |
| Part Rated                    |                    |                 |                 |                |        |        |        |
| Rating Date                   | 6-2-2014           | 6-2-2014        | 6-2-2014        | 6-2-2014       |        |        |        |
| Rating Type                   | CONTROL            | CONTROL         | CONTROL         | CONTROL        |        |        |        |
| Rating Unit                   | PERCENT            | PERCENT         | PERCENT         | PERCENT        |        |        |        |
| Rating Timing                 | 4 WEEK             | 4 WEEK          | 4 WEEK          | 4 WEEK         |        |        |        |
| Days After First/Last Applic. | 26 26              | 26 26           | 26 26           | 26 26          |        |        |        |
| Trt No.                       | Treatment Name     | Rate            | Growth Stage    | 9              | 10     | 11     | 12     |
| 9                             | AUTHORITY MTZ      | 14 oz/a         | PRE             |                |        |        |        |
|                               | MARVEL             | 7 oz/a          | V2              | 99             | 99     | 99     | 99     |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |                |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |                |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |                |        |        |        |
| 10                            | ANTHEM             | 6.5 oz/a        | PRE             | 99             | 99     | 99     | 99     |
|                               | AUTHORITY MTZ      | 14 oz/a         | PRE             |                |        |        |        |
|                               | CADET              | 0.6 oz/a        | V2              |                |        |        |        |
|                               | ACCOLADE           | 0.12 oz/a       | V2              |                |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |                |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |                |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |                |        |        |        |
| 11                            | FIERCE             | 3 oz/a          | PRE             | 99             | 99     | 99     | 99     |
|                               | PREFIX             | 32 oz/a         | V2              |                |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |                |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |                |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |                |        |        |        |
| 12                            | BOUNDARY           | 32 oz/a         | PRE             | 99             | 99     | 99     | 99     |
|                               | PREFIX             | 32 oz/a         | V2              |                |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |                |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |                |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |                |        |        |        |
| 13                            | VALOR XLT          | 3 oz/a          | PRE             | 99             | 99     | 99     | 99     |
|                               | PREFIX             | 32 oz/a         | V2              |                |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V2              |                |        |        |        |
|                               | NIS                | 0.25 % v/v      | V2              |                |        |        |        |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a      | V5              |                |        |        |        |
|                               | LSD (P=.05)        |                 |                 | 0.0            | 0.0    | 0.0    | 0.0    |
|                               | Standard Deviation |                 |                 | 0.0            | 0.0    | 0.0    | 0.0    |
|                               | CV                 |                 |                 | 0.0            | 0.0    | 0.0    | 0.0    |
|                               | Replicate F        |                 |                 | 0.000          | 0.000  | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                 |                 | 1.0000         | 1.0000 | 1.0000 | 1.0000 |
|                               | Treatment F        |                 |                 | 0.000          | 0.000  | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                 |                 | 1.0000         | 1.0000 | 1.0000 | 1.0000 |

|                               |                  |                   |                 |            |
|-------------------------------|------------------|-------------------|-----------------|------------|
| Pest Type                     | W Weed           | W Weed            | W Weed          | W Weed     |
| Pest Code                     | AMBTR            | ERICA             | SETFA           |            |
| Pest Scientific Name          | Ambrosia trifida | Conyza canadensis | Setaria faberii |            |
| Pest Name                     | Giant ragweed    | Marestail         | Giant foxtail   |            |
| Crop Code                     |                  |                   | GLXMA           |            |
| BBCH Scale                    |                  |                   | BSOY            |            |
| Crop Scientific Name          |                  |                   | Glycine max     |            |
| Crop Name                     |                  |                   | Soybean         |            |
| Crop Variety                  |                  |                   |                 |            |
| Description                   | AT POST V2       | AT POST V2        | AT POST V5      | AT POST V5 |
| Part Rated                    |                  |                   |                 |            |
| Rating Date                   | 6-2-2014         | 6-2-2014          | 6-20-2014       | 6-20-2014  |
| Rating Type                   | CONTROL          | CONTROL           | INJURY          | CONTROL    |
| Rating Unit                   | PERCENT          | PERCENT           | PERCENT         | PERCENT    |
| Rating Timing                 | 4 WEEK           | 4 WEEK            | 7 WEEK          | 7 WEEK     |
| Days After First/Last Applic. | 26 26            | 26 26             | 44 2            | 44 2       |

| Trt No. | Treatment Name   | Rate       | Growth Stage | 13 | 14 | 15 | 16 |
|---------|------------------|------------|--------------|----|----|----|----|
| 1       | UNTREATED CHECK  |            |              | 0  | 0  | 0  | 0  |
| 2       | ROUNDUP POWERMAX | 22 oz/a    | V2           | 0  | 0  | 0  | 99 |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 3       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 85 | 82 | 0  | 99 |
|         | ANTHEM           | 6.5 oz/a   | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 4       | AUTHORITY ELITE  | 24 oz/a    | PRE          | 90 | 78 | 0  | 99 |
|         | MARVEL           | 7 oz/a     | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 5       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 95 | 90 | 0  | 99 |
|         | ANTHEM           | 6.5 oz/a   | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 6       | AUTHORITY MAXX   | 5 oz/a     | PRE          | 99 | 87 | 0  | 99 |
|         | MARVEL           | 7 oz/a     | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 7       | ANTHEM           | 6.5 oz/a   | PRE          | 99 | 83 | 0  | 99 |
|         | AUTHORITY MAXX   | 5 oz/a     | PRE          |    |    |    |    |
|         | CADET            | 0.6 oz/a   | V2           |    |    |    |    |
|         | ACCOLADE         | 0.12 oz/a  | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |
| 8       | AUTHORITY MTZ    | 14 oz/a    | PRE          | 73 | 73 | 0  | 99 |
|         | ANTHEM           | 6.5 oz/a   | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V2           |    |    |    |    |
|         | NIS              | 0.25 % v/v | V2           |    |    |    |    |
|         | ROUNDUP POWERMAX | 22 fl oz/a | V5           |    |    |    |    |

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| Pest Type                     | W Weed             | W Weed            | W Weed          |                             |
|-------------------------------|--------------------|-------------------|-----------------|-----------------------------|
| Pest Code                     | AMBTR              | ERICA             | SETFA           |                             |
| Pest Scientific Name          | Ambrosia trifid    | Conyza canadensis | Setaria faberii |                             |
| Pest Name                     | Giant ragweed      | Marestail         | Giant foxtail   |                             |
| Crop Code                     |                    |                   | GLXMA           |                             |
| BBCH Scale                    |                    |                   | BSOY            |                             |
| Crop Scientific Name          |                    |                   | Glycine max     |                             |
| Crop Name                     |                    |                   | Soybean         |                             |
| Crop Variety                  |                    |                   |                 |                             |
| Description                   | AT POST V2         | AT POST V2        | AT POST V5      | AT POST V5                  |
| Part Rated                    |                    |                   |                 |                             |
| Rating Date                   | 6-2-2014           | 6-2-2014          | 6-20-2014       | 6-20-2014                   |
| Rating Type                   | CONTROL            | CONTROL           | INJURY          | CONTROL                     |
| Rating Unit                   | PERCENT            | PERCENT           | PERCENT         | PERCENT                     |
| Rating Timing                 | 4 WEEK             | 4 WEEK            | 7 WEEK          | 7 WEEK                      |
| Days After First/Last Applic. | 26 26              | 26 26             | 44 2            | 44 2                        |
| Trt No.                       | Treatment          | Rate              | Growth          |                             |
|                               |                    | Unit              | Stage           |                             |
| 9                             | AUTHORITY MTZ      | 14 oz/a           | PRE             | 13 87 14 76 15 0 16 99      |
|                               | MARVEL             | 7 oz/a            | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V2              |                             |
|                               | NIS                | 0.25 % v/v        | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V5              |                             |
| 10                            | ANTHEM             | 6.5 oz/a          | PRE             | 82 83 0 99                  |
|                               | AUTHORITY MTZ      | 14 oz/a           | PRE             |                             |
|                               | CADET              | 0.6 oz/a          | V2              |                             |
|                               | ACCOLADE           | 0.12 oz/a         | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V2              |                             |
|                               | NIS                | 0.25 % v/v        | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V5              |                             |
| 11                            | FIERCE             | 3 oz/a            | PRE             | 85 80 0 99                  |
|                               | PREFIX             | 32 oz/a           | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V2              |                             |
|                               | NIS                | 0.25 % v/v        | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V5              |                             |
| 12                            | BOUNDARY           | 32 oz/a           | PRE             | 87 99 0 99                  |
|                               | PREFIX             | 32 oz/a           | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V2              |                             |
|                               | NIS                | 0.25 % v/v        | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V5              |                             |
| 13                            | VALOR XLT          | 3 oz/a            | PRE             | 99 91 0 99                  |
|                               | PREFIX             | 32 oz/a           | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V2              |                             |
|                               | NIS                | 0.25 % v/v        | V2              |                             |
|                               | ROUNDUP POWERMAX   | 22 fl oz/a        | V5              |                             |
|                               | LSD (P=.05)        |                   |                 | 6.3 12.4 0.0 0.0            |
|                               | Standard Deviation |                   |                 | 3.8 7.4 0.0 0.0             |
|                               | CV                 |                   |                 | 4.98 10.38 0.0 0.0          |
|                               | Replicate F        |                   |                 | 1.045 4.613 0.000 0.000     |
|                               | Replicate Prob(F)  |                   |                 | 0.3671 0.0202 1.0000 1.0000 |
|                               | Treatment F        |                   |                 | 250.035 57.401 0.000 0.000  |
|                               | Treatment Prob(F)  |                   |                 | 0.0001 0.0001 1.0000 1.0000 |

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|                               |                 |                 |               |
|-------------------------------|-----------------|-----------------|---------------|
| Pest Type                     | W Weed          | W Weed          | W Weed        |
| Pest Code                     | AMBTR           | ERICA           | IPOSS         |
| Pest Scientific Name          | Ambrosia trifi> | Conyza canaden> | Ipomoea sp.   |
| Pest Name                     | Giant ragweed   | Marestail       | Morning glory |
| Crop Code                     |                 |                 |               |
| BBCH Scale                    |                 |                 |               |
| Crop Scientific Name          |                 |                 |               |
| Crop Name                     |                 |                 |               |
| Crop Variety                  |                 |                 |               |
| Description                   | AT POST V5      | AT POST V5      | AT POST V5    |
| Part Rated                    |                 |                 |               |
| Rating Date                   | 6-20-2014       | 6-20-2014       | 6-20-2014     |
| Rating Type                   | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 7 WEEK          | 7 WEEK          | 7 WEEK        |
| Days After First/Last Applic. | 44 2            | 44 2            | 44 2          |

| Trt No. | Treatment Name       | Rate       | Growth Stage | 17 | 18 | 19 |
|---------|----------------------|------------|--------------|----|----|----|
| 1       | UNTREATED CHECK      |            |              | 0  | 0  | 0  |
| 2       | ROUNDUP POWERMAX NIS | 22 oz/a    | V2           | 99 | 76 | 99 |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |    |    |    |
| 3       | AUTHORITY ELITE      | 24 oz/a    | V5           | 99 | 88 | 99 |
|         | ANTHEM               | 24 fl oz/a | PRE          |    |    |    |
|         | ROUNDUP POWERMAX NIS | 6.5 oz/a   | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |    |    |    |
| 4       | AUTHORITY ELITE      | 24 oz/a    | PRE          | 99 | 88 | 98 |
|         | MARVEL               | 7 oz/a     | V2           |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |    |    |    |
| 5       | AUTHORITY MAXX       | 5 oz/a     | PRE          | 99 | 92 | 99 |
|         | ANTHEM               | 6.5 oz/a   | V2           |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |    |    |    |
| 6       | AUTHORITY MAXX       | 5 oz/a     | PRE          | 99 | 95 | 99 |
|         | MARVEL               | 7 oz/a     | V2           |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |    |    |    |
| 7       | ANTHEM               | 6.5 oz/a   | PRE          | 99 | 98 | 99 |
|         | AUTHORITY MAXX       | 5 oz/a     | PRE          |    |    |    |
|         | CADET                | 0.6 oz/a   | V2           |    |    |    |
|         | ACCOLADE             | 0.12 oz/a  | V2           |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |    |    |    |
| 8       | AUTHORITY MTZ        | 14 oz/a    | PRE          | 99 | 79 | 96 |
|         | ANTHEM               | 6.5 oz/a   | V2           |    |    |    |
|         | ROUNDUP POWERMAX NIS | 22 fl oz/a | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 0.25 % v/v | V2           |    |    |    |
|         | ROUNDUP POWERMAX     | 22 fl oz/a | V5           |    |    |    |

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|                               |                 |                   |               |
|-------------------------------|-----------------|-------------------|---------------|
| Pest Type                     | W Weed          | W Weed            | W Weed        |
| Pest Code                     | AMBTR           | ERICA             | IPOSS         |
| Pest Scientific Name          | Ambrosia trifid | Conyza canadensis | Ipomoea sp.   |
| Pest Name                     | Giant ragweed   | Marestail         | Morning glory |
| Crop Code                     |                 |                   |               |
| BBCH Scale                    |                 |                   |               |
| Crop Scientific Name          |                 |                   |               |
| Crop Name                     |                 |                   |               |
| Crop Variety                  |                 |                   |               |
| Description                   | AT POST V5      | AT POST V5        | AT POST V5    |
| Part Rated                    |                 |                   |               |
| Rating Date                   | 6-20-2014       | 6-20-2014         | 6-20-2014     |
| Rating Type                   | CONTROL         | CONTROL           | CONTROL       |
| Rating Unit                   | PERCENT         | PERCENT           | PERCENT       |
| Rating Timing                 | 7 WEEK          | 7 WEEK            | 7 WEEK        |
| Days After First/Last Applic. | 44 2            | 44 2              | 44 2          |

| Trt No. | Treatment Name     | Rate Unit  | Growth Stage | 17     | 18     | 19      |
|---------|--------------------|------------|--------------|--------|--------|---------|
| 9       | AUTHORITY MTZ      | 14 oz/a    | PRE          | 99     | 73     | 99      |
|         | MARVEL             | 7 oz/a     | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V2           |        |        |         |
|         | NIS                | 0.25 % v/v | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V5           |        |        |         |
| 10      | ANTHEM             | 6.5 oz/a   | PRE          | 99     | 93     | 99      |
|         | AUTHORITY MTZ      | 14 oz/a    | PRE          |        |        |         |
|         | CADET              | 0.6 oz/a   | V2           |        |        |         |
|         | ACCOLADE           | 0.12 oz/a  | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V2           |        |        |         |
|         | NIS                | 0.25 % v/v | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V5           |        |        |         |
| 11      | FIERCE             | 3 oz/a     | PRE          | 99     | 86     | 99      |
|         | PREFIX             | 32 oz/a    | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V2           |        |        |         |
|         | NIS                | 0.25 % v/v | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V5           |        |        |         |
| 12      | BOUNDARY           | 32 oz/a    | PRE          | 99     | 89     | 99      |
|         | PREFIX             | 32 oz/a    | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V2           |        |        |         |
|         | NIS                | 0.25 % v/v | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V5           |        |        |         |
| 13      | VALOR XLT          | 3 oz/a     | PRE          | 99     | 95     | 99      |
|         | PREFIX             | 32 oz/a    | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V2           |        |        |         |
|         | NIS                | 0.25 % v/v | V2           |        |        |         |
|         | ROUNDUP POWERMAX   | 22 fl oz/a | V5           |        |        |         |
|         | LSD (P=.05)        |            |              | 0.0    | 17.3   | 2.6     |
|         | Standard Deviation |            |              | 0.0    | 10.3   | 1.5     |
|         | CV                 |            |              | 0.0    | 12.7   | 1.68    |
|         | Replicate F        |            |              | 0.000  | 2.358  | 1.857   |
|         | Replicate Prob(F)  |            |              | 1.0000 | 0.1162 | 0.1779  |
|         | Treatment F        |            |              | 0.000  | 18.381 | 963.258 |
|         | Treatment Prob(F)  |            |              | 1.0000 | 0.0001 | 0.0001  |

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NO TILL SOYBEAN V

Trial ID: S14026  
Protocol ID: FMC-SOY-PRE-POST  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: RUSTY MITCHELL

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

STEME, *Stellaria media*, = US  
LAMPU, *Lamium purpureum*, = US  
TAROF, *Taraxacum officinale*, = US  
SETFA, *Setaria faberi*, = US  
AMBTR, *Ambrosia trifida*, = US  
ERICA, *Conyza canadensis*, = US  
IPOSS, *Ipomoea sp.*, = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Rating Unit

PERCENT = percent



**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 7.5 IN  
**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Planting Date:** 5-6-2014  
**Planting Method:** DRILLE drilled  
**Emergence Date:** 5-14-2014

**Pest Description**

- Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed
- Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel
- Pest 3 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion
- Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail
- Pest 5 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed
- Pest 6 Type:** W **Code:** ERICA *Conyza canadensis*  
**Common Name:** Marestalk
- Pest 7 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 8.5 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 374 FT2  
**Replications:** 3

**Site Type:** FIELD field  
**Treatments:** 13  
**Tillage Type:** NOTILL no-till  
**Study Design:** RAOBL Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6  
**% Silt:** 62  
**% Clay:** 32

**% OM:** 2.6  
**pH:** 6.4  
**CEC:** 18  
**Texture:** SIL silt loam  
**Soil Name:** MAURY SILT LOAM  
**Fert. Level:** E excellent  
**Soil Drainage:** E excellent



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**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet

**Closest Weather Station:** SPINDLETOP

**Distance, Unit:** 2.25 MI

**Application Description**

|                                   | <b>A</b>  | <b>B</b>  | <b>C</b>  |
|-----------------------------------|-----------|-----------|-----------|
| <b>Application Date:</b>          | 5-7-2014  | 6-2-2014  | 6-18-2014 |
| <b>Appl. Start Time:</b>          |           | 1 PM      |           |
| <b>Application Method:</b>        | SPRAY     | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | V2        | V5        |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 84 F      | 76 F      | 88 F      |
| <b>% Relative Humidity:</b>       | 38        | 70        | 52        |
| <b>Wind Velocity, Unit:</b>       | 6 MPH     | 10 MPH    | 6 MPH     |
| <b>Wind Direction:</b>            | SW        | WNW       | SW        |
| <b>Soil Temperature, Unit:</b>    | 63 F      | 68 F      | 76 F      |
| <b>Soil Moisture:</b>             | GOOD      | NORMAL    | DRY       |
| <b>% Cloud Cover:</b>             | 20        | 50        | 30        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 6-4-2014  | 6-19-2014 |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|---------------------------------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            | V2 95      | V5 95      |
| <b>Height, Unit:</b>            |            | 5 IN       | 8 IN       |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | STEME W  | STEME W  | STEME W  |
| <b>Height, Unit:</b>             | 3 IN     | 3 IN     |          |
| <b>Pest 2 Code, Type, Scale:</b> | LAMPU W  | LAMPU W  | LAMPU W  |
| <b>Height, Unit:</b>             | 3 IN     | 3 IN     |          |
| <b>Pest 3 Code, Type, Scale:</b> | TAROF W  | TAROF W  | TAROF W  |
| <b>Height, Unit:</b>             | 2 IN     | 3 IN     | 4 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | SETFA W  | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             | 1 IN     | 2 IN     | 3 IN     |
| <b>Pest 5 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             | 1 IN     | 3 IN     | 6 IN     |
| <b>Pest 6 Code, Type, Scale:</b> | ERICA W  | ERICA W  | ERICA W  |
| <b>Height, Unit:</b>             | 2 IN     | 3 IN     | 4 IN     |
| <b>Pest 7 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 2 IN     |          |

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**Application Equipment**

|                                  | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|----------------------------------|------------|------------|------------|
| <b>Appl. Equipment:</b>          | ATV        | ATV        | ATV        |
| <b>Equipment Type:</b>           | ALTEVE     | ALTEVE     | ALTEVE     |
| <b>Operation Pressure, Unit:</b> | 30 PSI     | 30 PSI     | 30 PSI     |
| <b>Nozzle Type:</b>              | FLAT FAN   | FLAT FAN   | FLAT FAN   |
| <b>Nozzle Size:</b>              | 8004 DG    | 8004 DG    | 8004 DG    |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN      | 20 IN      | 20 IN      |
| <b>Boom Length, Unit:</b>        | 8.5 FT     | 8.5 FT     | 8.5 FT     |
| <b>Boom Height, Unit:</b>        | 30 IN      | 30 IN      | 30 IN      |
| <b>Ground Speed, Unit:</b>       | 4 MPH      | 4 MPH      | 4 MPH      |
| <b>Carrier:</b>                  | WATER      | WATER      | WATER      |
| <b>Spray Volume, Unit:</b>       | 24 GPA     | 24 GPA     | 24 GPA     |
| <b>Mix Size, Unit:</b>           | 2.7 liters | 2.7 liters | 2.7 liters |
| <b>Propellant:</b>               | CO2        | CO2        | CO2        |

Plant and Soil Science, U of KY  
Weed Science Research

NO TILL SOYBEAN VI

Trial ID: S14027  
Protocol ID: HGLXMAFOMME1401  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: THOMAS HAYDEN

|                               |             |                 |                 |                 |                |
|-------------------------------|-------------|-----------------|-----------------|-----------------|----------------|
| Pest Type                     |             | W Weed          | W Weed          | W Weed          | W Weed         |
| Pest Code                     |             | STEME           | LAMPU           | TAROF           | SETFA          |
| Pest Scientific Name          |             | Stellaria media | Lamium purpure> | Taraxacum offi> | Setaria faberi |
| Pest Name                     |             | Common chickwe> | Purple deadnet> | Common dandel>  | Giant foxtail  |
| Crop Code                     | GLXMA       |                 |                 |                 |                |
| BBCH Scale                    | BSOY        |                 |                 |                 |                |
| Crop Scientific Name          | Glycine max |                 |                 |                 |                |
| Crop Name                     | Soybean     |                 |                 |                 |                |
| Crop Variety                  |             |                 |                 |                 |                |
| Description                   |             |                 |                 |                 |                |
| Part Rated                    |             |                 |                 |                 |                |
| Rating Date                   | 5-21-2014   | 5-21-2014       | 5-21-2014       | 5-21-2014       | 5-21-2014      |
| Rating Type                   | INJURY      | CONTROL         | CONTROL         | CONTROL         | CONTROL        |
| Rating Unit                   | PERCENT     | PERCENT         | PERCENT         | PERCENT         | PERCENT        |
| Rating Timing                 | 2 WEEK      | 2 WEEK          | 2 WEEK          | 2 WEEK          | 2 WEEK         |
| Days After First/Last Applic. | 14 14       | 14 14           | 14 14           | 14 14           | 14 14          |

| Trt | Treatment          | Rate         | Growth | 1      |  | 2      |  | 3      |  | 4      |  | 5      |  |
|-----|--------------------|--------------|--------|--------|--|--------|--|--------|--|--------|--|--------|--|
| No. | Name               | Rate Unit    | Stage  |        |  |        |  |        |  |        |  |        |  |
| 1   | STATEMENT          | 1.31 lb ai/a | PRE    | 0      |  | 99     |  | 99     |  | 99     |  | 99     |  |
| 2   | PREFIX             | 1.32 lb ai/a | PRE    | 0      |  | 99     |  | 99     |  | 99     |  | 99     |  |
| 3   | CHECK              |              |        | 0      |  | 0      |  | 0      |  | 0      |  | 0      |  |
|     | LSD (P=.05)        |              |        | 0.0    |  | 0.0    |  | 0.0    |  | 0.0    |  | 0.0    |  |
|     | Standard Deviation |              |        | 0.0    |  | 0.0    |  | 0.0    |  | 0.0    |  | 0.0    |  |
|     | CV                 |              |        | 0.0    |  | 0.0    |  | 0.0    |  | 0.0    |  | 0.0    |  |
|     | Replicate F        |              |        | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  |
|     | Replicate Prob(F)  |              |        | 1.0000 |  | 1.0000 |  | 1.0000 |  | 1.0000 |  | 1.0000 |  |
|     | Treatment F        |              |        | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  | 0.000  |  |
|     | Treatment Prob(F)  |              |        | 1.0000 |  | 1.0000 |  | 1.0000 |  | 1.0000 |  | 1.0000 |  |

|                               |                    |                  |                  |             |                 |                 |        |        |
|-------------------------------|--------------------|------------------|------------------|-------------|-----------------|-----------------|--------|--------|
| Pest Type                     |                    | W Weed           | W Weed           |             | W Weed          | W Weed          |        |        |
| Pest Code                     |                    | AMBTR            | ERICA            |             | STEME           | LAMPU           |        |        |
| Pest Scientific Name          |                    | Ambrosia trifi>  | Conyza canadens> |             | Stellaria media | Lamium purpure> |        |        |
| Pest Name                     |                    | Giant ragweed    | Marestail        |             | Common chickwe> | Purple deadnet> |        |        |
| Crop Code                     |                    |                  |                  | GLXMA       |                 |                 |        |        |
| BBCH Scale                    |                    |                  |                  | BSOY        |                 |                 |        |        |
| Crop Scientific Name          |                    |                  |                  | Glycine max |                 |                 |        |        |
| Crop Name                     |                    |                  |                  | Soybean     |                 |                 |        |        |
| Crop Variety                  |                    |                  |                  |             |                 |                 |        |        |
| Description                   |                    |                  |                  |             |                 |                 |        |        |
| Part Rated                    |                    |                  |                  |             |                 |                 |        |        |
| Rating Date                   |                    | 5-21-2014        | 5-21-2014        | 6-6-2014    | 6-6-2014        | 6-6-2014        |        |        |
| Rating Type                   |                    | CONTROL          | CONTROL          | INJURY      | CONTROL         | CONTROL         |        |        |
| Rating Unit                   |                    | PERCENT          | PERCENT          | PERCENT     | PERCENT         | PERCENT         |        |        |
| Rating Timing                 |                    | 2 WEEK           | 2 WEEK           | 4 WEEK      | 4 WEEK          | 4 WEEK          |        |        |
| Days After First/Last Applic. |                    | 14 14            | 14 14            | 30 30       | 30 30           | 30 30           |        |        |
| Trt No.                       | Treatment Name     | Rate             | Growth Stage     | 6           | 7               | 8               | 9      | 10     |
|                               |                    | Rate Unit        |                  |             |                 |                 |        |        |
|                               | 1 STATEMENT        | 1.31 lb ai/a PRE |                  | 96          | 70              | 0               | 99     | 99     |
|                               | 2 PREFIX           | 1.32 lb ai/a PRE |                  | 99          | 57              | 0               | 99     | 99     |
|                               | 3 CHECK            |                  |                  | 0           | 0               | 0               | 0      | 0      |
|                               | LSD (P=.05)        |                  |                  | 6.8         | 15.1            | 0.0             | 0.0    | 0.0    |
|                               | Standard Deviation |                  |                  | 3.0         | 6.7             | 0.0             | 0.0    | 0.0    |
|                               | CV                 |                  |                  | 4.62        | 15.79           | 0.0             | 0.0    | 0.0    |
|                               | Replicate F        |                  |                  | 1.000       | 1.000           | 0.000           | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                  |                  | 0.4444      | 0.4444          | 1.0000          | 1.0000 | 1.0000 |
|                               | Treatment F        |                  |                  | 1057.000    | 93.250          | 0.000           | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                  |                  | 0.0001      | 0.0004          | 1.0000          | 1.0000 | 1.0000 |

|                               |                    |                  |                 |                  |             |          |        |        |
|-------------------------------|--------------------|------------------|-----------------|------------------|-------------|----------|--------|--------|
| Pest Type                     | W Weed             | W Weed           | W Weed          | W Weed           |             |          |        |        |
| Pest Code                     | TAROF              | SETFA            | AMBTR           | ERICA            |             |          |        |        |
| Pest Scientific Name          | Taraxacum offi>    | Setaria faberi   | Ambrosia trifi> | Conyza canadens> |             |          |        |        |
| Pest Name                     | Common dandelion>  | Giant foxtail    | Giant ragweed   | Marestail        |             |          |        |        |
| Crop Code                     |                    |                  |                 |                  | GLXMA       |          |        |        |
| BBCH Scale                    |                    |                  |                 |                  | BSOY        |          |        |        |
| Crop Scientific Name          |                    |                  |                 |                  | Glycine max |          |        |        |
| Crop Name                     |                    |                  |                 |                  | Soybean     |          |        |        |
| Crop Variety                  |                    |                  |                 |                  |             |          |        |        |
| Description                   |                    |                  |                 |                  |             |          |        |        |
| Part Rated                    |                    |                  |                 |                  |             |          |        |        |
| Rating Date                   | 6-6-2014           | 6-6-2014         | 6-6-2014        | 6-6-2014         | 6-30-2014   |          |        |        |
| Rating Type                   | CONTROL            | CONTROL          | CONTROL         | CONTROL          | INJURY      |          |        |        |
| Rating Unit                   | PERCENT            | PERCENT          | PERCENT         | PERCENT          | PERCENT     |          |        |        |
| Rating Timing                 | 4 WEEK             | 4 WEEK           | 4 WEEK          | 4 WEEK           | 8 WEEK      |          |        |        |
| Days After First/Last Applic. | 30 30              | 30 30            | 30 30           | 30 30            | 54 54       |          |        |        |
| Trt No.                       | Treatment Name     | Rate             | Growth Stage    | 11               | 12          | 13       | 14     | 15     |
| 1                             | STATEMENT          | 1.31 lb ai/a PRE |                 | 99               | 99          | 96       | 70     | 0      |
| 2                             | PREFIX             | 1.32 lb ai/a PRE |                 | 99               | 99          | 99       | 57     | 0      |
| 3                             | CHECK              |                  |                 | 0                | 0           | 0        | 0      | 0      |
|                               | LSD (P=.05)        |                  |                 | 0.0              | 0.0         | 6.8      | 15.1   | 0.0    |
|                               | Standard Deviation |                  |                 | 0.0              | 0.0         | 3.0      | 6.7    | 0.0    |
|                               | CV                 |                  |                 | 0.0              | 0.0         | 4.62     | 15.79  | 0.0    |
|                               | Replicate F        |                  |                 | 0.000            | 0.000       | 1.000    | 1.000  | 0.000  |
|                               | Replicate Prob(F)  |                  |                 | 1.0000           | 1.0000      | 0.4444   | 0.4444 | 1.0000 |
|                               | Treatment F        |                  |                 | 0.000            | 0.000       | 1057.000 | 93.250 | 0.000  |
|                               | Treatment Prob(F)  |                  |                 | 1.0000           | 1.0000      | 0.0001   | 0.0004 | 1.0000 |

|                               |                    |                  |                 |                  |
|-------------------------------|--------------------|------------------|-----------------|------------------|
| Pest Type                     |                    | W Weed           | W Weed          | W Weed           |
| Pest Code                     |                    | SETFA            | AMBTR           | ERICA            |
| Pest Scientific Name          |                    | Setaria faberi   | Ambrosia trifi> | Conyza canadens> |
| Pest Name                     |                    | Giant foxtail    | Giant ragweed   | Marestail        |
| Crop Code                     |                    |                  |                 |                  |
| BBCH Scale                    |                    |                  |                 |                  |
| Crop Scientific Name          |                    |                  |                 |                  |
| Crop Name                     |                    |                  |                 |                  |
| Crop Variety                  |                    |                  |                 |                  |
| Description                   |                    |                  |                 |                  |
| Part Rated                    |                    |                  |                 |                  |
| Rating Date                   |                    | 6-30-2014        | 6-30-2014       | 6-30-2014        |
| Rating Type                   |                    | CONTROL          | CONTROL         | CONTROL          |
| Rating Unit                   |                    | PERCENT          | PERCENT         | PERCENT          |
| Rating Timing                 |                    | 8 WEEK           | 8 WEEK          | 8 WEEK           |
| Days After First/Last Applic. |                    | 54 54            | 54 54           | 54 54            |
| Trt No.                       | Treatment Name     | Rate             | Growth Stage    |                  |
|                               |                    | Rate Unit        |                 |                  |
|                               |                    |                  | 16              | 17               |
|                               |                    |                  |                 | 18               |
|                               | 1 STATEMENT        | 1.31 lb ai/a PRE | 99              | 92               |
|                               | 2 PREFIX           | 1.32 lb ai/a PRE | 99              | 94               |
|                               | 3 CHECK            |                  | 0               | 0                |
|                               | LSD (P=.05)        |                  | 0.0             | 7.9              |
|                               | Standard Deviation |                  | 0.0             | 3.5              |
|                               | CV                 |                  | 0.0             | 5.64             |
|                               | Replicate F        |                  | 0.000           | 3.321            |
|                               | Replicate Prob(F)  |                  | 1.0000          | 0.1413           |
|                               | Treatment F        |                  | 0.000           | 707.140          |
|                               | Treatment Prob(F)  |                  | 1.0000          | 0.0001           |

Plant and Soil Science, U of KY  
Weed Science Research

NO TILL SOYBEAN VI

Trial ID: S14027  
Protocol ID: HGLXMAFOMME1401  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: THOMAS HAYDEN

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

STEME, *Stellaria media*, = US  
LAMPU, *Lamium purpureum*, = US  
TAROF, *Taraxacum officinale*, = US  
SETFA, *Setaria faberi*, = US  
AMBTR, *Ambrosia trifida*, = US  
ERICA, *Conyza canadensis*, = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Rating Unit

PERCENT = percent





**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Date:** 5-6-2014

**Planting Method:** DRILLE drilled

**Planting Rate, Unit:** 200000 S/A

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 7.5 IN

**Emergence Date:** 5-13-2014

**Soil Temperature, Unit:** 64 f

**Soil Moisture:** GOOD good

**Seed Bed:** MEDIUM medium

**Pest Description**

**Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion

**Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 5 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 6 Type:** W **Code:** ERICA *Conyza canadensis*  
**Common Name:** Marestalk

**Site and Design**

**Treated Plot Width:** 8.5 FT

**Site Type:** FIELD field

**Treated Plot Length:** 44 FT

**Treated Plot Area:** 374 FT<sup>2</sup>

**Treatments:** 3

**Tillage Type:** NOTILL no-till

**Replications:** 3

**Study Design:** RACOB L Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY

**% Sand:** 6 **% OM:** 2.6

**Texture:** SIL silt loam

**% Silt:** 62 **pH:** 6.4

**Soil Name:** MAURY SILT LOAM

**% Clay:** 32 **CEC:** 18

**Fert. Level:** E excellent

**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet

**Closest Weather Station:** SPINDLETOP

**Distance, Unit:** 2.25 MI

Plant and Soil Science, U of KY  
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**Application Description**

**A**

**Application Date:** 5-7-2014  
**Application Method:** SPRAY  
**Application Timing:** PRE  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 84 F  
**% Relative Humidity:** 38  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** SW  
**Soil Temperature, Unit:** 61 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 20  
**Next Moisture Occurred On:** 5-9-2014

**Crop Stage At Each Application**

**A**

**Crop 1 Code, BBCH Scale:** GLXMA BSOY

**Pest Stage At Each Application**

**A**

**Pest 1 Code, Type, Scale:** STEME W  
**Pest 2 Code, Type, Scale:** LAMPU W  
**Pest 3 Code, Type, Scale:** TAROF W  
**Pest 4 Code, Type, Scale:** SETFA W  
**Pest 5 Code, Type, Scale:** AMBTR W  
**Pest 6 Code, Type, Scale:** ERICA W

**Application Equipment**

**A**

**Appl. Equipment:** ATV  
**Operation Pressure, Unit:** 30 PSI  
**Nozzle Type:** FLAT FAN  
**Nozzle Size:** 8004 DG  
**Nozzle Spacing, Unit:** 20 IN  
**Boom Length, Unit:** 8.5 FT  
**Boom Height, Unit:** 20 IN  
**Ground Speed, Unit:** 4 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 24 GPA  
**Mix Size, Unit:** 2.7 liters  
**Propellant:** CO2

Plant and Soil Science, U of KY  
Weed Science Research

NO TILL SOYBEAN VII

Trial ID: S14028  
Protocol ID: SYN-NT-SOY  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: SCOTT CULLY

|                               |                 |                 |                 |
|-------------------------------|-----------------|-----------------|-----------------|
| Pest Type                     | W Weed          | W Weed          | W Weed          |
| Pest Code                     | STEME           | LAMPU           | TAROF           |
| Pest Scientific Name          | Stellaria media | Lamium purpure> | Taraxacum offi> |
| Pest Name                     | Common chickwe> | Purple deadnet> | Common dandel>  |
| Crop Code                     | GLXMA           |                 |                 |
| BBCH Scale                    | BSOY            |                 |                 |
| Crop Scientific Name          | Glycine max     |                 |                 |
| Crop Name                     | Soybean         |                 |                 |
| Crop Variety                  |                 |                 |                 |
| Description                   |                 |                 |                 |
| Part Rated                    |                 |                 |                 |
| Rating Date                   | 5-21-2014       | 5-21-2014       | 5-21-2014       |
| Rating Type                   | INJURY          | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT         |
| Rating Timing                 | 2 WEEK          | 2 WEEK          | 2 WEEK          |
| Days After First/Last Applic. | 14 2            | 14 2            | 14 2            |

| Trt No. | Treatment Name   | Rate  | Unit    | Growth Stage | 1 | 2  | 3  | 4  |
|---------|------------------|-------|---------|--------------|---|----|----|----|
| 1       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 0 | 99 | 99 | 99 |
|         | BOUNDARY         | 1.5   | pt/a    | PRE          |   |    |    |    |
|         | FLEXSTAR GT      | 3.5   | pt/a    | +14DAY       |   |    |    |    |
| 2       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 0 | 99 | 99 | 99 |
|         | PREFIX           | 2     | pt/a    | PRE          |   |    |    |    |
|         | SEQUENCE         | 2.5   | pt/a    | +14DAY       |   |    |    |    |
| 3       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 0 | 99 | 99 | 99 |
|         | BOUNDARY         | 1.5   | pt/a    | PRE          |   |    |    |    |
|         | PREFIX           | 2     | pt/a    | +14DAY       |   |    |    |    |
|         | TOUCHDOWN TOTAL  | 32    | oz/a    | +14DAY       |   |    |    |    |
| 4       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 0 | 99 | 99 | 99 |
|         | VERDICT          | 5     | oz/a    | PRE          |   |    |    |    |
|         | WARRANT          | 1.5   | qt/a    | MP           |   |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |   |    |    |    |
| 5       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 0 | 99 | 99 | 99 |
|         | VALOR XLT        | 4     | oz/a    | PRE          |   |    |    |    |
|         | WARRANT          | 1.25  | qt/a    | MP           |   |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |   |    |    |    |
| 6       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 0 | 99 | 99 | 99 |
|         | STALWART MTZ     | 1.5   | pt/a    | PRE          |   |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |   |    |    |    |
| 7       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 0 | 99 | 99 | 99 |
|         | AUTHORITY MAXX   | 5     | oz/a    | PRE          |   |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |   |    |    |    |
| 8       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 0 | 99 | 99 | 99 |
|         | AUTHORITY MTZ    | 14    | oz/a    | PRE          |   |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |   |    |    |    |
| 9       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 0 | 99 | 99 | 99 |
|         | ANTHEM           | 6.5   | oz/a    | PRE          |   |    |    |    |
|         | AUTHORITY MTZ    | 14    | oz/a    | PRE          |   |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |   |    |    |    |
| 10      | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 0 | 99 | 99 | 99 |
|         | VALOR XLT        | 3     | oz/a    | PRE          |   |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |   |    |    |    |
| 11      | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 0 | 99 | 99 | 99 |
|         | AUTHORITY FIRST  | 6.450 | oz wt/a | PRE          |   |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |   |    |    |    |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |             |                 |                 |                 |
|-------------------------------|-------------|-----------------|-----------------|-----------------|
| Pest Type                     |             | W Weed          | W Weed          | W Weed          |
| Pest Code                     |             | STEME           | LAMPU           | TAROF           |
| Pest Scientific Name          |             | Stellaria media | Lamium purpure> | Taraxacum offi> |
| Pest Name                     |             | Common chickwe> | Purple deadnet> | Common dandel>  |
| Crop Code                     | GLXMA       |                 |                 |                 |
| BBCH Scale                    | BSOY        |                 |                 |                 |
| Crop Scientific Name          | Glycine max |                 |                 |                 |
| Crop Name                     | Soybean     |                 |                 |                 |
| Crop Variety                  |             |                 |                 |                 |
| Description                   |             |                 |                 |                 |
| Part Rated                    |             |                 |                 |                 |
| Rating Date                   | 5-21-2014   | 5-21-2014       | 5-21-2014       | 5-21-2014       |
| Rating Type                   | INJURY      | CONTROL         | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT     | PERCENT         | PERCENT         | PERCENT         |
| Rating Timing                 | 2 WEEK      | 2 WEEK          | 2 WEEK          | 2 WEEK          |
| Days After First/Last Applic. | 14 2        | 14 2            | 14 2            | 14 2            |

| Trt No. | Treatment Name     | Rate          | Unit | Growth Stage | 1      | 2      | 3      | 4      |
|---------|--------------------|---------------|------|--------------|--------|--------|--------|--------|
| 12      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 0      | 99     | 99     | 99     |
|         | FIERCE             | 4.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | GANGSTER FR        | 0.450 oz wt/a |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a    |      | MP           |        |        |        |        |
| 13      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 0      | 99     | 99     | 99     |
|         | ENVIVE             | 3 oz wt/a     |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a    |      | MP           |        |        |        |        |
| 14      | OPTILL             | 2 oz wt/a     |      | PRE          | 0      | 99     | 99     | 99     |
|         | ZIDUA              | 2 oz wt/a     |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
| 15      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 0      | 99     | 99     | 99     |
|         | VERDICT            | 5 fl oz/a     |      | PRE          |        |        |        |        |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
| 16      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 0      | 99     | 99     | 99     |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | SHARPEN            | 1 fl oz/a     |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
| 17      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 0      | 99     | 99     | 99     |
|         | SONIC              | 4.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
| 18      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 0      | 99     | 99     | 99     |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | SHARPEN            | 1 fl oz/a     |      | PRE          |        |        |        |        |
|         | METRIBUZIN         | 5 oz wt/a     |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
|         | LSD (P=.05)        |               |      |              | 0.0    | 0.0    | 0.0    | 0.0    |
|         | Standard Deviation |               |      |              | 0.0    | 0.0    | 0.0    | 0.0    |
|         | CV                 |               |      |              | 0.0    | 0.0    | 0.0    | 0.0    |
|         | Replicate F        |               |      |              | 0.000  | 0.000  | 0.000  | 0.000  |
|         | Replicate Prob(F)  |               |      |              | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|         | Treatment F        |               |      |              | 0.000  | 0.000  | 0.000  | 0.000  |
|         | Treatment Prob(F)  |               |      |              | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |                |                 |               |              |
|-------------------------------|----------------|-----------------|---------------|--------------|
| Pest Type                     | W Weed         | W Weed          | W Weed        |              |
| Pest Code                     | SETFA          | AMBTR           | IPOSS         |              |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Ipomoea sp.   |              |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Morning glory |              |
| Crop Code                     |                |                 |               | GLXMA        |
| BBCH Scale                    |                |                 |               | BSOY         |
| Crop Scientific Name          |                |                 |               | Glycine max  |
| Crop Name                     |                |                 |               | Soybean      |
| Crop Variety                  |                |                 |               |              |
| Description                   |                |                 |               | AT POST APPL |
| Part Rated                    |                |                 |               |              |
| Rating Date                   | 5-21-2014      | 5-21-2014       | 5-21-2014     | 6-2-2014     |
| Rating Type                   | CONTROL        | CONTROL         | CONTROL       | INJURY       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT       | PERCENT      |
| Rating Timing                 | 2 WEEK         | 2 WEEK          | 2 WEEK        | 4 WEEK       |
| Days After First/Last Applic. | 14 2           | 14 2            | 14 2          | 26 14        |

| Trt No. | Treatment Name   | Rate  | Unit    | Growth Stage | 5  | 6  | 7  | 8 |
|---------|------------------|-------|---------|--------------|----|----|----|---|
| 1       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 | 0 |
|         | BOUNDARY         | 1.5   | pt/a    | PRE          |    |    |    |   |
|         | FLEXSTAR GT      | 3.5   | pt/a    | +14DAY       |    |    |    |   |
| 2       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 | 0 |
|         | PREFIX           | 2     | pt/a    | PRE          |    |    |    |   |
|         | SEQUENCE         | 2.5   | pt/a    | +14DAY       |    |    |    |   |
| 3       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 | 0 |
|         | BOUNDARY         | 1.5   | pt/a    | PRE          |    |    |    |   |
|         | PREFIX           | 2     | pt/a    | +14DAY       |    |    |    |   |
|         | TOUCHDOWN TOTAL  | 32    | oz/a    | +14DAY       |    |    |    |   |
| 4       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 92 | 99 | 0 |
|         | VERDICT          | 5     | oz/a    | PRE          |    |    |    |   |
|         | WARRANT          | 1.5   | qt/a    | MP           |    |    |    |   |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |   |
| 5       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0 |
|         | VALOR XLT        | 4     | oz/a    | PRE          |    |    |    |   |
|         | WARRANT          | 1.25  | qt/a    | MP           |    |    |    |   |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |   |
| 6       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 | 0 |
|         | STALWART MTZ     | 1.5   | pt/a    | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |   |
| 7       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0 |
|         | AUTHORITY MAXX   | 5     | oz/a    | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |   |
| 8       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0 |
|         | AUTHORITY MTZ    | 14    | oz/a    | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |   |
| 9       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 95 | 99 | 0 |
|         | ANTHEM           | 6.5   | oz/a    | PRE          |    |    |    |   |
|         | AUTHORITY MTZ    | 14    | oz/a    | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |   |
| 10      | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0 |
|         | VALOR XLT        | 3     | oz/a    | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |   |
| 11      | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0 |
|         | AUTHORITY FIRST  | 6.450 | oz wt/a | PRE          |    |    |    |   |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |   |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |                |                  |               |              |
|-------------------------------|----------------|------------------|---------------|--------------|
| Pest Type                     | W Weed         | W Weed           | W Weed        |              |
| Pest Code                     | SETFA          | AMBTR            | IPOSS         |              |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifida | Ipomoea sp.   |              |
| Pest Name                     | Giant foxtail  | Giant ragweed    | Morning glory |              |
| Crop Code                     |                |                  |               | GLXMA        |
| BBCH Scale                    |                |                  |               | BSOY         |
| Crop Scientific Name          |                |                  |               | Glycine max  |
| Crop Name                     |                |                  |               | Soybean      |
| Crop Variety                  |                |                  |               |              |
| Description                   |                |                  |               | AT POST APPL |
| Part Rated                    |                |                  |               |              |
| Rating Date                   | 5-21-2014      | 5-21-2014        | 5-21-2014     | 6-2-2014     |
| Rating Type                   | CONTROL        | CONTROL          | CONTROL       | INJURY       |
| Rating Unit                   | PERCENT        | PERCENT          | PERCENT       | PERCENT      |
| Rating Timing                 | 2 WEEK         | 2 WEEK           | 2 WEEK        | 4 WEEK       |
| Days After First/Last Applic. | 14 2           | 14 2             | 14 2          | 26 14        |

| Trt No. | Treatment Name     | Rate          | Unit | Growth Stage | 5      | 6      | 7      | 8      |
|---------|--------------------|---------------|------|--------------|--------|--------|--------|--------|
| 12      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     | 0      |
|         | FIERCE             | 4.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | GANGSTER FR        | 0.450 oz wt/a |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a    |      | MP           |        |        |        |        |
| 13      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     | 0      |
|         | ENVIVE             | 3 oz wt/a     |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a    |      | MP           |        |        |        |        |
| 14      | OPTILL             | 2 oz wt/a     |      | PRE          | 99     | 99     | 99     | 0      |
|         | ZIDUA              | 2 oz wt/a     |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
| 15      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     | 0      |
|         | VERDICT            | 5 fl oz/a     |      | PRE          |        |        |        |        |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
| 16      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     | 0      |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | SHARPEN            | 1 fl oz/a     |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
| 17      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     | 0      |
|         | SONIC              | 4.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
| 18      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     | 0      |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |        |
|         | SHARPEN            | 1 fl oz/a     |      | PRE          |        |        |        |        |
|         | METRIBUZIN         | 5 oz wt/a     |      | PRE          |        |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |        |
|         | LSD (P=.05)        |               |      |              | 0.0    | 1.1    | 0.0    | 0.0    |
|         | Standard Deviation |               |      |              | 0.0    | 0.7    | 0.0    | 0.0    |
|         | CV                 |               |      |              | 0.0    | 0.69   | 0.0    | 0.0    |
|         | Replicate F        |               |      |              | 0.000  | 1.000  | 0.000  | 0.000  |
|         | Replicate Prob(F)  |               |      |              | 1.0000 | 0.3784 | 1.0000 | 1.0000 |
|         | Treatment F        |               |      |              | 0.000  | 23.878 | 0.000  | 0.000  |
|         | Treatment Prob(F)  |               |      |              | 1.0000 | 0.0001 | 1.0000 | 1.0000 |

Plant and Soil Science, U of KY  
Weed Science Research

|                               |                 |                 |                 |
|-------------------------------|-----------------|-----------------|-----------------|
| Pest Type                     | W Weed          | W Weed          | W Weed          |
| Pest Code                     | STEME           | LAMPU           | TAROF           |
| Pest Scientific Name          | Stellaria media | Lamium purpure> | Taraxacum offi> |
| Pest Name                     | Common chickwe> | Purple deadnet> | Common dandel>  |
| Crop Code                     |                 |                 |                 |
| BBCH Scale                    |                 |                 |                 |
| Crop Scientific Name          |                 |                 |                 |
| Crop Name                     |                 |                 |                 |
| Crop Variety                  |                 |                 |                 |
| Description                   | AT POST APPL    | AT POST APPL    | AT POST APPL    |
| Part Rated                    |                 |                 |                 |
| Rating Date                   | 6-2-2014        | 6-2-2014        | 6-2-2014        |
| Rating Type                   | CONTROL         | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT         |
| Rating Timing                 | 4 WEEK          | 4 WEEK          | 4 WEEK          |
| Days After First/Last Applic. | 26 14           | 26 14           | 26 14           |

| Trt No. | Treatment Name   | Rate  | Unit    | Growth Stage | 9  | 10 | 11 |
|---------|------------------|-------|---------|--------------|----|----|----|
| 1       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 |
|         | BOUNDARY         | 1.5   | pt/a    | PRE          |    |    |    |
|         | FLEXSTAR GT      | 3.5   | pt/a    | +14DAY       |    |    |    |
| 2       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 |
|         | PREFIX           | 2     | pt/a    | PRE          |    |    |    |
|         | SEQUENCE         | 2.5   | pt/a    | +14DAY       |    |    |    |
| 3       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 |
|         | BOUNDARY         | 1.5   | pt/a    | PRE          |    |    |    |
|         | PREFIX           | 2     | pt/a    | +14DAY       |    |    |    |
|         | TOUCHDOWN TOTAL  | 32    | oz/a    | +14DAY       |    |    |    |
| 4       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 |
|         | VERDICT          | 5     | oz/a    | PRE          |    |    |    |
|         | WARRANT          | 1.5   | qt/a    | MP           |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |
| 5       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 |
|         | VALOR XLT        | 4     | oz/a    | PRE          |    |    |    |
|         | WARRANT          | 1.25  | qt/a    | MP           |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |
| 6       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 |
|         | STALWART MTZ     | 1.5   | pt/a    | PRE          |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |
| 7       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 |
|         | AUTHORITY MAXX   | 5     | oz/a    | PRE          |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |
| 8       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 |
|         | AUTHORITY MTZ    | 14    | oz/a    | PRE          |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |
| 9       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 |
|         | ANTHEM           | 6.5   | oz/a    | PRE          |    |    |    |
|         | AUTHORITY MTZ    | 14    | oz/a    | PRE          |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |
| 10      | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 |
|         | VALOR XLT        | 3     | oz/a    | PRE          |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |
| 11      | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 |
|         | AUTHORITY FIRST  | 6.450 | oz wt/a | PRE          |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |

Plant and Soil Science, U of KY  
Weed Science Research

|                      |                 |                 |                 |
|----------------------|-----------------|-----------------|-----------------|
| Pest Type            | W Weed          | W Weed          | W Weed          |
| Pest Code            | STEME           | LAMPU           | TAROF           |
| Pest Scientific Name | Stellaria media | Lamium purpure> | Taraxacum offi> |
| Pest Name            | Common chickwe> | Purple deadnet> | Common dandel>  |

Crop Code  
BBCH Scale

Crop Scientific Name

Crop Name

Crop Variety

Description

Part Rated

Rating Date

Rating Type

Rating Unit

Rating Timing

Days After First/Last Applic.

|  |              |              |              |
|--|--------------|--------------|--------------|
|  | AT POST APPL | AT POST APPL | AT POST APPL |
|  | 6-2-2014     | 6-2-2014     | 6-2-2014     |
|  | CONTROL      | CONTROL      | CONTROL      |
|  | PERCENT      | PERCENT      | PERCENT      |
|  | 4 WEEK       | 4 WEEK       | 4 WEEK       |
|  | 26 14        | 26 14        | 26 14        |

| Trt No. | Treatment Name     | Rate          | Unit | Growth Stage | 9      | 10     | 11     |
|---------|--------------------|---------------|------|--------------|--------|--------|--------|
| 12      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          |        | 99     | 99     |
|         | FIERCE             | 4.5 oz wt/a   |      | PRE          |        |        | 99     |
|         | GANGSTER FR        | 0.450 oz wt/a |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a    |      | MP           |        |        |        |
| 13      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     |        | 99     |
|         | ENVIVE             | 3 oz wt/a     |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a    |      | MP           |        |        |        |
| 14      | OPTILL             | 2 oz wt/a     |      | PRE          | 99     |        | 99     |
|         | ZIDUA              | 2 oz wt/a     |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
| 15      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     |        | 99     |
|         | VERDICT            | 5 fl oz/a     |      | PRE          |        |        |        |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
| 16      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     |        | 99     |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |
|         | SHARPEN            | 1 fl oz/a     |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
| 17      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     |        | 99     |
|         | SONIC              | 4.5 oz wt/a   |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
| 18      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     |        | 99     |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |
|         | SHARPEN            | 1 fl oz/a     |      | PRE          |        |        |        |
|         | METRIBUZIN         | 5 oz wt/a     |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
|         | LSD (P=.05)        |               |      |              | 0.0    | 0.0    | 0.0    |
|         | Standard Deviation |               |      |              | 0.0    | 0.0    | 0.0    |
|         | CV                 |               |      |              | 0.0    | 0.0    | 0.0    |
|         | Replicate F        |               |      |              | 0.000  | 0.000  | 0.000  |
|         | Replicate Prob(F)  |               |      |              | 1.0000 | 1.0000 | 1.0000 |
|         | Treatment F        |               |      |              | 0.000  | 0.000  | 0.000  |
|         | Treatment Prob(F)  |               |      |              | 1.0000 | 1.0000 | 1.0000 |



|                               |  |                 |               |             |
|-------------------------------|--|-----------------|---------------|-------------|
| Pest Type                     | W Weed                                 | W Weed          | W Weed        |             |
| Pest Code                     | SETFA                                  | AMBTR           | IPOSS         |             |
| Pest Scientific Name          | Setaria faberi                         | Ambrosia trifi> | Ipomoea sp.   |             |
| Pest Name                     | Giant foxtail                          | Giant ragweed   | Morning glory |             |
| Crop Code                     |  |                 |               | GLXMA       |
| BBCH Scale                    |  |                 |               | BSOY        |
| Crop Scientific Name          |  |                 |               | Glycine max |
| Crop Name                     |  |                 |               | Soybean     |
| Crop Variety                  |  |                 |               |             |
| Description                   | AT POST APPL AT POST APPL AT POST APPL |                 |               |             |
| Part Rated                    |  |                 |               |             |
| Rating Date                   | 6-2-2014                               | 6-2-2014        | 6-2-2014      | 6-30-2014   |
| Rating Type                   | CONTROL                                | CONTROL         | CONTROL       | INJURY      |
| Rating Unit                   | PERCENT                                | PERCENT         | PERCENT       | PERCENT     |
| Rating Timing                 | 4 WEEK                                 | 4 WEEK          | 4 WEEK        | 8 WEEK      |
| Days After First/Last Applic. | 26 14                                  | 26 14           | 26 14         | 54 28       |

| Trt No. | Treatment Name   | Rate  | Unit    | Growth Stage | 12 | 13 | 14 | 15 |
|---------|------------------|-------|---------|--------------|----|----|----|----|
| 1       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 | 0  |
|         | BOUNDARY         | 1.5   | pt/a    | PRE          |    |    |    |    |
|         | FLEXSTAR GT      | 3.5   | pt/a    | +14DAY       |    |    |    |    |
| 2       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 | 0  |
|         | PREFIX           | 2     | pt/a    | PRE          |    |    |    |    |
|         | SEQUENCE         | 2.5   | pt/a    | +14DAY       |    |    |    |    |
| 3       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 95 | 99 | 99 | 0  |
|         | BOUNDARY         | 1.5   | pt/a    | PRE          |    |    |    |    |
|         | PREFIX           | 2     | pt/a    | +14DAY       |    |    |    |    |
|         | TOUCHDOWN TOTAL  | 32    | oz/a    | +14DAY       |    |    |    |    |
| 4       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 86 | 99 | 99 | 0  |
|         | VERDICT          | 5     | oz/a    | PRE          |    |    |    |    |
|         | WARRANT          | 1.5   | qt/a    | MP           |    |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |    |
| 5       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0  |
|         | VALOR XLT        | 4     | oz/a    | PRE          |    |    |    |    |
|         | WARRANT          | 1.25  | qt/a    | MP           |    |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |    |
| 6       | GRAMOXONE INTEON | 2.5   | pt/a    | PRE          | 99 | 99 | 99 | 0  |
|         | STALWART MTZ     | 1.5   | pt/a    | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |    |
| 7       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0  |
|         | AUTHORITY MAXX   | 5     | oz/a    | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |    |
| 8       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0  |
|         | AUTHORITY MTZ    | 14    | oz/a    | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |    |
| 9       | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 83 | 99 | 99 | 0  |
|         | ANTHEM           | 6.5   | oz/a    | PRE          |    |    |    |    |
|         | AUTHORITY MTZ    | 14    | oz/a    | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |    |
| 10      | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0  |
|         | VALOR XLT        | 3     | oz/a    | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 22    | fl oz/a | MP           |    |    |    |    |
| 11      | ROUNDUP POWERMAX | 32    | fl oz/a | PRE          | 99 | 99 | 99 | 0  |
|         | AUTHORITY FIRST  | 6.450 | oz wt/a | PRE          |    |    |    |    |
|         | ROUNDUP POWERMAX | 32    | fl oz/a | MP           |    |    |    |    |

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| Pest Type                     | W Weed                                 | W Weed          | W Weed        |             |        |        |
|-------------------------------|--|-----------------|---------------|-------------|--------|--------|
| Pest Code                     | SETFA                                  | AMBTR           | IPOSS         |             |        |        |
| Pest Scientific Name          | Setaria faberi                         | Ambrosia trifi> | Ipomoea sp.   |             |        |        |
| Pest Name                     | Giant foxtail                          | Giant ragweed   | Morning glory |             |        |        |
| Crop Code                     |  |                 |               | GLXMA       |        |        |
| BBCH Scale                    |  |                 |               | BSOY        |        |        |
| Crop Scientific Name          |  |                 |               | Glycine max |        |        |
| Crop Name                     |  |                 |               | Soybean     |        |        |
| Crop Variety                  |  |                 |               |             |        |        |
| Description                   | AT POST APPL AT POST APPL AT POST APPL |                 |               |             |        |        |
| Part Rated                    |  |                 |               |             |        |        |
| Rating Date                   | 6-2-2014                               | 6-2-2014        | 6-2-2014      | 6-30-2014   |        |        |
| Rating Type                   | CONTROL                                | CONTROL         | CONTROL       | INJURY      |        |        |
| Rating Unit                   | PERCENT                                | PERCENT         | PERCENT       | PERCENT     |        |        |
| Rating Timing                 | 4 WEEK                                 | 4 WEEK          | 4 WEEK        | 8 WEEK      |        |        |
| Days After First/Last Applic. | 26 14                                  | 26 14           | 26 14         | 54 28       |        |        |
| Trt Treatment                 | Rate                                   | Growth          |               |             |        |        |
| No. Name                      | Unit                                   | Stage           | 12            | 13          |        |        |
| 14                            | 15                                     |                 |               |             |        |        |
| 12 ROUNDUP POWERMAX           | 32 fl oz/a                             | PRE             | 99            | 99          | 99     | 0      |
| FIERCE                        | 4.5 oz wt/a                            | PRE             |               |             |        |        |
| GANGSTER FR                   | 0.450 oz wt/a                          | PRE             |               |             |        |        |
| ROUNDUP POWERMAX              | 32 fl oz/a                             | MP              |               |             |        |        |
| 13 ROUNDUP POWERMAX           | 32 fl oz/a                             | PRE             | 99            | 99          | 99     | 0      |
| ENVIVE                        | 3 oz wt/a                              | PRE             |               |             |        |        |
| ROUNDUP POWERMAX              | 32 fl oz/a                             | MP              |               |             |        |        |
| 14 OPTILL                     | 2 oz wt/a                              | PRE             | 99            | 99          | 99     | 0      |
| ZIDUA                         | 2 oz wt/a                              | PRE             |               |             |        |        |
| ROUNDUP POWERMAX              | 22 fl oz/a                             | MP              |               |             |        |        |
| 15 ROUNDUP POWERMAX           | 32 fl oz/a                             | PRE             | 99            | 99          | 99     | 0      |
| VERDICT                       | 5 fl oz/a                              | PRE             |               |             |        |        |
| ZIDUA                         | 2.5 oz wt/a                            | PRE             |               |             |        |        |
| ROUNDUP POWERMAX              | 22 fl oz/a                             | MP              |               |             |        |        |
| 16 ROUNDUP POWERMAX           | 32 fl oz/a                             | PRE             | 99            | 99          | 99     | 0      |
| ZIDUA                         | 2.5 oz wt/a                            | PRE             |               |             |        |        |
| SHARPEN                       | 1 fl oz/a                              | PRE             |               |             |        |        |
| ROUNDUP POWERMAX              | 22 fl oz/a                             | MP              |               |             |        |        |
| 17 ROUNDUP POWERMAX           | 32 fl oz/a                             | PRE             | 99            | 99          | 99     | 0      |
| SONIC                         | 4.5 oz wt/a                            | PRE             |               |             |        |        |
| ROUNDUP POWERMAX              | 22 fl oz/a                             | MP              |               |             |        |        |
| 18 ROUNDUP POWERMAX           | 32 fl oz/a                             | PRE             | 99            | 99          | 99     | 0      |
| ZIDUA                         | 2.5 oz wt/a                            | PRE             |               |             |        |        |
| SHARPEN                       | 1 fl oz/a                              | PRE             |               |             |        |        |
| METRIBUZIN                    | 5 oz wt/a                              | PRE             |               |             |        |        |
| ROUNDUP POWERMAX              | 22 fl oz/a                             | MP              |               |             |        |        |
| LSD (P=.05)                   |  |                 | 5.6           | 0.0         | 0.0    | 0.0    |
| Standard Deviation            |  |                 | 3.4           | 0.0         | 0.0    | 0.0    |
| CV                            |  |                 | 3.46          | 0.0         | 0.0    | 0.0    |
| Replicate F                   |  |                 | 0.137         | 0.000       | 0.000  | 0.000  |
| Replicate Prob(F)             |  |                 | 0.8721        | 1.0000      | 1.0000 | 1.0000 |
| Treatment F                   |  |                 | 5.650         | 0.000       | 0.000  | 0.000  |
| Treatment Prob(F)             |  |                 | 0.0001        | 1.0000      | 1.0000 | 1.0000 |

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|                               |                |                 |               |
|-------------------------------|----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Morning glory |
| Crop Code                     |                |                 |               |
| BBCH Scale                    |                |                 |               |
| Crop Scientific Name          |                |                 |               |
| Crop Name                     |                |                 |               |
| Crop Variety                  |                |                 |               |
| Description                   |                |                 |               |
| Part Rated                    |                |                 |               |
| Rating Date                   | 6-30-2014      | 6-30-2014       | 6-30-2014     |
| Rating Type                   | CONTROL        | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT       |
| Rating Timing                 | 8 WEEK         | 8 WEEK          | 8 WEEK        |
| Days After First/Last Applic. | 54 28          | 54 28           | 54 28         |

| Trt | Treatment        | Rate          | Growth | 16 |  | 17 |  | 18 |  |
|-----|------------------|---------------|--------|----|--|----|--|----|--|
| No. | Name             | Rate Unit     | Stage  |    |  |    |  |    |  |
| 1   | GRAMOXONE INTEON | 2.5 pt/a      | PRE    | 99 |  | 99 |  | 99 |  |
|     | BOUNDARY         | 1.5 pt/a      | PRE    |    |  |    |  |    |  |
|     | FLEXSTAR GT      | 3.5 pt/a      | +14DAY |    |  |    |  |    |  |
| 2   | GRAMOXONE INTEON | 2.5 pt/a      | PRE    | 99 |  | 98 |  | 99 |  |
|     | PREFIX           | 2 pt/a        | PRE    |    |  |    |  |    |  |
|     | SEQUENCE         | 2.5 pt/a      | +14DAY |    |  |    |  |    |  |
| 3   | GRAMOXONE INTEON | 2.5 pt/a      | PRE    | 99 |  | 89 |  | 95 |  |
|     | BOUNDARY         | 1.5 pt/a      | PRE    |    |  |    |  |    |  |
|     | PREFIX           | 2 pt/a        | +14DAY |    |  |    |  |    |  |
|     | TOUCHDOWN TOTAL  | 32 oz/a       | +14DAY |    |  |    |  |    |  |
| 4   | ROUNDUP POWERMAX | 32 fl oz/a    | PRE    | 99 |  | 99 |  | 99 |  |
|     | VERDICT          | 5 oz/a        | PRE    |    |  |    |  |    |  |
|     | WARRANT          | 1.5 qt/a      | MP     |    |  |    |  |    |  |
|     | ROUNDUP POWERMAX | 32 fl oz/a    | MP     |    |  |    |  |    |  |
| 5   | ROUNDUP POWERMAX | 32 fl oz/a    | PRE    | 99 |  | 99 |  | 99 |  |
|     | VALOR XLT        | 4 oz/a        | PRE    |    |  |    |  |    |  |
|     | WARRANT          | 1.25 qt/a     | MP     |    |  |    |  |    |  |
|     | ROUNDUP POWERMAX | 32 fl oz/a    | MP     |    |  |    |  |    |  |
| 6   | GRAMOXONE INTEON | 2.5 pt/a      | PRE    | 99 |  | 99 |  | 99 |  |
|     | STALWART MTZ     | 1.5 pt/a      | PRE    |    |  |    |  |    |  |
|     | ROUNDUP POWERMAX | 32 fl oz/a    | MP     |    |  |    |  |    |  |
| 7   | ROUNDUP POWERMAX | 32 fl oz/a    | PRE    | 99 |  | 99 |  | 99 |  |
|     | AUTHORITY MAXX   | 5 oz/a        | PRE    |    |  |    |  |    |  |
|     | ROUNDUP POWERMAX | 22 fl oz/a    | MP     |    |  |    |  |    |  |
| 8   | ROUNDUP POWERMAX | 32 fl oz/a    | PRE    | 99 |  | 99 |  | 99 |  |
|     | AUTHORITY MTZ    | 14 oz/a       | PRE    |    |  |    |  |    |  |
|     | ROUNDUP POWERMAX | 22 fl oz/a    | MP     |    |  |    |  |    |  |
| 9   | ROUNDUP POWERMAX | 32 fl oz/a    | PRE    | 99 |  | 99 |  | 99 |  |
|     | ANTHEM           | 6.5 oz/a      | PRE    |    |  |    |  |    |  |
|     | AUTHORITY MTZ    | 14 oz/a       | PRE    |    |  |    |  |    |  |
|     | ROUNDUP POWERMAX | 22 fl oz/a    | MP     |    |  |    |  |    |  |
| 10  | ROUNDUP POWERMAX | 32 fl oz/a    | PRE    | 99 |  | 99 |  | 99 |  |
|     | VALOR XLT        | 3 oz/a        | PRE    |    |  |    |  |    |  |
|     | ROUNDUP POWERMAX | 22 fl oz/a    | MP     |    |  |    |  |    |  |
| 11  | ROUNDUP POWERMAX | 32 fl oz/a    | PRE    | 99 |  | 99 |  | 99 |  |
|     | AUTHORITY FIRST  | 6.450 oz wt/a | PRE    |    |  |    |  |    |  |
|     | ROUNDUP POWERMAX | 32 fl oz/a    | MP     |    |  |    |  |    |  |

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Weed Science Research

|                               |                |                 |               |
|-------------------------------|----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Morning glory |
| Crop Code                     |                |                 |               |
| BBCH Scale                    |                |                 |               |
| Crop Scientific Name          |                |                 |               |
| Crop Name                     |                |                 |               |
| Crop Variety                  |                |                 |               |
| Description                   |                |                 |               |
| Part Rated                    |                |                 |               |
| Rating Date                   | 6-30-2014      | 6-30-2014       | 6-30-2014     |
| Rating Type                   | CONTROL        | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT       |
| Rating Timing                 | 8 WEEK         | 8 WEEK          | 8 WEEK        |
| Days After First/Last Applic. | 54 28          | 54 28           | 54 28         |

| Trt No. | Treatment Name     | Rate          | Unit | Growth Stage | 16     | 17     | 18     |
|---------|--------------------|---------------|------|--------------|--------|--------|--------|
| 12      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     |
|         | FIERCE             | 4.5 oz wt/a   |      | PRE          |        |        |        |
|         | GANGSTER FR        | 0.450 oz wt/a |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a    |      | MP           |        |        |        |
| 13      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     |
|         | ENVIVE             | 3 oz wt/a     |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 32 fl oz/a    |      | MP           |        |        |        |
| 14      | OPTILL             | 2 oz wt/a     |      | PRE          | 99     | 98     | 99     |
|         | ZIDUA              | 2 oz wt/a     |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
| 15      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     |
|         | VERDICT            | 5 fl oz/a     |      | PRE          |        |        |        |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
| 16      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |
|         | SHARPEN            | 1 fl oz/a     |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
| 17      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 99     | 99     |
|         | SONIC              | 4.5 oz wt/a   |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
| 18      | ROUNDUP POWERMAX   | 32 fl oz/a    |      | PRE          | 99     | 98     | 99     |
|         | ZIDUA              | 2.5 oz wt/a   |      | PRE          |        |        |        |
|         | SHARPEN            | 1 fl oz/a     |      | PRE          |        |        |        |
|         | METRIBUZIN         | 5 oz wt/a     |      | PRE          |        |        |        |
|         | ROUNDUP POWERMAX   | 22 fl oz/a    |      | MP           |        |        |        |
|         | LSD (P=.05)        |               |      |              | 0.0    | 1.5    | 2.5    |
|         | Standard Deviation |               |      |              | 0.0    | 0.9    | 1.5    |
|         | CV                 |               |      |              | 0.0    | 0.91   | 1.52   |
|         | Replicate F        |               |      |              | 0.000  | 4.503  | 1.000  |
|         | Replicate Prob(F)  |               |      |              | 1.0000 | 0.0184 | 0.3784 |
|         | Treatment F        |               |      |              | 0.000  | 19.353 | 1.000  |
|         | Treatment Prob(F)  |               |      |              | 1.0000 | 0.0001 | 0.4813 |

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NO TILL SOYBEAN VII

Trial ID: S14028                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: SYN-NT-SOY            Investigator: Charles H Slack  
Project ID:                              Study Director: CHARLES SLACK  
Sponsor Contact: SCOTT CULLY

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

STEME, Stellaria media, = US  
LAMPU, Lamium purpureum, = US  
TAROF, Taraxacum officinale, = US  
SETFA, Setaria faberi, = US  
AMBTR, Ambrosia trifida, = US  
IPOSS, Ipomoea sp., = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Unit

PERCENT = percent

Plant and Soil Science, U of KY  
Weed Science Research

NO TILL SOYBEAN VII

Trial ID: S14028                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: SYN-NT-SOY            Investigator: Charles H Slack  
Project ID:                              Study Director: CHARLES SLACK  
Sponsor Contact: SCOTT CULLY

**General Trial Information**

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Investigator:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-6-2014  
**Completion Date:** 10-1-2014

**Trial Location**

**City:** LEXINGTON                      **Country:** USA United States  
**State/Prov.:** KENTUCKY  
**Postal Code:** 40511

**Contacts**

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY                      **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu

**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY                      **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu

**Other Contacts**

| <b>Name</b> | <b>Role</b>      | <b>Other</b>        |
|-------------|------------------|---------------------|
| SARA LAWSON | RESEARCH ANALYST | sara.lawson@uky.edu |

**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.75 IN  
**Row Spacing, Unit:** 7.5 IN  
**Soil Temperature, Unit:** 64 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Planting Date:** 5-6-2014  
**Planting Method:** DRILLE drilled  
**Emergence Date:** 5-13-2014

**Pest Description**

- Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed
- Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel
- Pest 3 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion
- Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail
- Pest 5 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed
- Pest 6 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 8.5 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 374 FT<sup>2</sup> **Treatments:** 18  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Analyzed By:**

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Weed Science Research

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet

**Closest Weather Station:** SPINDLETOP

**Distance, Unit:** 2.25 MI

**Application Description**

|                                   | <b>A</b>  | <b>B</b>  | <b>C</b>  |
|-----------------------------------|-----------|-----------|-----------|
| <b>Application Date:</b>          | 5-7-2014  | 5-19-2014 | 6-2-2014  |
| <b>Appl. Start Time:</b>          |           | 2:30 PM   | 1 PM      |
| <b>Application Method:</b>        | SPRAY     | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | 14D       | MP        |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 84 F      | 70 F      | 76 F      |
| <b>% Relative Humidity:</b>       | 38        | 48        | 70        |
| <b>Wind Velocity, Unit:</b>       | 6 MPH     | 8 MPH     | 10 MPH    |
| <b>Wind Direction:</b>            | SW        | NNE       | WNW       |
| <b>Soil Temperature, Unit:</b>    | 63 F      | 59 F      | 68 F      |
| <b>Soil Moisture:</b>             | GOOD      | EXCELL    | NORMAL    |
| <b>% Cloud Cover:</b>             | 20        | 0         | 50        |
| <b>Next Moisture Occurred On:</b> | 5-9-2014  | 5-22-2014 | 6-4-2014  |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|---------------------------------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Height, Unit:</b>            |            | 1.5 IN     | 3 IN       |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | STEME W  | STEME W  | STEME W  |
| <b>Height, Unit:</b>             |          | 3 IN     |          |
| <b>Pest 2 Code, Type, Scale:</b> | LAMPU W  | LAMPU W  | LAMPU W  |
| <b>Height, Unit:</b>             |          | 3 IN     |          |
| <b>Pest 3 Code, Type, Scale:</b> | TAROF W  | TAROF W  | TAROF W  |
| <b>Height, Unit:</b>             |          | 3 IN     | 2 IN     |
| <b>Pest 4 Code, Type, Scale:</b> | SETFA W  | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             |          | 1 IN     | 2 IN     |
| <b>Pest 5 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             |          | 2 IN     | 4 IN     |
| <b>Pest 6 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             |          | 1 IN     | 2 IN     |



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**Application Equipment**

|                                  | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|----------------------------------|------------|------------|------------|
| <b>Appl. Equipment:</b>          | ATV        | ATV        | ATV        |
| <b>Equipment Type:</b>           | ALTEVE     | ALTEVE     | ALTEVE     |
| <b>Operation Pressure, Unit:</b> | 30 PSI     | 30 PSI     | 30 PSI     |
| <b>Nozzle Type:</b>              | FLAT FAN   | FLAT FAN   | FLAT FAN   |
| <b>Nozzle Size:</b>              | 8004 DG    | 8004 DG    | 8004 DG    |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN      | 20 IN      | 20 IN      |
| <b>Boom Length, Unit:</b>        | 8.5 FT     | 8.5 FT     | 8.5 FT     |
| <b>Boom Height, Unit:</b>        | 20 IN      | 20 IN      | 20 IN      |
| <b>Ground Speed, Unit:</b>       | 4 MPH      | 4 MPH      | 4 MPH      |
| <b>Carrier:</b>                  | WATER      | WATER      | WATER      |
| <b>Spray Volume, Unit:</b>       | 24 GPA     | 24 GPA     | 24 GPA     |
| <b>Mix Size, Unit:</b>           | 2.7 liters | 2.7 liters | 2.7 liters |
| <b>Propellant:</b>               | CO2        | CO2        | CO2        |

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Weed Science Research

NO TILL SOYBEAN VIII

Trial ID: S14029  
Protocol ID: HGLXMAFOMME1402  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: THOMAS HAYDEN

| Pest Type                     | W Weed          | W Weed          | W Weed          |
|-------------------------------|-----------------|-----------------|-----------------|
| Pest Code                     | STEME           | LAMPU           | TAROF           |
| Pest Scientific Name          | Stellaria media | Lamium purpure> | Taraxacum offi> |
| Pest Name                     | Common chickwe> | Purple deadnet> | Common dandel>  |
| Crop Code                     | GLXMA           |                 |                 |
| BBCH Scale                    | BSOY            |                 |                 |
| Crop Scientific Name          | Glycine max     |                 |                 |
| Crop Name                     | Soybean         |                 |                 |
| Crop Variety                  |                 |                 |                 |
| Description                   |                 |                 |                 |
| Part Rated                    |                 |                 |                 |
| Rating Date                   | 6-6-2014        | 6-6-2014        | 6-6-2014        |
| Rating Type                   | INJURY          | CONTROL         | CONTROL         |
| Rating Unit                   | PERCENT         | PERCENT         | PERCENT         |
| Rating Timing                 | 2 WEEK          | 2 WEEK          | 2 WEEK          |
| Days After First/Last Applic. | 14 14           | 14 14           | 14 14           |

  

| Trt | Treatment          | Rate          | Growth | 1      | 2      | 3      | 4      |
|-----|--------------------|---------------|--------|--------|--------|--------|--------|
| No. | Name               | Rate          | Unit   | Stage  |        |        |        |
| 1   | STATEMENT          | 1.31 lb ai/a  | EP     | 0      | 99     | 99     | 99     |
|     | GLYFOS X-TRA       | 0.75 lb ae/a  | EP     |        |        |        |        |
| 2   | RHYTHM             | 0.375 lb ai/a | EP     | 0      | 99     | 99     | 99     |
|     | GLYFOS X-TRA       | 0.75 lb ae/a  | EP     |        |        |        |        |
| 3   | PREFIX             | 1.32 lb ai/a  | EP     | 0      | 99     | 99     | 99     |
|     | GLYFOS X-TRA       | 0.75 lb ae/a  | EP     |        |        |        |        |
| 4   | UNTREATED          |               |        | 0      | 0      | 0      | 0      |
|     | LSD (P=.05)        |               |        | 0.0    | 0.0    | 0.0    | 0.0    |
|     | Standard Deviation |               |        | 0.0    | 0.0    | 0.0    | 0.0    |
|     | CV                 |               |        | 0.0    | 0.0    | 0.0    | 0.0    |
|     | Replicate F        |               |        | 0.000  | 0.000  | 0.000  | 0.000  |
|     | Replicate Prob(F)  |               |        | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|     | Treatment F        |               |        | 0.000  | 0.000  | 0.000  | 0.000  |
|     | Treatment Prob(F)  |               |        | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| Pest Type                     | W Weed             | W Weed          | W Weed        | W Weed       | W Weed         |        |        |        |        |
|-------------------------------|--------------------|-----------------|---------------|--------------|----------------|--------|--------|--------|--------|
| Pest Code                     | SETFA              | AMBTR           | IPOSS         |              | SETFA          |        |        |        |        |
| Pest Scientific Name          | Setaria faberi     | Ambrosia trifi> | Ipomoea sp.   |              | Setaria faberi |        |        |        |        |
| Pest Name                     | Giant foxtail      | Giant ragweed   | Morning glory |              | Giant foxtail  |        |        |        |        |
| Crop Code                     |                    |                 |               | GLXMA        |                |        |        |        |        |
| BBCH Scale                    |                    |                 |               | BSOY         |                |        |        |        |        |
| Crop Scientific Name          |                    |                 |               | Glycine max  |                |        |        |        |        |
| Crop Name                     |                    |                 |               | Soybean      |                |        |        |        |        |
| Crop Variety                  |                    |                 |               |              |                |        |        |        |        |
| Description                   |                    |                 |               |              |                |        |        |        |        |
| Part Rated                    |                    |                 |               |              |                |        |        |        |        |
| Rating Date                   | 6-6-2014           | 6-6-2014        | 6-20-2014     | 6-20-2014    | 6-20-2014      |        |        |        |        |
| Rating Type                   | CONTROL            | CONTROL         | CONTROL       | INJURY       | CONTROL        |        |        |        |        |
| Rating Unit                   | PERCENT            | PERCENT         | PERCENT       | PERCENT      | PERCENT        |        |        |        |        |
| Rating Timing                 | 2 WEEK             | 2 WEEK          | 2 WEEK        | 4 WEEK       | 4 WEEK         |        |        |        |        |
| Days After First/Last Applic. | 14 14              | 14 14           | 28 28         | 28 28        | 28 28          |        |        |        |        |
| Trt No.                       | Treatment Name     | Rate            | Unit          | Growth Stage | 5              | 6      | 7      | 8      | 9      |
| 1                             | STATEMENT          | 1.31 lb ai/a    | EP            |              | 99             | 99     | 99     | 0      | 99     |
|                               | GLYFOS X-TRA       | 0.75 lb ae/a    | EP            |              |                |        |        |        |        |
| 2                             | RHYTHM             | 0.375 lb ai/a   | EP            |              | 99             | 99     | 99     | 0      | 99     |
|                               | GLYFOS X-TRA       | 0.75 lb ae/a    | EP            |              |                |        |        |        |        |
| 3                             | PREFIX             | 1.32 lb ai/a    | EP            |              | 99             | 99     | 99     | 0      | 99     |
|                               | GLYFOS X-TRA       | 0.75 lb ae/a    | EP            |              |                |        |        |        |        |
| 4                             | UNTREATED          |                 |               |              | 0              | 0      | 0      | 0      | 0      |
|                               | LSD (P=.05)        |                 |               |              | 0.0            | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | Standard Deviation |                 |               |              | 0.0            | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | CV                 |                 |               |              | 0.0            | 0.0    | 0.0    | 0.0    | 0.0    |
|                               | Replicate F        |                 |               |              | 0.000          | 0.000  | 0.000  | 0.000  | 0.000  |
|                               | Replicate Prob(F)  |                 |               |              | 1.0000         | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
|                               | Treatment F        |                 |               |              | 0.000          | 0.000  | 0.000  | 0.000  | 0.000  |
|                               | Treatment Prob(F)  |                 |               |              | 1.0000         | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| Pest Type                     | W Weed             | W Weed        | W Weed         | W Weed          |        |        |        |        |           |
|-------------------------------|--------------------|---------------|----------------|-----------------|--------|--------|--------|--------|-----------|
| Pest Code                     | AMBTR              | IPOSS         | SETFA          | AMBTR           |        |        |        |        |           |
| Pest Scientific Name          | Ambrosia trifi>    | Ipomoea sp.   | Setaria faberi | Ambrosia trifi> |        |        |        |        |           |
| Pest Name                     | Giant ragweed      | Morning glory | Giant foxtail  | Giant ragweed   |        |        |        |        |           |
| Crop Code                     |                    |               | GLXMA          |                 |        |        |        |        |           |
| BBCH Scale                    |                    |               | BSOY           |                 |        |        |        |        |           |
| Crop Scientific Name          |                    |               | Glycine max    |                 |        |        |        |        |           |
| Crop Name                     |                    |               | Soybean        |                 |        |        |        |        |           |
| Crop Variety                  |                    |               |                |                 |        |        |        |        |           |
| Description                   |                    |               |                |                 |        |        |        |        |           |
| Part Rated                    |                    |               |                |                 |        |        |        |        |           |
| Rating Date                   | 6-20-2014          | 6-20-2014     | 7-18-2014      | 7-18-2014       |        |        |        |        |           |
| Rating Type                   | CONTROL            | CONTROL       | INJURY         | CONTROL         |        |        |        |        |           |
| Rating Unit                   | PERCENT            | PERCENT       | PERCENT        | PERCENT         |        |        |        |        |           |
| Rating Timing                 | 4 WEEK             | 4 WEEK        | 8 WEEK         | 8 WEEK          |        |        |        |        |           |
| Days After First/Last Applic. | 28 28              | 28 28         | 56 56          | 56 56           |        |        |        |        |           |
| Trt No.                       | Treatment Name     | Rate          | Unit           | Growth Stage    | 10     | 11     | 12     | 13     | 14        |
| 1                             | STATEMENT          | 1.31 lb ai/a  | EP             |                 | 99     | 99     | 0      | 99     | 89        |
|                               | GLYFOS X-TRA       | 0.75 lb ae/a  | EP             |                 |        |        |        |        |           |
| 2                             | RHYTHM             | 0.375 lb ai/a | EP             |                 | 99     | 99     | 0      | 99     | 95        |
|                               | GLYFOS X-TRA       | 0.75 lb ae/a  | EP             |                 |        |        |        |        |           |
| 3                             | PREFIX             | 1.32 lb ai/a  | EP             |                 | 99     | 99     | 0      | 99     | 99        |
|                               | GLYFOS X-TRA       | 0.75 lb ae/a  | EP             |                 |        |        |        |        |           |
| 4                             | UNTREATED          |               |                |                 | 0      | 0      | 0      | 0      | 0         |
|                               | LSD (P=.05)        |               |                |                 | 0.0    | 0.0    | 0.0    | 0.0    | 1.2       |
|                               | Standard Deviation |               |                |                 | 0.0    | 0.0    | 0.0    | 0.0    | 0.6       |
|                               | CV                 |               |                |                 | 0.0    | 0.0    | 0.0    | 0.0    | 0.82      |
|                               | Replicate F        |               |                |                 | 0.000  | 0.000  | 0.000  | 0.000  | 1.000     |
|                               | Replicate Prob(F)  |               |                |                 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.4219    |
|                               | Treatment F        |               |                |                 | 0.000  | 0.000  | 0.000  | 0.000  | 20211.002 |
|                               | Treatment Prob(F)  |               |                |                 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0001    |

|                               |               |
|-------------------------------|---------------|
| Pest Type                     | W Weed        |
| Pest Code                     | IPOSS         |
| Pest Scientific Name          | Ipomoea sp.   |
| Pest Name                     | Morning glory |
| Crop Code                     |               |
| BBCH Scale                    |               |
| Crop Scientific Name          |               |
| Crop Name                     |               |
| Crop Variety                  |               |
| Description                   |               |
| Part Rated                    |               |
| Rating Date                   | 7-18-2014     |
| Rating Type                   | CONTROL       |
| Rating Unit                   | PERCENT       |
| Rating Timing                 | 8 WEEK        |
| Days After First/Last Applic. | 56 56         |

| Trt No. | Treatment Name     | Rate          | Unit | Growth Stage |        |
|---------|--------------------|---------------|------|--------------|--------|
|         |                    |               |      |              | 15     |
| 1       | STATEMENT          | 1.31 lb ai/a  | EP   |              | 99     |
|         | GLYFOS X-TRA       | 0.75 lb ae/a  | EP   |              |        |
| 2       | RHYTHM             | 0.375 lb ai/a | EP   |              | 99     |
|         | GLYFOS X-TRA       | 0.75 lb ae/a  | EP   |              |        |
| 3       | PREFIX             | 1.32 lb ai/a  | EP   |              | 99     |
|         | GLYFOS X-TRA       | 0.75 lb ae/a  | EP   |              |        |
| 4       | UNTREATED          |               |      |              | 0      |
|         | LSD (P=.05)        |               |      |              | 0.0    |
|         | Standard Deviation |               |      |              | 0.0    |
|         | CV                 |               |      |              | 0.0    |
|         | Replicate F        |               |      |              | 0.000  |
|         | Replicate Prob(F)  |               |      |              | 1.0000 |
|         | Treatment F        |               |      |              | 0.000  |
|         | Treatment Prob(F)  |               |      |              | 1.0000 |

NO TILL SOYBEAN VIII

Trial ID: S14029  
Protocol ID: HGLXMAFOMME1402  
Project ID:

Location: LEXINGTON, KY Trial Year: 2014  
Investigator: Charles H Slack  
Study Director: CHARLES SLACK  
Sponsor Contact: THOMAS HAYDEN

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

STEME, *Stellaria media*, = US  
LAMPU, *Lamium purpureum*, = US  
TAROF, *Taraxacum officinale*, = US  
SETFA, *Setaria faberi*, = US  
AMBTR, *Ambrosia trifida*, = US  
IPOSS, *Ipomoea sp.*, = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Rating Unit

PERCENT = percent



**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 4232

**Planting Date:** 5-6-2014

**Planting Rate, Unit:** 200000 S/A

**Planting Method:** DRILLE drilled

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 7.5 IN

**Emergence Date:** 5-14-2014

**Soil Temperature, Unit:** 60 F

**Soil Moisture:** GOOD good

**Seed Bed:** MEDIUM medium

**Pest Description**

**Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed

**Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 3 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion

**Pest 4 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 5 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 6 Type:** W **Code:** IPOSS *Ipomoea sp.*  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 8.5 FT

**Site Type:** FIELD field

**Treated Plot Length:** 44 FT

**Treated Plot Area:** 374 FT<sup>2</sup> **Treatments:** 4

**Tillage Type:** NOTILL no-till

**Replications:** 3

**Study Design:** RACOB L Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY

**% Sand:** 6 **% OM:** 2.6

**Texture:** SIL silt loam

**% Silt:** 62 **pH:** 6.4

**Soil Name:** MAURY SILT LOAM

**% Clay:** 32 **CEC:** 18

**Fert. Level:** E excellent

**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet

**Closest Weather Station:** SPINDLETOP

**Distance, Unit:** 2.25 MI



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**Application Description**

**A**  
**Application Date:** 5-23-2014  
**Application Method:** SPRAY  
**Application Timing:** EP  
**Application Placement:** BROFOL  
**Applied By:** C H SLACK  
**Air Temperature, Unit:** 84 F  
**% Relative Humidity:** 38  
**Wind Velocity, Unit:** 6 MPH  
**Wind Direction:** SW  
**Soil Temperature, Unit:** 63 F  
**Soil Moisture:** GOOD  
**% Cloud Cover:** 20  
**Next Moisture Occurred On:** 5-27-2014

**Crop Stage At Each Application**

**A**  
**Crop 1 Code, BBCH Scale:** GLXMA BSOY  
**Height, Unit:** 2 IN

**Pest Stage At Each Application**

**A**  
**Pest 1 Code, Type, Scale:** STEME W  
**Density, Unit:** 3 IN  
**Pest 2 Code, Type, Scale:** LAMPU W  
**Height, Unit:** 3 IN  
**Pest 3 Code, Type, Scale:** TAROF W  
**Height, Unit:** 3 IN  
**Pest 4 Code, Type, Scale:** SETFA W  
**Height, Unit:** 1 IN  
**Pest 5 Code, Type, Scale:** AMBTR W  
**Height, Unit:** 2 IN  
**Pest 6 Code, Type, Scale:** IPOSS W  
**Height, Unit:** 1 IN

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**Application Equipment**

**A**

**Appl. Equipment:** ATV  
**Equipment Type:** ALTEVE  
**Operation Pressure, Unit:** 30 PSI  
**Nozzle Type:** FLAT FAN  
**Nozzle Size:** 8004 DG  
**Nozzle Spacing, Unit:** 20 IN  
**Boom Length, Unit:** 8.5 FT  
**Boom Height, Unit:** 30 IN  
**Ground Speed, Unit:** 4 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 24 GPA  
**Mix Size, Unit:** 2.7 liters  
**Propellant:** CO2

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SOYBEAN PREEMERGENCE

Trial ID: S14030 Location: LEXINGTON, KY Trial Year: 2014  
Protocol ID: BASF-SB Investigator: Charles H Slack  
Project ID: Study Director: CHARLES SLACK  
Sponsor Contact: GREG STAPLETON

Pest Type W Weed W Weed W Weed W Weed  
Pest Code SETFA AMBTR CHEAL IPOSS  
Pest Scientific Name Setaria faberi Ambrosia trifida> Chenopodium albidum> Ipomoea sp.  
Pest Name Giant foxtail Giant ragweed Common lambsquarters Morning glory  
Crop Code GLXMA  
BBCH Scale BSOY  
Crop Scientific Name Glycine max  
Crop Name Soybean  
Crop Variety  
Description  
Part Rated  
Rating Date 5-23-2014 5-23-2014 5-23-2014 5-23-2014 5-23-2014  
Rating Type INJURY CONTROL CONTROL CONTROL CONTROL  
Rating Unit PERCENT PERCENT PERCENT PERCENT PERCENT  
Rating Timing 2 WEEK 2 WEEK 2 WEEK 2 WEEK 2 WEEK  
Days After First/Last Applic. 14 14 14 14 14 14

| Trt No. | Treatment Name    | Rate        | Growth Stage | 1 | 2  | 3  | 4  | 5  |
|---------|-------------------|-------------|--------------|---|----|----|----|----|
| 1       | OPTILL PRO DRY    | 2 oz wt/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | OPTILL PRO LIQUID | 10 fl oz/a  | PRE          |   |    |    |    |    |
| 2       | OPTILL PRO DRY    | 2 oz wt/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | OPTILL PRO LIQUID | 10 fl oz/a  | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 3       | OPTILL PRO DRY    | 2 oz wt/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | OPTILL PRO LIQUID | 10 fl oz/a  | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 5WK          |   |    |    |    |    |
| 4       | OPTILL            | 2 oz wt/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | ZIDUA             | 2 oz wt/a   | PRE          |   |    |    |    |    |
| 5       | OPTILL            | 2 oz wt/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | ZIDUA             | 2 oz wt/a   | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 6       | VERDICT           | 5 fl oz/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | PROWL H20         | 2.5 pt/a    | PRE          |   |    |    |    |    |
| 7       | VERDICT           | 5 fl oz/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | PROWL H20         | 2.5 pt/a    | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 8       | VERDICT           | 5 fl oz/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | ZIDUA             | 2.5 oz wt/a | PRE          |   |    |    |    |    |
| 9       | VERDICT           | 5 fl oz/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | ZIDUA             | 2.5 oz wt/a | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 10      | SONIC             | 4.5 oz wt/a | PRE          | 0 | 99 | 99 | 99 | 99 |
| 11      | AUTHORITY MAXX    | 3 oz wt/a   | PRE          | 0 | 99 | 99 | 99 | 99 |
| 12      | ZIDUA             | 2.5 oz wt/a | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |   |    |    |    |    |
| 13      | ZIDUA             | 2.5 oz wt/a | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 14      | ZIDUA             | 2.5 oz wt/a | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |   |    |    |    |    |
|         | METRIBUZIN        | 5 oz wt/a   | PRE          |   |    |    |    |    |
| 15      | ZIDUA             | 2.5 oz wt/a | PRE          | 0 | 99 | 99 | 99 | 99 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |   |    |    |    |    |
|         | METRIBUZIN        | 5 oz wt/a   | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |



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|                               |                |                 |                 |               |
|-------------------------------|----------------|-----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | CHEAL           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |
| Crop Code                     | GLXMA          |                 |                 |               |
| BBCH Scale                    | BSOY           |                 |                 |               |
| Crop Scientific Name          | Glycine max    |                 |                 |               |
| Crop Name                     | Soybean        |                 |                 |               |
| Crop Variety                  |                |                 |                 |               |
| Description                   |                |                 |                 |               |
| Part Rated                    |                |                 |                 |               |
| Rating Date                   | 6-6-2014       | 6-6-2014        | 6-6-2014        | 6-6-2014      |
| Rating Type                   | INJURY         | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 4 WEEK         | 4 WEEK          | 4 WEEK          | 4 WEEK        |
| Days After First/Last Applic. | 28 8           | 28 8            | 28 8            | 28 8          |

| Trt No. | Treatment Name    | Rate        | Growth Stage | 6 | 7  | 8  | 9  | 10 |
|---------|-------------------|-------------|--------------|---|----|----|----|----|
| 1       | OPTILL PRO DRY    | 2 oz wt/a   | PRE          | 0 | 99 | 96 | 99 | 99 |
|         | OPTILL PRO LIQUID | 10 fl oz/a  | PRE          |   |    |    |    |    |
| 2       | OPTILL PRO DRY    | 2 oz wt/a   | PRE          | 0 | 99 | 96 | 99 | 98 |
|         | OPTILL PRO LIQUID | 10 fl oz/a  | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 3       | OPTILL PRO DRY    | 2 oz wt/a   | PRE          | 0 | 99 | 98 | 99 | 99 |
|         | OPTILL PRO LIQUID | 10 fl oz/a  | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 5WK          |   |    |    |    |    |
| 4       | OPTILL            | 2 oz wt/a   | PRE          | 0 | 99 | 95 | 99 | 96 |
|         | ZIDUA             | 2 oz wt/a   | PRE          |   |    |    |    |    |
| 5       | OPTILL            | 2 oz wt/a   | PRE          | 0 | 99 | 96 | 99 | 96 |
|         | ZIDUA             | 2 oz wt/a   | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 6       | VERDICT           | 5 fl oz/a   | PRE          | 0 | 99 | 87 | 99 | 95 |
|         | PROWL H20         | 2.5 pt/a    | PRE          |   |    |    |    |    |
| 7       | VERDICT           | 5 fl oz/a   | PRE          | 0 | 99 | 92 | 99 | 98 |
|         | PROWL H20         | 2.5 pt/a    | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 8       | VERDICT           | 5 fl oz/a   | PRE          | 0 | 99 | 93 | 99 | 96 |
|         | ZIDUA             | 2.5 oz wt/a | PRE          |   |    |    |    |    |
| 9       | VERDICT           | 5 fl oz/a   | PRE          | 0 | 99 | 91 | 99 | 98 |
|         | ZIDUA             | 2.5 oz wt/a | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 10      | SONIC             | 4.5 oz wt/a | PRE          | 0 | 98 | 91 | 99 | 96 |
| 11      | AUTHORITY MAXX    | 3 oz wt/a   | PRE          | 0 | 99 | 86 | 99 | 96 |
| 12      | ZIDUA             | 2.5 oz wt/a | PRE          | 0 | 99 | 93 | 99 | 96 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |   |    |    |    |    |
| 13      | ZIDUA             | 2.5 oz wt/a | PRE          | 0 | 99 | 92 | 99 | 99 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |
| 14      | ZIDUA             | 2.5 oz wt/a | PRE          | 0 | 99 | 90 | 99 | 96 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |   |    |    |    |    |
|         | METRIBUZIN        | 5 oz wt/a   | PRE          |   |    |    |    |    |
| 15      | ZIDUA             | 2.5 oz wt/a | PRE          | 0 | 99 | 88 | 99 | 95 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |   |    |    |    |    |
|         | METRIBUZIN        | 5 oz wt/a   | PRE          |   |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |   |    |    |    |    |

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|                               |                    |                |                 |                 |               |
|-------------------------------|--------------------|----------------|-----------------|-----------------|---------------|
| Pest Type                     |                    | W Weed         | W Weed          | W Weed          | W Weed        |
| Pest Code                     |                    | SETFA          | AMBTR           | CHEAL           | IPOSS         |
| Pest Scientific Name          |                    | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |
| Pest Name                     |                    | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |
| Crop Code                     | GLXMA              |                |                 |                 |               |
| BBCH Scale                    | BSOY               |                |                 |                 |               |
| Crop Scientific Name          | Glycine max        |                |                 |                 |               |
| Crop Name                     | Soybean            |                |                 |                 |               |
| Crop Variety                  |                    |                |                 |                 |               |
| Description                   |                    |                |                 |                 |               |
| Part Rated                    |                    |                |                 |                 |               |
| Rating Date                   | 6-6-2014           | 6-6-2014       | 6-6-2014        | 6-6-2014        | 6-6-2014      |
| Rating Type                   | INJURY             | CONTROL        | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT            | PERCENT        | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 4 WEEK             | 4 WEEK         | 4 WEEK          | 4 WEEK          | 4 WEEK        |
| Days After First/Last Applic. | 28 8               | 28 8           | 28 8            | 28 8            | 28 8          |
| Trt No.                       | Treatment          | Rate           | Growth          |                 |               |
|                               | Name               | Rate Unit      | Stage           | 6               | 7             |
|                               |                    |                |                 | 8               | 9             |
|                               |                    |                |                 | 10              |               |
| 16                            | CHECK              |                |                 | 0               | 0             |
|                               |                    |                |                 | 0               | 0             |
|                               | LSD (P=.05)        |                |                 | 0.0             | 1.0           |
|                               |                    |                |                 | 0.0             | 5.6           |
|                               | Standard Deviation |                |                 | 0.0             | 0.6           |
|                               |                    |                |                 | 0.0             | 3.3           |
|                               | CV                 |                |                 | 0.0             | 0.62          |
|                               |                    |                |                 | 0.0             | 3.87          |
|                               |                    |                |                 | 0.0             | 0.0           |
|                               |                    |                |                 | 0.0             | 2.63          |
|                               |                    |                |                 | 0.0             | 0.0           |
|                               | Replicate F        |                |                 | 0.000           | 1.000         |
|                               |                    |                |                 | 0.000           | 3.210         |
|                               | Replicate Prob(F)  |                |                 | 1.0000          | 0.3798        |
|                               |                    |                |                 | 1.0000          | 0.0545        |
|                               | Treatment F        |                |                 | 0.000           | 5504.163      |
|                               |                    |                |                 | 0.000           | 145.747       |
|                               | Treatment Prob(F)  |                |                 | 1.0000          | 0.0001        |
|                               |                    |                |                 | 1.0000          | 0.0001        |

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|                               |                |                 |                 |               |
|-------------------------------|----------------|-----------------|-----------------|---------------|
| Pest Type                     | W Weed         | W Weed          | W Weed          | W Weed        |
| Pest Code                     | SETFA          | AMBTR           | CHEAL           | IPOSS         |
| Pest Scientific Name          | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |
| Pest Name                     | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |
| Crop Code                     | GLXMA          |                 |                 |               |
| BBCH Scale                    | BSOY           |                 |                 |               |
| Crop Scientific Name          | Glycine max    |                 |                 |               |
| Crop Name                     | Soybean        |                 |                 |               |
| Crop Variety                  |                |                 |                 |               |
| Description                   |                |                 |                 |               |
| Part Rated                    |                |                 |                 |               |
| Rating Date                   | 7-2-2014       | 7-2-2014        | 7-2-2014        | 7-2-2014      |
| Rating Type                   | INJURY         | CONTROL         | CONTROL         | CONTROL       |
| Rating Unit                   | PERCENT        | PERCENT         | PERCENT         | PERCENT       |
| Rating Timing                 | 8 WEEK         | 8 WEEK          | 8 WEEK          | 8 WEEK        |
| Days After First/Last Applic. | 54 20          | 54 20           | 54 20           | 54 20         |

| Trt No. | Treatment Name    | Rate        | Growth Stage | 11 | 12 | 13 | 14 | 15 |
|---------|-------------------|-------------|--------------|----|----|----|----|----|
| 1       | OPTILL PRO DRY    | 2 oz wt/a   | PRE          | 0  | 99 | 93 | 99 | 99 |
|         | OPTILL PRO LIQUID | 10 fl oz/a  | PRE          |    |    |    |    |    |
| 2       | OPTILL PRO DRY    | 2 oz wt/a   | PRE          | 0  | 99 | 91 | 99 | 98 |
|         | OPTILL PRO LIQUID | 10 fl oz/a  | PRE          |    |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |    |    |    |    |    |
| 3       | OPTILL PRO DRY    | 2 oz wt/a   | PRE          | 0  | 99 | 93 | 99 | 98 |
|         | OPTILL PRO LIQUID | 10 fl oz/a  | PRE          |    |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 5WK          |    |    |    |    |    |
| 4       | OPTILL            | 2 oz wt/a   | PRE          | 0  | 99 | 91 | 99 | 96 |
|         | ZIDUA             | 2 oz wt/a   | PRE          |    |    |    |    |    |
| 5       | OPTILL            | 2 oz wt/a   | PRE          | 0  | 99 | 93 | 99 | 95 |
|         | ZIDUA             | 2 oz wt/a   | PRE          |    |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |    |    |    |    |    |
| 6       | VERDICT           | 5 fl oz/a   | PRE          | 0  | 99 | 78 | 99 | 93 |
|         | PROWL H20         | 2.5 pt/a    | PRE          |    |    |    |    |    |
| 7       | VERDICT           | 5 fl oz/a   | PRE          | 0  | 99 | 83 | 99 | 95 |
|         | PROWL H20         | 2.5 pt/a    | PRE          |    |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |    |    |    |    |    |
| 8       | VERDICT           | 5 fl oz/a   | PRE          | 0  | 99 | 88 | 99 | 95 |
|         | ZIDUA             | 2.5 oz wt/a | PRE          |    |    |    |    |    |
| 9       | VERDICT           | 5 fl oz/a   | PRE          | 0  | 99 | 85 | 99 | 96 |
|         | ZIDUA             | 2.5 oz wt/a | PRE          |    |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |    |    |    |    |    |
| 10      | SONIC             | 4.5 oz wt/a | PRE          | 0  | 93 | 87 | 99 | 95 |
| 11      | AUTHORITY MAXX    | 3 oz wt/a   | PRE          | 0  | 98 | 77 | 99 | 91 |
| 12      | ZIDUA             | 2.5 oz wt/a | PRE          | 0  | 99 | 83 | 99 | 91 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |    |    |    |    |    |
| 13      | ZIDUA             | 2.5 oz wt/a | PRE          | 0  | 99 | 88 | 99 | 96 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |    |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |    |    |    |    |    |
| 14      | ZIDUA             | 2.5 oz wt/a | PRE          | 0  | 99 | 83 | 99 | 96 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |    |    |    |    |    |
|         | METRIBUZIN        | 5 oz wt/a   | PRE          |    |    |    |    |    |
| 15      | ZIDUA             | 2.5 oz wt/a | PRE          | 0  | 99 | 83 | 99 | 95 |
|         | SHARPEN           | 1 fl oz/a   | PRE          |    |    |    |    |    |
|         | METRIBUZIN        | 5 oz wt/a   | PRE          |    |    |    |    |    |
|         | OUTLOOK           | 10 fl oz/a  | 3WK          |    |    |    |    |    |

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|                               |             |                |                 |                 |               |        |        |
|-------------------------------|-------------|----------------|-----------------|-----------------|---------------|--------|--------|
| Pest Type                     |             | W Weed         | W Weed          | W Weed          | W Weed        |        |        |
| Pest Code                     |             | SETFA          | AMBTR           | CHEAL           | IPOSS         |        |        |
| Pest Scientific Name          |             | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Ipomoea sp.   |        |        |
| Pest Name                     |             | Giant foxtail  | Giant ragweed   | Common lambsqu> | Morning glory |        |        |
| Crop Code                     | GLXMA       |                |                 |                 |               |        |        |
| BBCH Scale                    | BSOY        |                |                 |                 |               |        |        |
| Crop Scientific Name          | Glycine max |                |                 |                 |               |        |        |
| Crop Name                     | Soybean     |                |                 |                 |               |        |        |
| Crop Variety                  |             |                |                 |                 |               |        |        |
| Description                   |             |                |                 |                 |               |        |        |
| Part Rated                    |             |                |                 |                 |               |        |        |
| Rating Date                   | 7-2-2014    | 7-2-2014       | 7-2-2014        | 7-2-2014        | 7-2-2014      |        |        |
| Rating Type                   | INJURY      | CONTROL        | CONTROL         | CONTROL         | CONTROL       |        |        |
| Rating Unit                   | PERCENT     | PERCENT        | PERCENT         | PERCENT         | PERCENT       |        |        |
| Rating Timing                 | 8 WEEK      | 8 WEEK         | 8 WEEK          | 8 WEEK          | 8 WEEK        |        |        |
| Days After First/Last Applic. | 54 20       | 54 20          | 54 20           | 54 20           | 54 20         |        |        |
| Trt Treatment                 | Rate        | Growth         |                 |                 |               |        |        |
| No. Name                      | Rate Unit   | Stage          | 11              | 12              | 13            | 14     | 15     |
| 16 CHECK                      |             |                | 0               | 0               | 0             | 0      | 0      |
| LSD (P=.05)                   |             |                | 0.0             | 2.3             | 7.1           | 0.0    | 7.2    |
| Standard Deviation            |             |                | 0.0             | 1.4             | 4.3           | 0.0    | 4.3    |
| CV                            |             |                | 0.0             | 1.52            | 5.28          | 0.0    | 4.81   |
| Replicate F                   |             |                | 0.000           | 1.406           | 2.379         | 0.000  | 3.104  |
| Replicate Prob(F)             |             |                | 1.0000          | 0.2608          | 0.1099        | 1.0000 | 0.0595 |
| Treatment F                   |             |                | 0.000           | 926.725         | 80.851        | 0.000  | 93.025 |
| Treatment Prob(F)             |             |                | 1.0000          | 0.0001          | 0.0001        | 1.0000 | 0.0001 |



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Weed Science Research

SOYBEAN PREEMERGENCE

Trial ID: S14030                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: BASF-SB                Investigator: Charles H Slack  
Project ID:                              Study Director: CHARLES SLACK  
Sponsor Contact: GREG STAPLETON

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, *Setaria faberi*, = US

AMBTR, *Ambrosia trifida*, = US

CHEAL, *Chenopodium album*, = US

IPOSS, *Ipomoea* sp., = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Rating Unit

PERCENT = percent

Plant and Soil Science, U of KY  
Weed Science Research

SOYBEAN PREEMERGENCE

Trial ID: S14030                      Location: LEXINGTON, KY    Trial Year: 2014  
Protocol ID: BASF-SB              Investigator: Charles H Slack  
Project ID:                              Study Director: CHARLES SLACK  
Sponsor Contact: GREG STAPLETON

**General Trial Information**

**Study Director:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST  
**Investigator:** CHARLES SLACK    **Title:** RESEARCH SPECIALIST

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 5-9-2014  
**Completion Date:** 10-1-2014

**Trial Location**

**City:** LEXINGTON                      **Country:** USA United States  
**State/Prov.:** KENTUCKY  
**Postal Code:** 40511

**Contacts**

**Study Director:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY                      **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu

**Investigator:** CHARLES SLACK                      **Title:** RESEARCH SPECIALIST  
**Organization:** UNIVERSITY OF KENTUCKY  
**Address:** 415 PLANT SCIENCE BUILDING    **Phone No.:** 859-218-0747  
**City+State/Prov:** LEXINGTON, KY                      **Mobile No.:** 859-227-3355  
**Postal Code:** 40546-0312                      **E-mail:** cslack@uky.edu

**Other Contacts**

| <b>Name</b> | <b>Role</b>      | <b>Other</b>        |
|-------------|------------------|---------------------|
| SARA LAWSON | RESEARCH ANALYST | sara.lawson@uky.edu |

**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG 3822

**Planting Rate, Unit:** 200000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 7.5 IN  
**Soil Temperature, Unit:** 64 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** SMOOTH smooth

**Planting Date:** 5-9-2014  
**Planting Method:** PLANTD planted  
**Emergence Date:** 5-19-2014

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed

**Pest 3 Type:** W **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters

**Pest 4 Type:** W **Code:** IPOSS Ipomoea sp.  
**Common Name:** Morning glory

**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 44 FT  
**Treated Plot Area:** 440 FT<sup>2</sup> **Treatments:** 16  
**Replications:** 3

**Site Type:** FIELD field  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WET wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.25 MI

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**Application Description**

|                                   | <b>A</b>  | <b>B</b>  | <b>C</b>  |
|-----------------------------------|-----------|-----------|-----------|
| <b>Application Date:</b>          | 5-9-2014  | 5-29-2014 | 6-12-2014 |
| <b>Application Method:</b>        | SPRAY     | SPRAY     | SPRAY     |
| <b>Application Timing:</b>        | PRE       | 3WAP      | 5WAP      |
| <b>Application Placement:</b>     | BROSOI    | BROFOL    | BROFOL    |
| <b>Applied By:</b>                | C H SLACK | C H SLACK | C H SLACK |
| <b>Air Temperature, Unit:</b>     | 84 F      | 80 F      | 78 F      |
| <b>% Relative Humidity:</b>       | 38        | 60        | 70        |
| <b>Wind Velocity, Unit:</b>       | 10 MPH    | 6 MPH     | 4 MPH     |
| <b>Wind Direction:</b>            | SW        | SSE       | SW        |
| <b>Soil Temperature, Unit:</b>    | 64 F      | 68 F      | 69 F      |
| <b>Soil Moisture:</b>             | GOOD      | NORMAL    | GOOD      |
| <b>% Cloud Cover:</b>             | 20        | 10        | 10        |
| <b>Next Moisture Occurred On:</b> | 5-10-2014 | 6-1-2014  | 6-13-2014 |

**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|---------------------------------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Height, Unit:</b>            | 2 IN       | 4 IN       |            |

**Pest Stage At Each Application**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Pest 1 Code, Type, Scale:</b> | SETFA W  | SETFA W  | SETFA W  |
| <b>Height, Unit:</b>             | 1 IN     | 2 IN     |          |
| <b>Pest 2 Code, Type, Scale:</b> | AMBTR W  | AMBTR W  | AMBTR W  |
| <b>Height, Unit:</b>             | 2 IN     | 3 IN     |          |
| <b>Pest 3 Code, Type, Scale:</b> | CHEAL W  | CHEAL W  | CHEAL W  |
| <b>Height, Unit:</b>             | 1 IN     | 2 IN     |          |
| <b>Pest 4 Code, Type, Scale:</b> | IPOSS W  | IPOSS W  | IPOSS W  |
| <b>Height, Unit:</b>             | 1 IN     | 2 IN     |          |

**Application Equipment**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      | ATV      |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   | ALTEVE   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      | CO2      |



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Pest Type  
Pest Code  
Pest Scientific Name  
Pest Name  
Crop Code GLXMA  
BBCH Scale BSOY  
Crop Scientific Name Glycine max  
Crop Name Soybean  
Crop Variety  
Description  
Part Rated  
Rating Date 11-3-2014  
Rating Type YIELD  
Rating Unit BU  
Rating Timing  
Days After First/Last Applic. 168 90

| Trt No. | Treatment        | Rate         | Growth Unit | Stage |      |
|---------|------------------|--------------|-------------|-------|------|
| 7       | BOUNDARY         | 29 fl oz/a   | PRE         |       | 45.6 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | QUADRI TOP       | 8 oz/a       | R3          |       |      |
|         | BESIEGE          | 7 oz/a       | R3          |       |      |
|         | S45-V8           |              |             |       |      |
| 8       | BOUNDARY         | 29 fl oz/a   | PRE         |       | 45.5 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | S45-V8           |              |             |       |      |
| 9       | BOUNDARY         | 29 fl oz/a   | PRE         |       | 43.8 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | QUADRI TOP       | 8 oz/a       | R3          |       |      |
|         | BESIEGE          | 7 oz/a       | R3          |       |      |
|         | S46-L2           |              |             |       |      |
| 10      | BOUNDARY         | 29 fl oz/a   | PRE         |       | 41.5 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | S46-L2           |              |             |       |      |
| 11      | BOUNDARY         | 29 fl oz/a   | PRE         |       | 49.2 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | QUADRI TOP       | 8 oz/a       | R3          |       |      |
|         | BESIEGE          | 7 oz/a       | R3          |       |      |
|         | S47-K5           |              |             |       |      |
| 12      | BOUNDARY         | 29 fl oz/a   | PRE         |       | 42.9 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | S47-K5           |              |             |       |      |
| 13      | BOUNDARY         | 29 fl oz/a   | PRE         |       | 51.4 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | QUADRI TOP       | 8 oz/a       | R3          |       |      |
|         | BESIEGE          | 7 oz/a       | R3          |       |      |
|         | S48-P4           |              |             |       |      |

Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code GLXMA  
 BBCH Scale BSOY  
 Crop Scientific Name Glycine max  
 Crop Name Soybean  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 11-3-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Rating Timing  
 Days After First/Last Applic. 168 90

| Trt No. | Treatment Name     | Rate         | Growth Unit | Stage |      |
|---------|--------------------|--------------|-------------|-------|------|
|         |                    |              |             |       | 4    |
| 14      | BOUNDARY           | 29 fl oz/a   | PRE         |       | 58.9 |
|         | N-PAK AMS LIQUID   | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR           | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO                | 1 % v/v      | 45DAY       |       |      |
|         | S48-P4             |              |             |       |      |
| 15      | BOUNDARY           | 29 fl oz/a   | PRE         |       | 51.4 |
|         | N-PAK AMS LIQUID   | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR           | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO                | 1 % v/v      | 45DAY       |       |      |
|         | QUADRIS TOP        | 8 oz/a       | R3          |       |      |
|         | BESIEGE            | 7 oz/a       | R3          |       |      |
|         | S49-F8             |              |             |       |      |
| 16      | BOUNDARY           | 29 fl oz/a   | PRE         |       | 46.0 |
|         | N-PAK AMS LIQUID   | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR           | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO                | 1 % v/v      | 45DAY       |       |      |
|         | S49-F8             |              |             |       |      |
|         | LSD (P=.05)        |              |             |       | .    |
|         | Standard Deviation |              |             |       | .    |
|         | CV                 |              |             |       | .    |

Crop Code  
 GLXMA, BSOY, Glycine max, = US

Rating Type  
 YIELD = yield

Rating Unit  
 BU = bushel

ARM Action Codes  
 TY1 = 1.001379\*[1]\*(100-[2])/87





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**Harvest Date:** 11-3-2014  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 145 FT  
**Harvest Equipment:** WINTERSTEIGER  
**% Standard Moisture:** 13.0

**Soil Temperature, Unit:** 56 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Crop 2:** GLXMA Glycine max  
**Variety:** S41-J6 Soybean

**Planting Date:** 5-19-2014  
**Planting Method:** PLANTD planted

**Planting Rate, Unit:** 140000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-26-2014  
**Harvest Date:** 11-3-2014

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 145 FT  
**Harvest Equipment:** WINTERSTEIGER  
**% Standard Moisture:** 13.0

**Soil Temperature, Unit:** 56 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Crop 3:** GLXMA Glycine max  
**Variety:** S43-K1 Soybean

**Planting Date:** 5-19-2014  
**Planting Method:** PLANTD planted

**Planting Rate, Unit:** 140000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-26-2014  
**Harvest Date:** 11-3-2014

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 145 FT  
**Harvest Equipment:** WINTERSTEIGER  
**% Standard Moisture:** 13.0

**Soil Temperature, Unit:** 56 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Crop 4:** GLXMA Glycine max  
**Variety:** S45-V8 Soybean

**Planting Date:** 5-19-2014  
**Planting Method:** PLANTD planted

**Planting Rate, Unit:** 140000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-26-2014  
**Harvest Date:** 11-3-2014

**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 145 FT  
**Harvest Equipment:** WINTERSTEIGER  
**% Standard Moisture:** 13.0

**Soil Temperature, Unit:** 56 F  
**Soil Moisture:** GOOD good  
**Seed Bed:** MEDIUM medium

**Crop 5:** GLXMA Glycine max  
**Variety:** S46-L2 Soybean

**Planting Date:** 5-19-2014  
**Planting Method:** PLANTD planted

**Planting Rate, Unit:** 140000 S/A  
**Depth, Unit:** 1.5 IN

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|  |   |
|--|---|
| <b>Row Spacing, Unit:</b> 30 IN        | <b>Emergence Date:</b> 5-26-2014        |
|  | <b>Harvest Date:</b> 11-3-2014          |
|  | <b>Harvested Width, Unit:</b> 5 FT      |
| <b>Soil Temperature, Unit:</b> 56 F    | <b>Harvested Length, Unit:</b> 145 FT   |
| <b>Soil Moisture:</b> GOOD good        | <b>Harvest Equipment:</b> WINTERSTEIGER |
| <b>Seed Bed:</b> MEDIUM medium         | <b>% Standard Moisture:</b> 13.0        |
| <b>Crop 6:</b> GLXMA Glycine max       | Soybean                                 |
| <b>Variety:</b> S47-K5                 |   |
|  | <b>Planting Date:</b> 5-19-2014         |
| <b>Planting Rate, Unit:</b> 140000 S/A | <b>Planting Method:</b> PLANTD planted  |
| <b>Depth, Unit:</b> 1.5 IN             |   |
| <b>Row Spacing, Unit:</b> 30 IN        | <b>Emergence Date:</b> 5-26-2014        |
|  | <b>Harvest Date:</b> 11-3-2014          |
|  | <b>Harvested Width, Unit:</b> 5 FT      |
| <b>Soil Temperature, Unit:</b> 56 F    | <b>Harvested Length, Unit:</b> 145 FT   |
| <b>Soil Moisture:</b> GOOD good        | <b>Harvest Equipment:</b> WINTERSTEIGER |
| <b>Seed Bed:</b> MEDIUM medium         | <b>% Standard Moisture:</b> 13.0        |
| <b>Crop 7:</b> GLXMA Glycine max       | Soybean                                 |
| <b>Variety:</b> S48-P4                 |   |
|  | <b>Planting Date:</b> 5-19-2014         |
| <b>Planting Rate, Unit:</b> 140000 S/A | <b>Planting Method:</b> PLANTD planted  |
| <b>Depth, Unit:</b> 1.5 IN             |   |
| <b>Row Spacing, Unit:</b> 30 IN        | <b>Emergence Date:</b> 5-26-2014        |
|  | <b>Harvest Date:</b> 11-3-2014          |
|  | <b>Harvested Width, Unit:</b> 5 FT      |
| <b>Soil Temperature, Unit:</b> 56 F    | <b>Harvested Length, Unit:</b> 145 FT   |
| <b>Soil Moisture:</b> GOOD good        | <b>Harvest Equipment:</b> WINTERSTEIGER |
| <b>Seed Bed:</b> MEDIUM medium         | <b>% Standard Moisture:</b> 13.0        |
| <b>Crop 8:</b> GLXMA Glycine max       | Soybean                                 |
| <b>Variety:</b> S49-F8                 |   |
|  | <b>Planting Date:</b> 5-19-2014         |
| <b>Planting Rate, Unit:</b> 140000 S/A | <b>Planting Method:</b> PLANTD planted  |
| <b>Depth, Unit:</b> 1.5 IN             |   |
| <b>Row Spacing, Unit:</b> 30 IN        | <b>Emergence Date:</b> 5-26-2014        |
|  | <b>Harvest Date:</b> 11-3-2014          |
|  | <b>Harvested Width, Unit:</b> 5 FT      |
| <b>Soil Temperature, Unit:</b> 56 F    | <b>Harvested Length, Unit:</b> 145 FT   |
| <b>Soil Moisture:</b> GOOD good        | <b>Harvest Equipment:</b> WINTERSTEIGER |
| <b>Seed Bed:</b> MEDIUM medium         | <b>% Standard Moisture:</b> 13.0        |

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**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 150 FT  
**Treated Plot Area:** 1500 FT<sup>2</sup> **Treatments:** 16  
**Replications:** 1  
**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RAOBL Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.5 MI

**Application Description**

|                                   | <b>A</b>  | <b>B</b>  | <b>C</b>    |
|-----------------------------------|-----------|-----------|-------------|
| <b>Application Date:</b>          | 5-19-2014 | 7-7-2014  | 8-5-2014    |
| <b>Application Method:</b>        | SPRAY     | SPRAY     | SPRAY       |
| <b>Application Timing:</b>        | PRE       | 45DAY     | R3          |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    | BROFOL      |
| <b>Applied By:</b>                | C H SLACK | C H SLACK | SARA LAWSON |
| <b>Air Temperature, Unit:</b>     | 68 F      | 85 F      | 84 F        |
| <b>% Relative Humidity:</b>       | 50        | 45        | 55          |
| <b>Wind Velocity, Unit:</b>       | 4 MPH     | 5 MPH     | 6 MPH       |
| <b>Wind Direction:</b>            | SW        | SSW       | WSW         |
| <b>Soil Temperature, Unit:</b>    | 56 F      | 74 F      | 74 F        |
| <b>Soil Moisture:</b>             | GOOD      | SLIDRY    | FAIR        |
| <b>% Cloud Cover:</b>             | 20        | 30        | 10          |
| <b>Next Moisture Occurred On:</b> | 5-22-2014 | 7-7-2014  | 8-6-2014    |

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**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|---------------------------------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            |            | 14 IN      | 30 IN      |
| <b>Crop 2 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            |            | 14 IN      | 30 IN      |
| <b>Crop 3 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            |            | 14 IN      | 30 IN      |
| <b>Crop 4 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            |            | 14 IN      | 30 IN      |
| <b>Crop 5 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            |            | 14 IN      | 30 IN      |
| <b>Crop 6 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            |            | 14 IN      | 30 IN      |
| <b>Crop 7 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            |            | 14 IN      | 30 IN      |
| <b>Crop 8 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            |            | 14 IN      | 30 IN      |

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**Application Equipment**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      | BACKPACK |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   | BELSPR   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      | CO2      |

**Date**    **By**    **Notes**  
7-27-2014    SARA LAWSON    SIGNIFICANT HAIL DAMAGE OCCURRED TO ENTIRE TRIAL AREA.



Pest Type  
Pest Code  
Pest Scientific Name  
Pest Name  
Crop Code GLXMA  
BBCH Scale BSOY  
Crop Scientific Name Glycine max  
Crop Name Soybean  
Crop Variety  
Description  
Part Rated  
Rating Date 11-3-2014  
Rating Type YIELD  
Rating Unit BU  
Rating Timing  
Days After First/Last Applic. 168 90

| Trt No. | Treatment        | Rate         | Growth Unit | Stage |      |
|---------|------------------|--------------|-------------|-------|------|
| 7       | BOUNDARY         | 29 fl oz/a   | PRE         |       | 50.3 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | QUADRI TOP       | 8 oz/a       | R3          |       |      |
|         | BESIEGE          | 7 oz/a       | R3          |       |      |
|         | S45-V8           |              |             |       |      |
| 8       | BOUNDARY         | 29 fl oz/a   | PRE         |       | 43.2 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | S45-V8           |              |             |       |      |
| 9       | BOUNDARY         | 29 fl oz/a   | PRE         |       | 49.7 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | QUADRI TOP       | 8 oz/a       | R3          |       |      |
|         | BESIEGE          | 7 oz/a       | R3          |       |      |
|         | S46-L2           |              |             |       |      |
| 10      | BOUNDARY         | 29 fl oz/a   | PRE         |       | 32.8 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | S46-L2           |              |             |       |      |
| 11      | BOUNDARY         | 29 fl oz/a   | PRE         |       | 41.4 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | QUADRI TOP       | 8 oz/a       | R3          |       |      |
|         | BESIEGE          | 7 oz/a       | R3          |       |      |
|         | S47-K5           |              |             |       |      |
| 12      | BOUNDARY         | 29 fl oz/a   | PRE         |       | 38.1 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | S47-K5           |              |             |       |      |
| 13      | BOUNDARY         | 29 fl oz/a   | PRE         |       | 47.0 |
|         | N-PAK AMS LIQUID | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR         | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO              | 1 % v/v      | 45DAY       |       |      |
|         | QUADRI TOP       | 8 oz/a       | R3          |       |      |
|         | BESIEGE          | 7 oz/a       | R3          |       |      |
|         | S48-P4           |              |             |       |      |

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Pest Type  
 Pest Code  
 Pest Scientific Name  
 Pest Name  
 Crop Code GLXMA  
 BBCH Scale BSOY  
 Crop Scientific Name Glycine max  
 Crop Name Soybean  
 Crop Variety  
 Description  
 Part Rated  
 Rating Date 11-3-2014  
 Rating Type YIELD  
 Rating Unit BU  
 Rating Timing  
 Days After First/Last Applic. 168 90

| Trt No. | Treatment Name     | Rate         | Growth Unit | Stage |      |
|---------|--------------------|--------------|-------------|-------|------|
|         |                    |              |             |       | 4    |
| 14      | BOUNDARY           | 29 fl oz/a   | PRE         |       | 35.0 |
|         | N-PAK AMS LIQUID   | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR           | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO                | 1 % v/v      | 45DAY       |       |      |
|         | S48-P4             |              |             |       |      |
| 15      | BOUNDARY           | 29 fl oz/a   | PRE         |       | 49.0 |
|         | N-PAK AMS LIQUID   | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR           | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO                | 1 % v/v      | 45DAY       |       |      |
|         | QUADRIS TOP        | 8 oz/a       | R3          |       |      |
|         | BESIEGE            | 7 oz/a       | R3          |       |      |
|         | S49-F8             |              |             |       |      |
| 16      | BOUNDARY           | 29 fl oz/a   | PRE         |       | 44.7 |
|         | N-PAK AMS LIQUID   | 2.5 % v/v    | 45DAY       |       |      |
|         | FLEXSTAR           | 56.7 fl oz/a | 45DAY       |       |      |
|         | MSO                | 1 % v/v      | 45DAY       |       |      |
|         | S49-F8             |              |             |       |      |
|         | LSD (P=.05)        |              |             |       | .    |
|         | Standard Deviation |              |             |       | .    |
|         | CV                 |              |             |       | .    |

Crop Code  
GLXMA, BSOY, Glycine max, = US

Rating Type  
YIELD = yield

Rating Unit  
BU = bushel

ARM Action Codes  
TY1 = 1.001379\*[1]\*(100-[2])/87





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|   |   |
|---|---|
| <p><b>Soil Temperature, Unit:</b> 56 F<br/> <b>Soil Moisture:</b> GOOD good<br/> <b>Seed Bed:</b> MEDIUM medium</p> <p><b>Crop 2:</b> GLXMA Glycine max<br/> <b>Variety:</b> S41-J6</p> <p><b>Planting Rate, Unit:</b> 14000 S/A<br/> <b>Depth, Unit:</b> 1.5 IN<br/> <b>Row Spacing, Unit:</b> 30 IN</p> <p><b>Soil Temperature, Unit:</b> 56 F<br/> <b>Soil Moisture:</b> GOOD good<br/> <b>Seed Bed:</b> MEDIUM medium</p> <p><b>Crop 3:</b> GLXMA Glycine max<br/> <b>Variety:</b> S43-K1</p> <p><b>Planting Rate, Unit:</b> 140000 S/A<br/> <b>Depth, Unit:</b> 1.5 IN<br/> <b>Row Spacing, Unit:</b> 30 IN</p> <p><b>Soil Temperature, Unit:</b> 56 F<br/> <b>Soil Moisture:</b> GOOD good<br/> <b>Seed Bed:</b> MEDIUM medium</p> <p><b>Crop 4:</b> GLXMA Glycine max<br/> <b>Variety:</b> S45-V8</p> <p><b>Planting Rate, Unit:</b> 140000 S/A<br/> <b>Depth, Unit:</b> 1.5 IN<br/> <b>Row Spacing, Unit:</b> 30 IN</p> <p><b>Soil Temperature, Unit:</b> 56 F<br/> <b>Soil Moisture:</b> GOOD good<br/> <b>Seed Bed:</b> MEDIUM medium</p> <p><b>Crop 5:</b> GLXMA Glycine max<br/> <b>Variety:</b> S46-L2</p> <p><b>Planting Rate, Unit:</b> 140000 S/A<br/> <b>Depth, Unit:</b> 1.5 IN</p> | <p><b>Harvest Date:</b> 11-3-2014<br/> <b>Harvested Width, Unit:</b> 5 FT<br/> <b>Harvested Length, Unit:</b> 145 FT<br/> <b>Harvest Equipment:</b> WINTERSTEIGER<br/> <b>% Standard Moisture:</b> 13.0</p> <p><b>BBCH Scale:</b> BSOY</p> <p><b>Planting Date:</b> 5-19-2014<br/> <b>Planting Method:</b> PLANTD planted</p> <p><b>Emergence Date:</b> 5-26-2014<br/> <b>Harvest Date:</b> 11-3-2014<br/> <b>Harvested Width, Unit:</b> 5 FT<br/> <b>Harvested Length, Unit:</b> 145 FT<br/> <b>Harvest Equipment:</b> WINTERSTEIGER<br/> <b>% Standard Moisture:</b> 13.0</p> <p><b>BBCH Scale:</b> BSOY</p> <p><b>Planting Date:</b> 5-19-2014<br/> <b>Planting Method:</b> PLANTD planted</p> <p><b>Emergence Date:</b> 5-26-2014<br/> <b>Harvest Date:</b> 11-3-2014<br/> <b>Harvested Width, Unit:</b> 5 FT<br/> <b>Harvested Length, Unit:</b> 145 FT<br/> <b>Harvest Equipment:</b> WINTERSTEIGER<br/> <b>% Standard Moisture:</b> 13.0</p> <p><b>BBCH Scale:</b> BSOY</p> <p><b>Planting Date:</b> 5-19-2014<br/> <b>Planting Method:</b> PLANTD planted</p> <p><b>Emergence Date:</b> 5-26-2014<br/> <b>Harvest Date:</b> 11-3-2014<br/> <b>Harvested Width, Unit:</b> 5 FT<br/> <b>Harvested Length, Unit:</b> 145 FT<br/> <b>Harvest Equipment:</b> WINTERSTEIGER<br/> <b>% Standard Moisture:</b> 13.0</p> <p><b>BBCH Scale:</b> BSOY</p> <p><b>Planting Date:</b> 5-19-2014<br/> <b>Planting Method:</b> PLANTD planted</p> |
|---|---|

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**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-26-2014

**Harvest Date:** 11-3-2014

**Harvested Width, Unit:** 5 FT

**Harvested Length, Unit:** 145 FT

**Harvest Equipment:** WINTERSTEIGER

**% Standard Moisture:** 13.0

**Soil Temperature, Unit:** 56 F

**Soil Moisture:** GOOD good

**Seed Bed:** MEDIUM medium

**Crop 6:** GLXMA Glycine max

**Variety:** S47-K5

Soybean

**BBCH Scale:** BSOY

**Planting Date:** 5-19-2014

**Planting Method:** PLANTD planted

**Planting Rate, Unit:** 140000 S/A

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-26-2014

**Harvest Date:** 11-3-2014

**Harvested Width, Unit:** 5 FT

**Harvested Length, Unit:** 145 FT

**Harvest Equipment:** WINTERSTEIGER

**% Standard Moisture:** 13.0

**Soil Temperature, Unit:** 56 F

**Soil Moisture:** GOOD good

**Seed Bed:** MEDIUM medium

**Crop 7:** GLXMA Glycine max

**Variety:** S48-P4

Soybean

**BBCH Scale:** BSOY

**Planting Date:** 5-19-2014

**Planting Method:** PLANTD planted

**Planting Rate, Unit:** 140000 S/A

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-26-2014

**Harvest Date:** 11-3-2014

**Harvested Width, Unit:** 5 FT

**Harvested Length, Unit:** 145 FT

**Harvest Equipment:** WINTERSTEIGER

**% Standard Moisture:** 13.0

**Soil Temperature, Unit:** 56 F

**Soil Moisture:** GOOD good

**Seed Bed:** MEDIUM medium

**Crop 8:** GLXMA Glycine max

**Variety:** S49-F8

Soybean

**BBCH Scale:** BSOY

**Planting Date:** 5-19-2014

**Planting Method:** PLANTD planted

**Planting Rate, Unit:** 140000 S/A

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Emergence Date:** 5-26-2014

**Harvest Date:** 11-3-2014

**Harvested Width, Unit:** 5 FT

**Harvested Length, Unit:** 145 FT

**Harvest Equipment:** WINTERSTEIGER

**% Standard Moisture:** 13.0

**Soil Temperature, Unit:** 56 F

**Soil Moisture:** GOOD good

**Seed Bed:** MEDIUM medium

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**Site and Design**

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 150 FT  
**Treated Plot Area:** 1500 FT<sup>2</sup> **Treatments:** 16  
**Replications:** 1  
**Site Type:** FIELD field  
**Tillage Type:** NOTILL no-till  
**Study Design:** RAOBL Randomized Complete Block (RCB)

**Soil Description**

**Description Name:** MAURY  
**% Sand:** 6 **% OM:** 2.6 **Texture:** SIL silt loam  
**% Silt:** 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM  
**% Clay:** 32 **CEC:** 18 **Fert. Level:** E excellent  
**Soil Drainage:** E excellent

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** WEDRWE wet-dry-wet  
**Closest Weather Station:** SPINDLETOP **Distance, Unit:** 2.5 MI

**Application Description**

|                                   | <b>A</b>  | <b>B</b>  | <b>C</b>    |
|-----------------------------------|-----------|-----------|-------------|
| <b>Application Date:</b>          | 5-19-2014 | 7-7-2014  | 8-5-2014    |
| <b>Application Method:</b>        | SPRAY     | SPRAY     | SPRAY       |
| <b>Application Timing:</b>        | PRE       | 45DAY     | R3          |
| <b>Application Placement:</b>     | BROFOL    | BROFOL    | BROFOL      |
| <b>Applied By:</b>                | C H SLACK | C H SLACK | SARA LAWSON |
| <b>Air Temperature, Unit:</b>     | 68 F      | 85 F      | 84 F        |
| <b>% Relative Humidity:</b>       | 50        | 45        | 55          |
| <b>Wind Velocity, Unit:</b>       | 4 MPH     | 5 MPH     | 6 MPH       |
| <b>Wind Direction:</b>            | SW        | SSW       | WSW         |
| <b>Soil Temperature, Unit:</b>    | 56 F      | 74 F      | 74 F        |
| <b>Soil Moisture:</b>             | GOOD      | SLIDRY    | FAIR        |
| <b>% Cloud Cover:</b>             | 20        | 30        | 10          |
| <b>Next Moisture Occurred On:</b> | 5-22-2014 | 7-7-2014  | 8-6-2014    |

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**Crop Stage At Each Application**

|                                 | <b>A</b>   | <b>B</b>   | <b>C</b>   |
|---------------------------------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            | 14 IN      |            | 30 IN      |
| <b>Crop 2 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            | 14 IN      |            | 30 IN      |
| <b>Crop 3 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            | 14 IN      |            | 30 IN      |
| <b>Crop 4 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            | 14 IN      |            | 30 IN      |
| <b>Crop 5 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            | 14 IN      |            | 30 IN      |
| <b>Crop 6 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            | 14 IN      |            | 30 IN      |
| <b>Crop 7 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            | 14 IN      |            | 30 IN      |
| <b>Crop 8 Code, BBCH Scale:</b> | GLXMA BSOY | GLXMA BSOY | GLXMA BSOY |
| <b>Stage Scale Used:</b>        |            |            | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            | R3 90      |
| <b>Height, Unit:</b>            | 14 IN      |            | 30 IN      |

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**Application Equipment**

|                                  | <b>A</b> | <b>B</b> | <b>C</b> |
|----------------------------------|----------|----------|----------|
| <b>Appl. Equipment:</b>          | ATV      | ATV      | BACKPACK |
| <b>Equipment Type:</b>           | ALTEVE   | ALTEVE   | BELSPR   |
| <b>Operation Pressure, Unit:</b> | 30 PSI   | 30 PSI   | 30 PSI   |
| <b>Nozzle Type:</b>              | FLAT FAN | FLAT FAN | FLAT FAN |
| <b>Nozzle Size:</b>              | 8004 DG  | 8004 DG  | 8004 DG  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN    | 20 IN    | 20 IN    |
| <b>Boom Length, Unit:</b>        | 10 FT    | 10 FT    | 10 FT    |
| <b>Boom Height, Unit:</b>        | 30 IN    | 30 IN    | 30 IN    |
| <b>Ground Speed, Unit:</b>       | 4 MPH    | 4 MPH    | 4 MPH    |
| <b>Carrier:</b>                  | WATER    | WATER    | WATER    |
| <b>Spray Volume, Unit:</b>       | 24 GPA   | 24 GPA   | 24 GPA   |
| <b>Mix Size, Unit:</b>           | 3 liters | 3 liters | 3 liters |
| <b>Propellant:</b>               | CO2      | CO2      | CO2      |

| <b>Date</b> | <b>By</b>   | <b>Notes</b>                                  |
|-------------|-------------|---|
| 7-27-2014   | SARA LAWSON | SIGNIFICANT HAIL DAMAGE TO ENTIRE TRIAL AREA. |