Specialist Outlines Waterhemp Control In Glyphosate Resistant Soybeans

URBANA, ILL.

A particular population of waterhemp in Illinois is now considered to be glyphosate-resistant. This population joins other biotypes of waterhemp that have documented resistance to ALS-inhibiting, PPO-inhibiting, and triazine herbicides.

Waterhemp biotypes resistant to glyphosate and PPO inhibitors represent a worst-case scenario, in that there are no postemergence herbicide options for their control in soybean, notes Aaron Hager, University of Illinois Extension weed specialist.

Hager shared University of Illinois recommendations for the management of glyphosate-resistant waterhemp in the 2008 soybean crop at the recent Corn & Soybean Classic. These recommendations assume glyphosate-resistant soybeans are planted.

Recommendation 1. Apply a full labeled rate (according to label guidelines for soil type and organic matter) of a soil-residual herbicide not sooner than 7 days before planting or later than 3 days after planting.

Recommendation 2. The initial postemergence application of glyphosate (alone at 0.75 to 1.0 pound acid equivalent per acre) must be made when waterhemp is 3 to 5 inches tall.

Recommendation 3. Fields must be scouted 7 days after the initial glyphosate application to determine treatment effectiveness.

Recommendation 4. If waterhemp control is inadequate and retreatment is necessary, consider applying a PPO-inhibiting herbicide (lactofen, fomesafen, or acifluorfen) at a full labeled rate (with recommended additives) as soon as possible.

Recommendation 5. Re-scout the treated field within 10 to 14 days to determine the effectiveness of the PPO-inhibiting herbicide treatment. If scouting reveals that plants treated with a second herbicide application might survive, implement whatever tactics are available or feasible to rogue theses surviving plants from the field before they reach a reproductive growth stage.

Hager notes that these recommendations are an illustration of the need for an integrated approach to waterhemp management. This approach may well stave off some potential new challenges.

The above mentioned recommendations, along with the justifications used to develop the recommendations, are available from Extension crop and IPM educators, and from Aaron Hager, email hager@uiuc.edu. Δ