

IVYLEAF MORNINGGLORY (*IPOMOEA HEDERACEA* (L.) JACQ.) MANAGEMENT IN ROUNDUP READY COTTON, J.D. Everitt, J.W. Keeling, P.A. Dotray, and L.L. Lyon, Texas Agricultural Experiment Station, Texas Agricultural Extension Service, and Texas Tech University, Lubbock, TX

ABSTRACT

Field experiments were established in 2000 in Hale County, Texas to compare Roundup Ultra application timings and to evaluate postemergence-topical (PT) and postemergence-directed (PDIR) Roundup Ultra tank mixtures for ivyleaf morningglory (*Ipomoea hederacea* (L.) JACQ.) control in Roundup Ready cotton. The test area received a preplant incorporated (PPI) application of Prowl at 0.75 lb ai/A. Roundup Ultra application timings were compared to Prowl PPI and Prowl PPI followed by (fb) Caparol preemergence (PE) at 1.2 lb ai/A. The addition of Staple to Roundup Ultra PT and PDIR was evaluated also. Roundup Ultra PDIR alone was compared to Roundup Ultra tank mixtures with residual herbicides following Roundup Ultra PT. Weed control was evaluated at 7, 14, and 28 days after each application.

Roundup Ultra early PT fb two PDIR applications of Roundup Ultra controlled ivyleaf morningglory 90% late season compared to 80% ivyleaf morningglory control from two PT applications and one PDIR application. One PT and one PDIR application controlled ivyleaf morningglory 60%. One PT application of Roundup Ultra did not control ivyleaf morningglory. A PT application of Roundup Ultra at 0.56 lb ae/A plus Staple at 0.032 lb ai/A fb either Roundup Ultra PDIR alone or Roundup Ultra (0.56 lb ae/A) plus Staple (0.032 lb ai/A) PDIR resulted in 90 to 95% season-long ivyleaf morningglory control. Following a PT application of Roundup Ultra, a tank mixture of Roundup Ultra and Direx at 0.75 lb ai/A PDIR controlled morningglory 95% late season compared to 55% control with Roundup Ultra PDIR alone. Ivyleaf morningglory was controlled >90% with the addition of Direx at 0.5 lb ai/A to Roundup Ultra PDIR. Cotoran at 0.75 lb ai/A added to Roundup Ultra PDIR increased ivyleaf morningglory control to 85% and the addition of Caparol at 0.8 lb ai/A controlled ivyleaf morningglory 90%. Roundup Ultra plus Aim at 0.0018 and 0.0036 lb ai/A PDIR provided >90% control of ivyleaf morningglory 14 days after treatment (DAT), but control declined to <80% control late season. The addition of Goal at 0.2 lb ai/A to Roundup Ultra PDIR increased ivyleaf morningglory control to 95% when compared to Roundup Ultra alone 14 DAT, but late season ivyleaf morningglory control was <70%. Roundup Ultra plus FirstRate at 0.016 and 0.032 lb ai/A PDIR controlled ivyleaf morningglory 95% 14 DAT and control was maintained throughout the remainder of the season. Cotton injury <10% 14 DAT from the addition of Cotoran, Goal, and both rates of FirstRate to Roundup Ultra PDIR, but injury was not apparent 28 DAT.