WEED CONTROL PROGRAMS USING ENGENIA IN XTEND COTTON

J.S. Rose University of Arkansas Fayetteville, AR L.T. Barber University of Arkansas-Extension Lonoke, AR J.K. Norsworthy University of Arkansas Fayetteville, AR R. Doherty University of Arkansas Monticello Monticello, AR L. Collie University of Arkansas-Extension Lonoke, AR

Abstract

BASF recently announced the development of Engenia, a new formulation of dicamba, for use in the fight against herbicide-resistant and difficult-to-control broadleaves, particularly glyphosate-resistant Palmer amaranth. This new formulation of dicamba has reduced volatility characteristics due to the development of the new BAPMA salt. This product will be intended for use in dicamba-resistant crops, such as XtendFlex cotton, which can be applied preemergence or postemergence in the crop. Under a prolonged period without rainfall following application, dicamba may provide residual control of some broadleaf weeds. Experiments were conducted in 2015 at the Southeast Research and Extension Center in Rohwer, AR, and the Lon Mann Cotton Research Station in Marianna, AR, to evaluate the performance of Engenia in programs with other herbicides in XtendFlex cotton. The trial consisted of 8 herbicide programs comprised of preemergence (PRE), early postemergence (EPOST), and late postemergence (LPOST) applications. Programs that contained Prowl H2O (0.95 lb ai/acre) or Cotoran 4L (1.0 lb ai/acre) applied PRE provided better season-long control of Palmer amaranth than programs not having these residuals at planting. Engenia provided better control of Palmer amaranth and morningglories when used in a season-long herbicide program with residuals compared to a POST-only program. Hence, the continued recommendation of PRE and POST residual herbicides in an Engenia-containing herbicide program will be crucial for long-term success of the XtendFlex system.