

Field tests seek new control methods for resistant ragweed in cotton crops

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Giant ragweed lives up to its name, towering over crops and choking out surrounding plant species. Just one ragweed plant per square meter has been shown to reduce crop yields 45 to 77 percent. Now giant ragweed has evolved resistance to the herbicide glyphosate, which had been effective at controlling the weed.

The journal *Weed Technology* reports results of a field test with giant ragweed and WideStrike®, a cotton variety resistant to glyphosate and glufosinate herbicides. Planting this new variety of cotton will allow farmers to treat ragweed without negatively affecting their crop yield.

Giant ragweed has extended its reach from Midwestern corn and [soybean fields](#) into Southern [cotton crops](#). Once a bystander in fence rows and ditch banks, giant ragweed now grows rapidly, has an extended period of emergence, and is able to thrive in many environments. These features have made it a major competitor with [field crops](#).

Few postemergence herbicides are providing effective control of resistant giant ragweed. Glufosinate, which currently has no known broadleaf resistance, proved one of the most effective in this study. In 2009, 2010, and 2011, Widestrike cotton was planted in a Tennessee grower's field known to have a population of glyphosate-resistant giant ragweed.

Unfortunately, many of the herbicide treatments in this study reduced cotton yield along with the resistant giant ragweed. Of 12 treatments

tested, glufosinate alone, glufosinate plus glyphosate, glyphosate plus pyriithiobac, and glufosinate plus fluometuron were the most effective. The only combination that showed 90 percent control of giant ragweed without reducing crop yield was glufosinate followed by another treatment of glufosinate. However, growers will need to use multiple methods of [weed control](#) in the future to prevent weeds from developing resistance to glufosinate as they have with other herbicides.

More information: www.wssajournals.org/doi/full/.../1614/WT-D-12-00042.1

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