

University of Tennessee

Engenia Cotton Weed Control No-till - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: DP 1522BXF (planted 4/25/16)

Application: A 4/25/16; B 5/26/16; C 6/14/16 (CO2 pressurized backpack sprayer; 15 gpa TTI 003 30 psi)

Plots: 6.33 ft x 30 ft (RCBD 4 reps)

Rating scale of 0-100 (% control of weeds)

| Pest Name | Palmer amaranth | Pitted mg | Annl grasses | Palmer amaranth | Palmer amaranth | Goosegrass | | |
|-------------------|-----------------|-----------|--------------|-----------------|-----------------|------------|--------|--------|
| Rating Date | 6/9/2016 | 6/9/2016 | 6/9/2016 | 7/8/2016 | 7/25/2016 | 7/25/2016 | | |
| Rating Type | CONTROL | CONTROL | CONTROL | CONTROL | CONTROL | CONTROL | | |
| Trt-Eval Interval | 45 DA-A | 45 DA-A | 45 DA-A | 74 DA-A | 91 DA-A | 91 DA-A | | |
| Treatment | Rate | Appl | | | | | | |
| 1 ROUNDUP PMAX | 32 oz/a | A | 50 b | 88.3 a | 97 a | 42.5 b | 35 b | 69.8 a |
| AMS | 20.4 oz/a | A | | | | | | |
| ROUNDUP PMAX | 32 oz/a | B | | | | | | |
| AMS | 20.4 oz/a | B | | | | | | |
| 2 GRAMOXONE SL | 48 oz/a | A | 89.3 a | 93.6 a | 96.3 a | 89.8 a | 99 a | 99 a |
| COTORAN 4 L | 32 oz/a | A | | | | | | |
| NIS | 0.25 % v/v | A | | | | | | |
| ROUNDUP PMAX | 32 oz/a | B | | | | | | |
| LIBERTY 280 SL | 29 oz/a | B | | | | | | |
| DUAL MAGNUM | 21 oz/a | B | | | | | | |
| AMS | 20.4 oz/a | B | | | | | | |
| ROUNDUP PMAX | 32 oz/a | C | | | | | | |
| LIBERTY 280 SL | 29 oz/a | C | | | | | | |
| DUAL MAGNUM | 21 oz/a | C | | | | | | |
| AMS | 20.4 oz/a | C | | | | | | |
| 3 ROUNDUP PMAX | 32 oz/a | A | 95.5 a | 98.1 a | 99 a | 98.5 a | 99 a | 99 a |
| ENGENIA | 12.8 oz/a | A | | | | | | |
| PROWL H2O | 32 oz/a | A | | | | | | |
| COTORAN 4 L | 32 oz/a | A | | | | | | |
| ROUNDUP PMAX | 32 oz/a | B | | | | | | |
| ENGENIA | 12.8 oz/a | B | | | | | | |
| OUTLOOK | 12 oz/a | B | | | | | | |
| LIBERTY 280 SL | 29 oz/a | C | | | | | | |
| DUAL MAGNUM | 21 oz/a | C | | | | | | |
| AMS | 20.4 oz/a | C | | | | | | |
| 4 ROUNDUP PMAX | 32 oz/a | A | 95.5 a | 98.6 a | 99 a | 94.3 a | 91.8 a | 96 a |
| ENGENIA | 12.8 oz/a | A | | | | | | |
| PROWL H2O | 32 oz/a | A | | | | | | |
| COTORAN 4 L | 32 oz/a | A | | | | | | |
| ENGENIA | 12.8 oz/a | B | | | | | | |
| ROUNDUP PMAX | 32 oz/a | B | | | | | | |
| OUTLOOK | 12 oz/a | B | | | | | | |
| ZIDUA | 1.5 oz/a | D | | | | | | |
| LIBERTY 280 SL | 29 oz/a | D | | | | | | |
| AMS | 20.4 oz/a | D | | | | | | |
| 5 ROUNDUP PMAX | 32 oz/a | A | 93.8 a | 92.2 a | 98.5 a | 82 ab | 99 a | 99 a |
| ENGENIA | 12.8 oz/a | A | | | | | | |
| PROWL H2O | 32 oz/a | A | | | | | | |
| COTORAN 4 L | 32 oz/a | A | | | | | | |
| ROUNDUP PMAX | 32 oz/a | B | | | | | | |
| ENGENIA | 12.8 oz/a | B | | | | | | |
| ROUNDUP PMAX | 32 oz/a | C | | | | | | |
| ENGENIA | 12.8 oz/a | C | | | | | | |
| 6 ROUNDUP PMAX | 32 oz/a | A | 95.5 a | 96.7 a | 98.5 a | 83.3 ab | 99 a | 99 a |
| ENGENIA | 12.8 oz/a | A | | | | | | |
| PROWL H2O | 32 oz/a | A | | | | | | |
| COTORAN 4 L | 32 oz/a | A | | | | | | |
| LIBERTY 280 SL | 29 oz/a | B | | | | | | |

| | | | | | | | | |
|-----------------|-----------|---|--------|--------|--------|---------|--------|--------|
| OUTLOOK | 12 oz/a | B | | | | | | |
| AMS | 20.4 oz/a | B | | | | | | |
| ROUNDUP PMAX | 32 oz/a | C | | | | | | |
| ENGENIA | 12.8 oz/a | C | | | | | | |
| DUAL MAGNUM | 21 oz/a | C | | | | | | |
| 7 ROUNDUP PMAX | 32 oz/a | A | 99 a | 97.2 a | 98.5 a | 83.5 ab | 95.8 a | 95.5 a |
| ENGENIA | 12.8 oz/a | A | | | | | | |
| ENGENIA | 12.8 oz/a | B | | | | | | |
| ROUNDUP PMAX | 32 oz/a | B | | | | | | |
| OUTLOOK | 12 oz/a | B | | | | | | |
| 8 ROUNDUP PMAX | 32 oz/a | A | 93.3 a | 96.3 a | 96.5 a | 89.8 a | 99 a | 99 a |
| ENGENIA | 12.8 oz/a | A | | | | | | |
| ENGENIA | 12.8 oz/a | B | | | | | | |
| ROUNDUP PMAX | 32 oz/a | B | | | | | | |
| OUTLOOK | 12 oz/a | B | | | | | | |
| 9 ROUNDUP PMAX | 32 oz/a | A | 81.5 a | 88.6 a | 87.3 a | 78 ab | 81.8 a | 70 a |
| ENGENIA | 12.8 oz/a | A | | | | | | |
| LIBERTY 280 SL | 29 oz/a | B | | | | | | |
| ROUNDUP PMAX | 32 oz/a | B | | | | | | |
| DUAL MAGNUM | 21 oz/a | B | | | | | | |
| 10 ROUNDUP PMAX | 32 oz/a | A | 77.5 a | 87 a | 82 a | 83 ab | 89 a | 82.3 a |
| ENGENIA | 12.8 oz/a | A | | | | | | |
| ENGENIA | 12.8 oz/a | C | | | | | | |
| ROUNDUP PMAX | 32 oz/a | C | | | | | | |
| OUTLOOK | 12 oz/a | C | | | | | | |

Means followed by same letter do not significantly differ (P=.05, LSD)