

FALL HERBICIDE TOP 10

Andy Kendig
State Extension Weed Specialist
Commercial Agriculture Program
MU Delta Center

Fall herbicides are still debated as to whether they give growers a true benefit or if they just give chemical companies some extra sales. They used to be a Midwest issue, but have recently crept into the Mid-South. Personally, I am on the fence- there are some things fall herbicides do and some things they don't. I can't say whether you should use them, but here are some things to consider.

1. Fall herbicides look good on paper. This comment emphasizes that fall herbicides are a great concept for no-till. Spray something in the fall when you have some free time, and then next spring, drop in and plant into a clean field. Before the fall herbicide sales folks shoot me- this is what growers who use them say- it works just like the concept says on paper, and if it works for them- it's a good deal. And again, there are farmers who say the concept doesn't work, and we'll debate that next.

2. Fall herbicides are just an extra expense if they don't "replace" your spring burndown. This is the number one question you need to answer for yourself. Many different fall herbicides have been recommended in many different crops. Some of those herbicides last longer than others and some crops are planted earlier than others. From our research, I can say with good confidence that Princep (one of the strongest, longest-lasting herbicides in row crops) will keep the soil clean basically right up to corn planting. There are other herbicides that don't last from fall until soybean planting- and this leads to the next item to consider.

3. We can already do what we need to do in the spring. This comment ties in to the ultimate question. If the fall herbicide doesn't eliminate or reduce the cost of your spring burndown, then to some extent it is simply an added cost.

4. Fall herbicides keep the soil "bare" through most of the winter. The strongest opponents to fall herbicides come from areas with highly-erodible soils. Crop residue reduces erosion, but on steep hillsides, some winter vegetation protects the soil more. Also, in extremely sandy cover-crop areas, fall herbicides may interfere with your cover crop. In fact, if you have to plant a cover crop- that means the soil really doesn't support much winter vegetation anyway. Of course, if you aren't on a slope, keeping the soil bare may be something you want. Weeds and residue can harbor insects, can rob moisture and can keep the soil cooler in the spring. This is one area where the fall herbicide is superior to an effective, old-fashioned spring burndown.

5. Fall herbicides may control difficult weeds. If you have a weed that causes you trouble at burndown time, there may be a fall treatment that will control it. Ryegrass is a big issue in corn and fall Princep does a good job of controlling it. A lot of growers have used fall applications of Valor stop the glyphosate-resistant horseweed from germinating. Researchers and growers are still a bit divided on how effective Valor is on horseweed, but it does do a good

job of keeping fields generally clean through the winter.

6. Fall herbicides can affect your cropping plans. As stated before, since corn is planted so early and Princep is so long lasting, that is one fall herbicide scenario that works with a high level of reliability. However, if you use Princep in the fall, then you can only plant corn or milo in that field. Authority/Spartan is another good fall herbicide, but it will lock you into planting soybeans. One advantage to Valor is that it does allow the planting of any crop. Prowl has also been mentioned as a fall herbicide, but in our fall-application studies it has had a somewhat narrow spectrum and left us needing to make a full-blown burndown in the spring.

7. Fall herbicides work better the farther North you are. Fall herbicides might do more in North Missouri than they do in South Missouri and I'd tend to worry about them doing anything of value in the deep South. When the soil freezes in the wintertime, weeds stop growing and herbicides don't break down. When it's 50 degrees and moist, weeds are trying to grow and bacteria and fungi are breaking down herbicides. There is a big difference in how often the soil freezes as you go North to South, and the further South you are, the quicker these fall herbicides break down and the more likely you are to need a full-blown spring burndown. Finally, Mother Nature can throw some big curve balls: fall herbicides will do more in a cooler, drier winter than they will during a warmer-wetter winter. The month-to-month weather is more important than exactly how far North you are.

8. Alternative herbicides are good. From the resistance management standpoint, it is good to be getting some alternative modes of action out in the field. This can have a direct effect on weeds like ryegrass and horseweed that have developed resistance in various parts of the world. On the other hand, A herbicide applied in November, really won't be impacting your summertime weeds. I always caution that alternative herbicides are good, but just because you use one, doesn't mean you have an iron-clad resistance-prevention scheme.

9. Residual herbicides are good. This comment isn't too different than the previous one, but just highlights a slightly different angle- a general rule is that residual herbicides improve weed control. However, this comment also leads to the next issue, which in my mind is another one of the most important things to consider.

10. WHEN will a residual herbicide do you the most good? My number one objection to fall herbicides is that they may do you more good if you saved them for planting time. There are stacks and stacks of data that say that preemergence Princep, preemergence Authority/Spartan, and preemergence Valor will improve the weed control in their respective crops. So, why are we putting them out in November when they do so much at planting time? And, there is one other twist to this question. About 10 years ago, it was popular to apply preemergence herbicides with a burndown 3 to 6 weeks ahead of planting. In this scenario, the preemergence herbicide would keep new weeds from germinating, but let you burn down early so the winter vegetation is small and has time to break down. Would your herbicide do you more good in March than it would in November? Take a moment to think about when the herbicide might do the most good.

Consider the factors I've listed here, try some, and see if you like them. People have

been debating fall herbicides for over 15 years now. Some object to them and some swear by them. I've traditionally been opposed to fall herbicides, but the more I study and work with them, the less I am able to argue against the folks that like them. Like so many things, they have advantages and disadvantages. Take a look at your weed control needs and consider all of these points. Again, two most important points to consider is if the fall herbicides actually reduce or eliminate something in your spring burndown. We know that old-fashioned burndowns work- so if we don't eliminate something from the spring, it's mostly an added expense. Number two- it's great that we are putting some alternative, residual herbicides out, but you need to do some serious soul searching as to WHEN is the best time. Would planting time, or early burndown time might give you more bang for the buck?