

COMPARISON OF GLYPHOSATE BRANDS. Brady F. Kappler, Robert F. Klein, Stevan Z. Knezevic, Drew J. Lyon, Alex R. Martin, Frew W. Roeth, Gail A. Wicks. Extension Educator, Professor, Assistant Professor, Associate Professor, Professor, and Professor, Department of Agronomy University of Nebraska, Lincoln, NE 68583-0915.

Much attention has been given to the entry of other brands (trade names) of glyphosate into the market. Field studies were repeated in five locations across Nebraska to evaluate different brands of glyphosate herbicides after 2001 studies showed there to be little or no differences in weed control of most species. The study was conducted in glyphosate tolerant soybean at Concord, and Lincoln, Nebraska. The study was conducted in glyphosate tolerant corn in Clay Center. The study was conducted in wheat stubble in North Platte, Ogallala and Sidney, Nebraska. Treatments of 0.42 kg ae/ha and 0.84 kg ae/ha of the following glyphosate products were applied; Roundup UltraMax, Touchdown, Clearout 41 Plus, Glyphos Xtra, Roundup UltraDry and Roundup WeatherMAX. Most of the products represent the isopropylamine salt of glyphosate however, Touchdown is formulated as the diammonium salt of glyphosate, Roundup UltraDry is formulated as the mono-ammonium salt of glyphosate, Roundup WeatherMAX is formulated as potassium salt of glyphosate. In the wheat stubble at North Platte an additional treatment of Engame, a glyphosate acid, was included in the trial. All of the locations except Clay Center evaluated treatments at 15 and 30 days after treatment (DAT). Clay Center was evaluated at only 30 DAT. All sites were evaluated for percent control of both grass and broadleaf species.

In the glyphosate tolerant soybean treatment differences were small and varied slightly across the different trade names. Neither Lincoln or Concord had any largely significant differences in control at the 0.42 or 0.84 kg ae/ha rates or at the 15 and the 30 DAT ratings. In Clay Center in the glyphosate tolerant corn there were little to no difference between any of the products at either the 15 or 30 DAT ratings with all brands providing over 95 percent control. At Sidney, in wheat stubble, there were once again very few significant differences between products at either rate. Touchdown provided less control than the other products however last year it provided better control than the other products. All four of these sites showed the expected increased control with the 0.84 kg/ha rate but the 0.42 kg/ha rate allowed us to approach a threshold level in which differences would be more easily detected.

In North Platte, wheat stubble showed significant differences in percent control of Glyphos Xtra at the 0.42 kg ae/ha rate provided significantly less slimleaf lambsquarter control than the other products at 30 DAT. At 30 days after treatment Engame at 0.84 kg ae/ha provided significantly less weed control than the other products. In Ogallala, Engame provided significantly better weed control of yellow foxtail and kochia at both the 0.42 and 0.84 kg ae/ha rates than the other products.

As a whole, few differences were seen between different glyphosate brands in this study across the locations. However, with a difficult to control species and dry conditions some differences may be evident. Yet they do not appear with any consistency. Still with species that are easily susceptible to glyphosate there seems to be little or no differences rather rate, environmental factors, and most importantly costs will play a larger role than brand name in product selection.