

Debunking 4 weed control myths

Corteva Agriscience field scientist Joe Armstrong explains the truth behind four common weed control misconceptions.

Creating the right weed control program means having a good understanding of what you need to accomplish in your own fields and having a healthy understanding of the science behind it. Sometimes, however, the science is clouded by misconceptions. So it can be helpful to look at those misconceptions and exactly why these weed control myths are wrong. Corteva Agriscience field scientist Joe Armstrong says there are four weed control myths, in particular, he hears from farmers and his other peers in the ag community.

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Using herbicides creates "super weeds"

The first myth Armstrong brings up is the idea that using herbicides creates so-called "super weeds." He says this does not happen. "Herbicide-resistant weeds are a problem and we do need to be very diligent in addressing them, but those resistant weeds aren't necessarily more evolved than other weeds except in this one area," Armstrong explains. Yes, Armstrong says, weeds are developing resistance to herbicides. However, it doesn't make them super weeds, as that resistance is typically the only difference the plant will have over nonresistant plants of the same variety. Also, he says that resistance can actually come with drawbacks for the weed. "It's not a super weed in the sense that it will grow to be taller than your tractor or something like that. It is resistant, but that resistance can come at a cost. A famous example is atrazine-resistant velvetleaf," Armstrong explains. "We can prove that it's resistant in a greenhouse or out in a field, but it has a 'fitness penalty.' Those plants don't grow as tall; they don't grow as quickly as a normal velvetleaf."

The Weed Science Society of America also does a good job of breaking down this particular misconception. This is not to say that herbicide resistance isn't a concern. It is absolutely a concern. However, Armstrong says, resistance can be mitigated: "It's a matter of using the tools we have appropriately and smartly. Be diligent and diverse with your weed control program." Using a weed control program that includes burndown, preemergence and postemergence herbicides with residual control is one good way to control those resistant weeds and help prevent future resistance. Armstrong also advises adding cultural practices like tillage, crop rotation and cover crops into the mix when appropriate.

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Eliminating weeds is the only goal of weed control

The second myth Armstrong tackles is the idea that eliminating weeds is the only goal of a weed control program. He says, of course, the main purpose of weed control is to do just that: control weeds. However, that can't be the only consideration. "While it is important to eliminate weeds and end the season with a clean field, it's even more important to kill weeds at the right time to prevent yield loss," Armstrong says.

Corn's yield potential is at risk during just about every growing stage due to various threats. And when corn is young, it needs the right amount of nutrients, water and sunlight to ensure the best possible yield potential. Armstrong says weeds present during those early growth stages are in direct competition with the crop for those resources, and the bigger the weeds, the more resources they'll take. "You might be able to let the weeds grow with the crop for a few weeks and successfully kill them when they are 8-plus inches tall, but the weed-crop competition that took place during that time robbed yield that cannot be recovered, even if the field is completely weed-free from that point on," he explains.

Armstrong says this is another reason a program approach to weed control is so important. By applying burndown, preemergence and postemergence solutions with residual activity, you're more likely to keep fields clean and keep weeds from competing with your corn at any stage. It's important to note a program approach can also help control weed seeds that might be lingering in your fields. Keeping the weed seedbank from growing is just another weed control goal.



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All adjuvants are the same

The third misconception Armstrong hears is that all adjuvants are the same. "This is certainly not true and adjuvants must be carefully selected to minimize crop injury and maximize weed control," he says. Armstrong is specifically talking about nonionic surfactants (NIS), crop oil concentrates (COC) and methylated seed oils (MSO). "These adjuvants help more of the herbicide get into the plant faster than it would alone," he says.

While it's important that the adjuvants help get the herbicide into weeds more quickly, the wrong product can injure your corn. Injuries could ultimately lead to diminished yield. "If you pick an MSO and the label calls for an NIS, you can cause a lot of crop injury that could have otherwise been avoided," Armstrong explains. Luckily, there's a pretty simple solution: Read the label. Armstrong says the best course of action when choosing the right adjuvant is to read all product labels to get the safest mix. You can also talk with your retailer for advice.

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You get the same experience with generic products

Finally, Armstrong says, it's important to talk about the experience you get with solutions from Corteva Agriscience versus generic products. Some might think weed control is weed control, but there are some big differences. He says the first is "the service. When you use our products, you get the service of our sales representatives and our research and development teams. You get the knowledge and experience those folks bring."

Not only do you get the customer service that comes from the sales force, but also you get the expertise of every person who helps create each product. A new herbicide formulation from Corteva, for example, takes about 10 years to develop and requires dozens of tests and a team that includes hundreds of people. Those people include scientists with experience and understanding across a range of geographies and climates. Armstrong says the extensive research and development process helps create solutions that are very consistent in quality. He says generic products, meanwhile, can vary in quality.

And if something ever goes wrong with a solution from Corteva, the company will be there to fix the problem. "There's a lot of peace of mind in knowing that you're buying from a manufacturer that's there to support that product and provide service for it," Armstrong explains, saying you can't expect the same service when buying generics. If you ever experience an issue with a Corteva product, you can reach out to your ag retailer, who can then work with a Corteva territory manager to figure out what went wrong. They can work together to help you with next steps.