

Done right, you can kill annual ryegrass

By JOSH FLINT

ANNUAL ryegrass' root structure provides many of the soil health benefits farmers are after in a cover crop.

Unfortunately, it comes with the reputation of being difficult to terminate. Let go, it can easily reach heights of 3 feet in the spring. Illinois cover crops specialist Mike Plumer says it can become a serious challenge for the uninitiated.

"I've been working with it for a long time, so I don't have any problem killing it once it's past the vegetative growth stage," Plumer notes. "But if you're just starting out, you should probably terminate it before it reaches three joints."

Chris Kamienski, a Monsanto technology representative, has a few basic tips to follow with annual ryegrass.

First, there is a sweet spot when spraying this cover crop. It's just as the first node (or joint) is starting to form, and well before three nodes. At this stage, the plant will be 6 to 9 inches tall. With that much growth, there is plenty of plant material to absorb the glyphosate and translocate it into the massive root system.

If the annual rye grows past this point, Oregon farmer Wayne Kizer says it's possible to mow it and then spray. Still, he advises waiting for it to grow back to the first joint stage before spraying.

Metabolic advantage

As expected, glyphosate is the go-to herbicide when terminating annual rye. Kamienski advises against tankmixing it with atrazine or mesotrione. Doing so will only antagonize the glyphosate.

After the first pass of glyphosate, Kamienski strongly recommends growers go back and confirm the application was 100% effective.

If it wasn't, Plumer says there are a couple of common reasons, neither of which are glyphosate resistance.

First, timing makes a big difference. Glyphosate works by using the plant's metabolism to translocate within the plant structure. In the late winter or early spring, it takes a few days of warm temperatures before the plant speeds up its metabolism. Also, the metabolism slows back down several hours before dark. Plumer says spraying four to six hours before sunset could result in a completely ineffective burndown pass.

Another common problem deals with varietal differences in annual ryegrass. Plumer says at least one annual rye variety comes out of dormancy several weeks after other varieties. It's entirely possible to spray and achieve a 100% kill, and then come back several days later only to see a different variety growing in the field.

Don't tick it off

With so many nuances, Kamienski says one of the most important things is to get it right the first time. Not achieving a 100% kill will simply "tick it off."

"Once you've made it mad, it's a lot harder to deal with the second time around," Kizer adds.

First off, Kamienski recommends using a full rate of glyphosate. In the spring, that means 44 ounces per acre of a fully loaded 4.5 pound acid equivalent glyphosate per

Key Points

- Annual ryegrass can be difficult for beginning cover croppers to terminate.
- Be sure to use a full rate of glyphosate; killing it the first time is important.
- If you just "ticked it off" with the first pass, it's going to be even tougher to kill.

gallon. In the fall, producers can drop down to 22 ounces per acre.

A 6- to 9-inch-tall grass may not look intimidating, but Kamienski reminds folks that the root structure could be 4 feet deep. When spraying herbicides, overall plant length matters, not just the top growth, he adds.

Those unlucky enough to have ticked

off the grass should come back with a completely different mode of action on the second pass. Kamienski says growers should consider products such as Gramoxone tankmixed with atrazine.

Lastly, don't forget to add ammonium sulfate to the tank when using glyphosate. Kamienski says this is even more important for those with hard water.

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