

Giant Ragweed with Resistance to PPO and ALS
inhibiting Herbicides (Mark Loux and Jeff Stachler,
The Ohio State University)

Some growers and dealers have been reporting reduced control of giant ragweed with PPO-inhibiting herbicides (Cobra, Flexstar, and Reflex) the last few years in non-GMO soybeans. OSU greenhouse research confirms the presence in Ohio of giant ragweed populations with multiple herbicide resistance, to both PPO- and ALS-inhibiting herbicides. Giant ragweed populations in Clinton, Marion, and Mercer Counties have exhibited a relatively high level of resistance to both types of herbicide, while the populations we have worked with so far from Champaign, Clark, Madison, and Pickaway Counties have exhibited a lower level of resistance. We have also identified a giant ragweed population in Licking County with a low-level of resistance to PPO-inhibiting herbicides. Populations with a low level of resistance are not likely to be controlled by PPO or ALS inhibitors, but usually show at least some symptoms following treatment. Populations with a high level of resistance are less likely to show symptoms of herbicide injury.

Giant ragweed populations with resistance to both PPO- and ALS-inhibiting herbicides can be most effectively managed in corn, using a combination of preemergence and postemergence herbicides. This is due to the effective alternatives to PPO and ALS inhibitors that are available for use in corn - atrazine, dicamba, Laudis/Impact/Callisto, etc. These populations can be effectively managed with glyphosate in Roundup Ready soybeans, but continuous use of this practice is likely to result in resistance to glyphosate as well. For more information on control of giant ragweed with various types of herbicide resistance, consult the "Problem Weed" section of the current "Weed Control Guide for Ohio and Indiana".

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