

Glyphosate-Resistant Johnsongrass Found In Crittenden County Field

LONOKE, ARK.

Glyphosate-resistant Johnsongrass has been confirmed in a Crittenden County field, said Dr. Bob Scott, a University of Arkansas Division of Agriculture Extension crop, soil and environmental science specialist, adding that so far, it's the only known population in Arkansas.

The discovery is important because glyphosate, also known as Roundup, has been a longtime weed control ally for farmers. It has been effective on Johnsongrass, which is a tough customer for producers. Johnsongrass is a very efficient weed – it can grow from both seed and root-like rhizomes.

Scott said it's important to note that the resistance is to field application levels of the herbicide.

The story began last year.

"The farmer approached the county extension agent about this weed he couldn't kill," Scott said. "County agents Jason Osborne and Mike Hamilton went out and did some investigating on their own and believed there might be more to it than just control failures, so they contacted me."

Back in the fall, Scott took Johnsongrass samples back to his laboratory for a closer

look.

"We have a nice facility at Lonoke for doing this kind of work," he said.

"We tested both rhizomes and seed and both were resistant," Scott said. "We need to do further testing to determine the extent of the resistance and probably need to do other studies on heritability and distribution."

Scott added, "We have also determined that this bio-type is not resistant to Select herbicide, so at least we have an alternative option."

The bad news for farmers is that "by testing both the rhizome and seed, we have determined it is a heritable trait," Scott said.

The next step is to confirm the lab findings in the field.

"We'll go out and spray some to confirm it," Scott said.

The discovery of the Johnsongrass brings to five the number of glyphosate resistant weeds found in Arkansas. The others are: horseweed, common ragweed, giant ragweed, and Palmer amaranth, also known as Palmer pigweed.

Resistant Johnsongrass also was discovered this past fall, across the Mississippi River in a field near Clarksdale, Miss., by Monsanto, maker of Roundup. Δ