



FALL APPLICATION OF HERBICIDES FOR CORN AND SOYBEAN

What You'll Learn...

- Fall application of herbicides may be required for winter annual, biennial, or perennial weed problems.
- Herbicides have specific use instructions for fall applications.
- Fall herbicide use should be integrated with spring herbicide planning.

Once harvesting is finished, it's time to evaluate the need for fall weed management, particularly in no-till systems. During and after harvest, scout fields to determine the weed species present, difficulty of control, and intensity of weed infestations. If weed pressure is high, tillage may be required to supplement a herbicide application. Adjusting crop selection and associated production practices may be necessary to have the best array of control options for tough-to-control weeds. Fall herbicide applications should be the initial part of a weed management plan that includes spring burndown, pre-emergence residual and in-crop herbicides to address the full spectrum of weeds infesting fields.

A fall herbicide program should control winter annual, biennial, and perennial weeds that have emerged in the late summer or early fall, or are present in the crop at harvest. Some of the weeds that fit this description include chickweed, annual bluegrass; purple deadnettle, marestail, wild carrot, poison hemlock, and dandelion. Perennial species like horsenettle, smooth groundcherry, and woody species like multiflora rose should be treated early while cool-season perennials like Canada thistle, quackgrass, and dandelion can be effectively controlled even after several light frosts.¹ These weeds overwinter and regrow in the spring potentially interfering with crop establishment and early season growth. A secondary goal for fall weed management is to prevent weed seed production to help manage the intensity of weed infestations in future crops. Palmer amaranth emerging in late summer or early fall can produce mature seed in as little as 30 days after emergence.²

Depending on the production system, geography, and environmental conditions there are a number of



Figure 1. Purple deadnettle(L) Figure 2. Marestail seedling, Henbit (R).

reasons to consider fall applying herbicides: 1) to fields with heavy weed populations that are best candidates for a fall application; 2) to help spread out the workload in the spring; 3) that typically provide better control of marestail than spring burndown; 4) that fall conditions are more favorable for control of winter annual weeds than in early spring because of smaller weed size and more suitable days for herbicide applications.³

Generally, burndown herbicides are recommended in the fall. In some situations, a burndown plus a residual herbicide may help control some fall weeds. Fall applied residual herbicides may not persist long enough to provide adequate in-crop weed control. Fields with a diverse array of winter annual, biennial, or perennial weeds plus tough-to-control weeds may require multiple herbicide application timings (spring burndown, at-planting, or in-crop) for effective weed management. The application of residual herbicides in the fall does not replace the need for residual herbicide applications in the spring.

Using and maintaining diverse site of action herbicides in a weed management plan is critical to effective weed control and weed resistance management. Check individual product labels to determine crop planting restrictions with residual herbicides in case planting intentions change.

Fall herbicide applications should be part of a comprehensive weed management program in corn and soybean crops. Programs should be designed to minimize the risk of weed resistance and weed species shifts. Get crop and weed specific recommendations at <http://www.RoundupReadyPLUS.com>.

Sources: ¹Loux, M. 2007. The ABC's of fall herbicide treatments. Ohio State University. ²Copes, J., Miller, D., and Stephenson, D. Assessment of weed control programs and post-harvest weed control in problem fields. LSU AgCenter. ³Bradley, K. 2008. Considering fall herbicide options in corn and soybean. University of Missouri.



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Table 1. Herbicide options for use post-harvest, prior to planting corn or soybean.

Herbicide	Fall Application Comments (Always consult all product labels for specific use instructions)
Burndown	
dicamba*	4 to 6 inches of regrowth for perennial weeds. Delay tillage at least 7 days after application.
Roundup WeatherMAX® Herbicide, Roundup PowerMAX® Herbicide	Higher rates may be required for large weeds. Tank mix with dicamba or 2,4-D.
paraquat*	Higher rates for weeds more than 6 inches.
2,4-D ester	Delay tillage at least 7 days after application.
suflufenacil	Small, actively growing weeds and thorough coverage.
Iodosulfuron	Apply to no-till or con-till fields after harvest, at least 30 days prior to planting corn or 90 days prior to planting soybean. Do not apply to frozen ground.
Corn Residual (Tank mix with burndown as needed. See product labels for weeds controlled and crop rotation restrictions).	
Rowel® Herbicide	Do not apply to frozen or snow covered soil or perform any tillage operation after application.
sulfentrazone + metribuzin*	Apply after soil temperatures are sustained below 55°F
TripleFLEX® II Herbicide	Apply to soybean stubble after October 15, soil temperature below 50°F. Medium and fine textured soil with > 2.5% organic matter.
simazine	Apply prior to weed emergence to land to be planted to corn only. Do not apply to frozen ground.
rimsulfuron + thifensulfuron	Apply after harvest but before ground freezes.
Soybean Residual (Tank mix with burndown as needed. See product labels for weeds controlled and crop rotation restrictions).	
Rowel® FX Herbicide	Do not apply to frozen or snow covered soil or perform any tillage after application. Use with burndown herbicides if weeds emerged.
sulfentrazone + metribuzin*	Apply to stubble or soil surface when soil temperature is below sustained 55°F. Use a minimum of 15 GPA for adequate weed coverage.
sulfentrazone + chloransulam*	Minimum of 10 GPA application volume.
chlorimuron + thifensulfuron + flumiozazin*	Do not apply to frozen or snow covered soil or perform any tillage after application. Annual broadleaf weeds up to 3 inches, perennials up to 6 inches height or diameter.
sulfentrazone + chlorimuron*	Minimum of 10 GPA, 15 to 20 GPA if vegetation is dense or heavy crop residue.
metribuzin + chlorimuron	Annual broadleaf weeds up to 3 inches, perennials up to 6 inches annual grasses up to 1 inch in height or diameter in no-till or conservation fields.
metribuzin	1/2 inch rainfall needed for herbicide activation.
* Roundup Ready PLUS Crop Management Solutions recommended product, http://www.RoundupReadyPLUS.com .	
Sources: Bradley, K. 2008. Considering fall herbicide options in corn and soybean. University of Missouri. Loux, M. 2007. The ABC's of fall herbicide treatments. Ohio State University.	

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