

Residual Herbicides For Soybeans Making Comeback

LONOKE, ARK.

There was a time when you could barely think of a weed control program for soybeans that didn't include starting off with some kind of residual program, according to Dr. Bob Scott, extension weed scientist with the University of Arkansas Division of Agriculture.

"Especially in Arkansas, glyphosate or Roundup was badly needed when it came on the scene 10 years ago," Scott said. "Weeds such as common cocklebur and pigweed had become herbicide resistant.

"Other weeds had undergone a species shift to more difficult weeds such as balloon vine, teasweed, morning glories, sesbania and nutsedge. Roundup Ready saved the day and is still saving the day for many growers."

Scott said that like any technology that's overly-relied on, weed resistance has now caused Roundup to lose some of its luster, and it can't be relied on as a stand alone program any longer.

Many growers are turning to a few new residual products and some of the old standbys for answers, Scott said.

The University of Arkansas, he said, has documented two important weeds – horseweed and Palmer amaranth or pigweed – and three weeds of lesser importance – common and giant ragweed and Johnson grass – that are glyphosate resistant in the state.

"Luckily, soybean producers have two good options for residual control of our two most significant glyphosate-resistant weeds, Valor and Prefix," he said.

Scott said a number of package deals that include Valor have looked good in his research trials for pigweed and horseweed residual control. They include Envive (Valor + Synchrony), Valor XLT (Valor + Classic), Gangster FR (Valor + Firstrate) and others.

"The reason I focus on Valor is because it represents a new mode of chemical action against pigweed," Scott said. "Many populations of pigweed in Arkansas are ALS and DNA resistant; therefore, products such as Canopy, Scepter and Prowl may not perform if pigweed is the primary target."

Scott said there is some injury potential with preplant applications of Valor in soybeans. The danger comes when a rain is received just as the beans are emerging. The herbicide can be "splashed up" onto the emerging cotyledons.

He prefers to use Valor in a pre-plant scenario, typically in a tank-mix with glyphosate. If you're willing to take the risk, he noted, Valor is labeled preplant. Scott has observed 20-30 days of residual pigweed and horseweed control from Valor residual. Also, Valor will control small emerged pigweeds in a burndown situation.

Prefix herbicide is a new premix product that contains Dual and fomesafen, the active ingredient in Flexstar and Reflex. Last year, it came as a co-pack, but this year it's mixed together.

"It's excellent on a very large spectrum of grass and broadleaf weeds, including Palmer pigweed. On the treatments I have looked at, Prefix is one of the best premixes for soybeans," Scott said.

He said there are other good residual options. So far, there isn't resistance to the PPO (enzyme) inhibitors such as Reflex and Valor, so they're the resistance management tools of the day.

"It's important to remember that with residual herbicides you must have rainfall for activation," the weed scientist said.

Without activation, 100 percent weed control can become 0 percent and is a waste of money. This is one reason most weed scientists agree that residual herbicides will never replace Roundup and Roundup Ready crops, according to Scott. △