GIANT RAGWEED MANAGEMENT IN HERBICIDE RESISTANT CORN. Michael D. White, Thomas T. Bauman, and Chad D. Dyer, Research Associate, Professor, and Graduate Student, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN, 47907.

Giant ragweed is one of the most competitive annual weeds in corn and can cause significant reductions in crop yield. In addition to competition it also can harbor insect pests such as stalk and corn borers.

Giant ragweed was one of the first weeds in Indiana to evolve resistance to herbicides classified as ALS inhibitors. Many herbicides labeled for giant ragweed control in corn are ALS herbicides. Effective alternative control measures need to be identified for control of giant ragweed if the prevalence of ALS resistant giant ragweed increases. Several herbicide resistant crop management systems were tested to determine their effectiveness in controlling giant ragweed in corn. The herbicide resistant crop systems tested were Roundup Ready, Liberty Link and Clearfield. Effective giant ragweed control was obtained with weed control programs which utilized sequential applications of glyphosate and glufosinate and tank mixes of glyphosate, glufosinate and imazethapyr+imazapyr with atrazine, dicamba and mesotrione.

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