## Kochia control in soybean with soil-applied herbicides.

The objective of the study was to evaluate kochia control with soil-applied herbicides used in soybean. No crop was planted in this study due to excessively wet soil conditions. Herbicide treatments were applied June 18 when kochia was 2- to 7-inches tall with 3-10 plants per sq ft. All treatments were applied with glyphosate at 22 fl oz. At 4 weeks after treatment (WAT), all treatments provided ≥92% kochia control. At 8 WAT, only treatments containing metribuzin (0.66 lb/A) or sulfentrazone (Sonic, Authority MTZ, Authority Assist) provided >90% kochia control. Note that the metribuzin rate is very high, especially for light soils with high pH and low organic matter.

|  |                               | Weed Control<br>Kochia |        |        |
|--|-------------------------------|------------------------|--------|--------|
| Treatment <sup>ab</sup>                            | Rate                          |                        |        |        |
|  |                               | Jun-29                 | Jul-16 | Aug-15 |
|  |                               | %%                     |        |        |
| Gly + Zidua  | 22 oz + 3 oz                  | 98                     | 96     | 74     |
| Gly + Zidua + Sharpen                              | 22 oz + 3 oz + 1 oz           | 96                     | 93     | 73     |
| Gly + Zidua + Verdict                              | 22 oz + 3 oz + 5 oz           | 98                     | 95     | 81     |
| Gly + Zidua + Verdict + Metribuzin                 | 22 oz + 3 oz + 5 oz + 0.66 lb | 99                     | 100    | 99     |
| Gly + Zidua + Sharpen + Metribuzin                 | 22 oz + 3 oz + 1 oz + 0.66 lb | 99                     | 100    | 99     |
| Gly + Verdict                                      | 22 oz + 5 oz                  | 97                     | 94     | 73     |
| Gly + Verdict + Metribuzin                         | 22 oz + 5 oz + 0.66 lb        | 99                     | 100    | 98     |
| Gly + Anthem                                       | 22 oz + 9 oz                  | 96                     | 92     | 68     |
| Gly + Fierce                                       | 22 oz + 4.5 oz                | 98                     | 97     | 85     |
| Gly + Sonic  | 22 oz + 4 oz                  | 97                     | 98     | 94     |
| Gly + Authority MTZ                                | 22 oz + 14 oz                 | 97                     | 98     | 97     |
| Gly + Authority Assist                             | 22 oz + 6 oz                  | 98                     | 99     | 95     |
| Gly + Zidua + Pursuit + Sharpen                    | 22 oz + 3 oz + 2 oz + 1 oz    | 97                     | 93     | 75     |
| Gly  |                               | 97                     | 94     | 68     |
| LSD (0.05)   |                               | NS                     | 4      | 10.7   |
| CV   |                               | 1.4                    | 2.5    | 7.6    |
| <sup>a</sup> All treatments applied to 2-7" Kochia | (no crop-prevent plant)       |                        |        |        |
| <sup>b</sup> Gly=Glyphosate (PowerMax)             |                               |                        |        |        |