

Keys to Cover Crop Success

"Cover crops act as an additional tool for soybean growers to use in their weed control toolbox," says Will Tubbs, Market Development Specialist, Corteva Agriscience. Various cover crop species can help reduce the emergence of weeds during the growing season, especially annual weeds like waterhemp and marestail. The residue left in soybean fields after cover crop termination also can shield weeds from sunlight, preventing germination. Use the following tips to help customers maximize the return on their cover crop investment.

Don't Cut Herbicide Rates

When adding a cover crop to a weed control program, customers may want to reduce herbicide application rates in an attempt to reduce injury to cover crops, but Tubbs strongly advises against this practice.

"Reducing herbicide rates not only goes against product label requirements but also can accelerate the development of herbicide resistance," Tubbs says. "Herbicides are still the primary option for season-long weed control in soybean production, and cover crops should be used to enhance—not replace—our current weed control options."

It's critical to reference product labels to determine the length of time needed to plant cover crops after in-season residual herbicide applications.

Choosing the Right Cover Crops

You can help customers set up a successful cover crop system by first understanding their goals. Determining target weeds will help narrow down the cover crop options. "For growers just starting out with cover crops in soybean fields, I recommend experimenting with fall-seeded species such as cereal rye, oats or wheat," Tubbs says.

- Cereal rye is the most common cover crop grown in the Midwest due to its winter hardiness and short life cycle. The high carbon-to-nitrogen ratio of cereal rye compared with legume or Brassica cover crops results in a slow degradation of the residues, thereby increasing the duration of weed suppression.¹

Tubbs notes that cereal rye can easily be confused with ryegrass when talking about cover crops. "However, ryegrass species are much more difficult to control with herbicides compared with cereal rye and have become troublesome in the southern United States due to herbicide resistance," Tubbs says.

- Oats are quick-growing winter annuals that suppress weeds, prevent erosion and add biomass.
- Wheat has similar benefits to oats but is slower maturing and works well in no-till or reduced tillage systems.

You and your customers can use the Midwest Cover Crops Council Cover Crop Decision Tool (www.midwestcovercrops.org/covercroptool/) to determine which cover crops make the most sense for each individual operation.

Terminating Cover Crops

Proper spring termination of cover crops is critical to ensure your customers' next soybean crop is successful. The size of cover crops at termination should be the deciding factor on whether to include a residual herbicide in your cover crop program, as this will influence the amount of herbicide that reaches the soil.² "Products such as Durango DMA, Kyber, Enlist One and Enlist Duo herbicides are all excellent options for cover crop termination in soybeans," Tubbs says.

¹ Jha, Prashant, Ramawatar Yadav, and Bob Hartzler. "Using Cereal Rye Cover Crop and Narrow Row Soybeans to Manage Herbicide Resistance." *Integrated Crop Management News*, Iowa State University Extension and Outreach. Accessed November 14, 2022. <https://crops.extension.iastate.edu/cropnews/2020/08/using-cereal-rye-cover-crop-and-narrow-row-soybean-manage-herbicide-resistant>.

² "Final Results from a Multi-state Study on Cover Crop Termination with Herbicides." University of Missouri Integrated Pest Management. Accessed November 14, 2022. <https://ipm.missouri.edu/cropPest/2020/3/coverCropTermination-KB/>.

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