

WEED MANAGEMENT AND CROP TOLERANCE WITH WARRANT IN LOUISIANA COTTON**D.K. Miller****D. O. Stephenson, IV****M.S. Mathews****Louisiana State University Agricultural Center****St. Joseph, LA.****Abstract**

A field study was conducted in 2011 to evaluate early season weed management and crop tolerance with Warrant in cotton in Louisiana. 'FM 1740 B2F' cotton was planted on April 26. Soil was a silt loam with pH 6.8. Treatments included Roundup Powermax @ 22 oz/A plus Staple LX @ 1.7 oz/A, Roundup Powermax @ 22 oz/A plus Staple LX @ 2.7 oz/A, Roundup Powermax @ 22 oz/A plus Dual Magnum @ 16 oz/A, Roundup Powermax @ 22 oz/A plus Warrant at 48 oz/A, Roundup Powermax @ 22 oz/A plus Staple LX @ 1.7 oz/A and Dual Magnum @ 16 oz/A, Roundup Powermax @ 22 oz/A plus Staple LX @ 1.7 oz/A and Warrant at 48 oz/A, Roundup Powermax @ 22 oz/A plus Staple LX at 2.7 oz/A and Dual Magnum at 16 oz/A, and Roundup Powermax @ 22 oz/A plus Staple LX @ 2.7 oz/A and Warrant at 48 oz/A. Treatments were applied to cotton in the 2-lf growth stage to 2 to 3 inch weeds. Parameters measured included visual crop injury 7 and 14 d after treatment (DAT) and weed control 14 and 28 DAT.

At 7 DAT, equivalent injury among treatments in the form of leaf speckling and /or yellowing ranged from 1 to 6%. At 14 DAT, control of barnyardgrass, goosegrass, broadleaf signalgrass, large crabgrass, sicklepod, pitted morningglory, entireleaf morningglory, redroot pigweed, and common purslane ranged from 90 to 100, 100, 100, 100, 93 to 98, 84 to 100, 98 to 100, 100, and 98 to 100%, respectively, and was equal among all treatments. Control of hemp sesbania was 86 and 78% for Roundup Powermax plus Dual Magnum and Warrant, respectively, which was less than control for all other treatments (96 to 100%).

At 14 DAT, visual injury was not observed for any treatment. At 28 DAT, all treatments provided equal control of barnyardgrass, goosegrass, broadleaf signalgrass, large crabgrass, sicklepod, hemp sesbania, pitted morningglory, entireleaf morningglory, redroot pigweed, and common purslane ranging from 84 to 98, 100, 94 to 100, 100, 84 to 98, 65 to 95, 95 to 100, 95 to 100, 100, and 98 to 100%, respectively.

With the exception of hemp sesbania, control of weeds evaluated with Warrant in combination with Roundup Powermax was good to excellent early season. Crop injury was minimal when applied alone with Roundup Powermax or plus Staple LX.