Expanding weed control options with PowerCore® Enlist® corn

Enlist® trait technology has built a great reputation for herbicide flexibility in Enlist E3® soybeans. In that crop, tolerance to 2,4-D, glyphosate and glufosinate has been essential for farmers who have limited options against increasingly resistant weeds. In corn, however, the herbicide landscape is already pretty diverse. What else does PowerCore® Enlist® corn bring to the table when farmers already have an array of herbicide options?

In our last issue, Clint Pilcher, Global Technical Education Team Lead at Corteva Agriscience, discussed the advantages of above-ground insect control with PowerCore Enlist corn. In this article in our series on PowerCore Enlist corn, we'll focus on the value of expanding herbicide flexibility in corn.

More tolerances, more choices

With tolerance to four herbicides—2,4-D choline in Enlist® herbicides, FOP herbicides, glyphosate and glufosinate—PowerCore Enlist corn gives farmers additional flexibility for designing their weed control program.

Tolerance to 2,4-D choline in Enlist® herbicides

The 2,4-D choline formulation found in Enlist herbicides lets farmers spray corn up to 30" tall. That's yet another mode of action farmers can add to their programs, and one they can use when they need it mostin corn. Of course, this tolerance is also highly convenient for farmers planting Enlist E3 soybeans on their farms, allowing them to utilize Enlist herbicides early or late, depending on their pressures and desired approach.

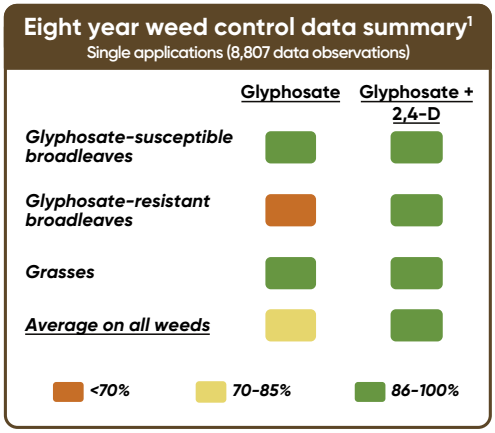
Tolerance to FOP herbicides

This tolerance isn't something that was added to the PowerCore Enlist corn trait package, but a benefit that comes along in tandem with tolerance to 2,4-D choline in Enlist herbicides. This additional tolerance is a nice bonus for farmers fighting volunteer corn, and it's also useful against glyphosate-resistant grasses, which are becoming more common.

Tolerance to glyphosate

Glyphosate-resistant weeds get a lot of attention in soybean farming, but they're also becoming an increasing problem in corn. With tolerance to Enlist Duo® herbicide (a combination of 2,4-D choline and glyphosate), PowerCore Enlist corn helps farmers control those tough, resistant broadleaf weeds.

Research shows that 2,4-D choline complements glyphosate control, helping to fill in the gaps created by glyphosate resistance.



This chart shows how 2,4-D choline complements control of grasses and glyphosate-resistant weeds in corn.

Tolerance to glufosinate

Glufosinate provides effective broad-spectrum weed control and it was used on just 1% of corn acres in 2020. That makes it a smart mode of action to add for long-term resistance management in corn. It can be tank-mixed with Enlist One® herbicide, too, for added convenience.

Options today, opportunities tomorrow

More herbicide rotation options today mean less risk of resistance tomorrow, and more crop rotation choices year over year. "With certain residuals, there are limitations for the next crop you can plant," explains Pilcher. "With the tolerance built into PowerCore Enlist corn, you have more post-emergence herbicide options and more choices in a multi-year strategy. That builds in flexibility for cropconsiderations the following year." In our next installment we'll look at what farmers should consider when weighing whether to plant PowerCore Enlist corn.

[1] Corteva Agriscience data on file.