

COMPETITION AND MANAGEMENT OF ANNUAL MORNINGGLORY (*IPOMOEA* SPP.) IN CORN AND SOYBEAN. Dawn E. Refsell, Phillip J. Parrish, and Emerson D. Nafziger, Extension Specialist, Department of Crop Sciences, University of Illinois, Urbana, IL 61801, Graduate Student, Department of Crop Sciences, University of Illinois, Urbana, IL 61801, and Professor, Department of Crop Sciences, University of Illinois, Urbana, IL 61801.

Annual morningglory species are becoming a problem in production agriculture in Illinois due to current weed management strategies. Continuous emergence in combination with increased use of glyphosate as a post emergence treatment alone is a potential reason for morningglory to become a problematic weed. Field research was conducted at Urbana, IL in 2006 and 2007 to evaluate herbicide options for *Ipomoea* spp. control in glyphosate-resistant corn and soybean. Fields with naturally high densities of *Ipomoea* spp. were chosen for the study. All postemergence applications included 0.84 kg/ha of glyphosate. Treatments were evaluated at 15, 30, and 60 DAT for morningglory control and 15DAT for crop injury.

Soybean injury was observed 15 DAT in the cloransulam methyl followed by glyphosate plus carfentrazone, cloransulam methyl followed by glyphosate plus acifluorfen, and the cloransulam methyl followed by glyphosate plus fomesafen treatments. The control of *Ipomoea* spp. in soybean ranged from 33 to 85% control over all three evaluation times. Five herbicide treatments provided greater than 70% control of morningglory through 60 DAT. These treatments were flumioxazin followed by glyphosate plus fomesafen, flumioxazin followed by glyphosate plus cloransulam methyl, cloransulam methyl followed by glyphosate plus cloransulam methyl, cloransulam methyl followed by glyphosate plus carfentrazone, and cloransulam methyl followed by glyphosate plus fomesafen.

Injury to corn was only observed in the atrazine followed by glyphosate plus carfentrazone treatment 15 DAT at 8%. The level of morningglory control was much greater in corn than soybean, with some treatments obtaining greater than 90% control. Only three treatments provided greater than 70% control of *Ipomoea* spp. through 60 DAT. These treatments included atrazine followed by glyphosate plus 2,4-D, atrazine followed by glyphosate plus bromoxynil/atrazine, and atrazine followed by glyphosate plus nicosulfuron/rimsulfuron/atrazine.