Match Your 2023 Soybean Trait System to Your Field

Farmers have options when selecting traited soybeans; let your weed spectrum be your guide.

For 2023, how will you choose the soybean trait system best suited for your fields?

"It really comes down to you have to know what's growing in the field," said Aaron G. Hager, associate professor in weed management in the Department of Crop Sciences, University of Illinois. "If you pick the system based on what your individual criteria are, are you certain the herbicide that accompanies that trait will sufficiently control the spectrum of weeds that you have?"

Scout for weeds early and weekly

Just what kinds of weeds are you really dealing with in those fields? There are a range of new tools to help you scope out the variety and extent of what you're really facing for 2023. Use identification guides and smart phone apps. You can send samples to the extension weed scientist in your state. Do your homework to understand exactly which products control which weeds.

Then, Hager says, determine if weeds have "evolved resistance to whatever this herbicide system is, and, if they have, do I need to think about a different trait package that would allow a different herbicide system to be used?"

Enlist E3[®] soybeans or dicamba trait soybeans?

Enlist E3® soybeans have three herbicide tolerances–2,4-D choline, glyphosate and glufosinate–for over-the-top applications of Enlist One® and Enlist Duo® herbicides. These soybeans do not tolerate dicamba. With a new form of 2,4-D containing choline salt plus Colex–D® Technology, Enlist® herbicide applications "stay on target with extremely low volatility and almost no drift when used according to the label," Corteva Agriscience says.

Certain dicamba trait soybean crop systems claim a "low-volatility dicamba formulation and glyphosate for additional herbicide tolerance," despite those claims, there have been widespread reported cases of dicamba drift issues. Dicamba herbicides can currently be sprayed up to and beginning R1 growth, which is the beginning bloom, and through June 30, the label says. Some states set application timing restrictions earlier; it's important to be aware of your state's rules before application. Also, the U.S. Environmental Protection Agency has opened a comment period following the publication of





a draft ecological risk assessment of dicamba. As of October 12, more than 330 comments have been submitted from interested parties. The comment period closes on October 17, 2022.

Consider volatility and drift

The Enlist® weed control system reduces such concerns over drift compared to dicamba technology, university experts say. And with Enlist E3 soybeans, growers can spray upwind of any soybean, says Steve Snyder and Andy Carriger, Corteva Agriscience Enlist® Specialists. "Just the lack of application or buffer restrictions allows people to go out and be very compatible with other traits, like Liberty, or even conventional soybeans," Carriger explained. "You can go row to row, right next to it with the Enlist weed control system and not have to worry about restrictions. Soybeans without the Enlist trait are not a susceptible crop."

With dicamba technology, many growers concerned with volatility and being "neighbor-friendly" have no intention of spraying over the top and are "spending a lot of money for a trait simply for protection, with no intentions to use it," Carriger remarked. Using the Enlist E3 trait, he said, gives growers more options and flexibility, including easy cleaning of Enlist water-based products from sprayers. Growers are climbing aboard since the 2019 launch of Enlist E3 soybeans, with more than 45% market share in the U.S. in 2022."

Know your labels, tank-mixing

Your next step is to understand product labels, Hager said, because with dicamba soybeans, for example, you cannot tank-mix dicamba products with glufosinate. "On the other hand, with the Enlist system on the (Enlist) E3 soybeans, you can tank-mix the 2,4-D choline," Hager said. "On Enlist One (herbicide), you can tank-mix with glufosinate products," such as Liberty[®] herbicide. "In our opinion, that's going to be a more effective way to help manage the evolution of resistance."

This content was produced by Farm Progress for Corteva Agriscience and has been updated by Corteva since its original publication.

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