## PREPLANT HORSEWEED AND RUSSIAN THISTLE CONTROL IN CONSERVATION TILLAGE COTTON

J.W. Keeling<sup>1\*</sup> and J.D. Everitt<sup>1</sup>

<sup>1</sup>Texas Agricultural Experiment Station, Lubbock, TX

\*Corresponding author's e-mail address: w-keeling@tamu.edu

## ABSTRACT

With increasing use of reduced or no-till practices, Russian thistle (Salsola iberica) and horseweed (Conyza canadensis) are two winter annual weeds that are increasing problems to Texas Southern High Plains producers. Studies were conducted in 2005 at the Texas Agricultural Experiment Station near Lubbock. Treatments evaluated included 2,4-D, Clarity, and Roundup WeatherMax applied at three weed growth stages. Gramoxone Max, Ignite, and ET were compared to Roundup WeatherMax. 2,4-D and Clarity controlled 1 to 3 inch Russian thistle >90%, and were more effective than Roundup WeatherMax. At the 4 to 6 inch and 6 to 12 inch weed stages, control declined with 2,4-D and Clarity while control with Roundup WeatherMax was 97 to 100%. 2,4-D, Clarity, and Roundup WeatherMax controlled 1 to 3 inch horseweed 90 to 92%. Horseweed control declined with both 2,4-D and Clarity as weed size increased; however, Roundup WeatherMax controlled 4 to 6 inch and 6 to 12 inch horseweed 93 and 99%, respectively. Gramoxone Max, ET, and Roundup WeatherMax controlled 4 to 6 inch Russian thistle 97 to 100%. Roundup WeatherMax and Gramoxone Max controlled 4 to 6 inch horseweed 92 to 95% 14 DAT; however, significant regrowth occurred 28 DAT and control declined with Gramoxone Max. Ignite controlled horseweed 77%, while ET was less effective. Studies indicated 2.4-D is an effective option for control of both Russian thistle and horseweed.