ROUNDUP READY PLUS
CROP MANAGEMENT SOLUTIONS

FALL BURNDOWN OPTIONS PRIOR TO PLANTING SOYBEANS - NORTH

What You'll Learn...

- Weed management is often more difficult in the spring because of weed size and weather conditions
- Fields that are heavily infested with weeds such as marestail, henbit, dandelion, and chickweed are good candidates for a fall burndown herbicide application
- Marestail can be easier to control in the fall
- Burndown and residual herbicides can provide control of most winter annuals including marestail

Figure 1. Fall-applied herbicide applications targeting winter annuals and dandelion can help to provide a weed-free seedbed in the spring (treated area on right).

Benefits

Post-harvest herbicide applications, in minimum- or no-till fields, can help to provide a weed-free seedbed in the spring.

- Fields with heavy weed populations are the best candidates for a fall application.
- Fall burndown helps to spread out the workload in the spring.
- Fall burndown typically provides better control of marestail than spring burndown.
- Fall conditions are more favorable for control of winter annual weeds than early spring because of smaller weed size and more suitable days for herbicide applications.[1]
- Controlling winter annuals in the fall may increase soil temperature and soil moisture at planting.[1]
- Fall burndown can reduce the potential for cutworms and soybean cyst nematodes (SCN) by removing weed hosts where these pests overwinter.

Fall applications will not eliminate the need for a residual herbicide program near or at planting. Fall burndown will not provide in-season control of summer annual weeds, particularly tough-to-control weeds such as waterhemp or Palmer amaranth.

Winter Annual Weeds and Marestail

Fields that are heavily infested with winter annual weeds such as marestail, henbit, dandelion, and chickweed are good candidates for a fall burndown herbicide application (Figures 3, 4, 5). Winter annual weeds will emerge in the fall after harvest and complete their life cycle in the spring and early summer. Weed control is often more difficult in the spring because of larger weeds and weather conditions. If allowed to grow in the spring, winter annual weeds can form a thick mat on the soil surface which can interfere with tillage, crop establishment, and soil warming from the sun.

A single marestail plant can produce as many as 200,000 seeds, so it is vital that growers initiate a herbicide control program when marestail is small.[2] Marestail is generally easier to control in the fall when they are small before they bolt or shoot a main stem in the spring. Bolted marestail is difficult to control with a spring burndown herbicide application.

Figure 2. Marestail seedling.

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Herbicide Recommendations

Roundup WeatherMAX® Herbicide and Roundup PowerMAX® Herbicide are effective on most grass and broadleaf weeds; however, the addition of dicamba and other tank mix partners can improve control of most winter annuals including marestail. Some marestail populations can also be resistant to glyphosate (the active ingredient in Roundup® brand glyphosate-only agricultural herbicides) and may require the addition of dicamba for marestail control.

Check individual product labels to determine crop planting restrictions for residual herbicides, just in case planting intentions change. Any crop can be planted 4 months after an application of dicamba or 30 days after Roundup WeatherMAX® Herbicide or Roundup PowerMAX® Herbicide application. Rowel™ FX Herbicide use is restricted by soil pH above 7.0, soil texture, and in some northern states. The rotation interval for corn for Rowel™ Herbicide or Valor® SX is 14 to 30 days, at the 3 oz/acre rate, 10 months for Rowel™ FX Herbicide or Valor® XLT, and 10 to 18 months for Authority® products. Tillage after application may reduce residual 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.

Table 1. Fall Burndown Options Prior to Planting Soybeans.

Burndown Herbicides
Roundup WeatherMAX® Herbicide *or* Roundup PowerMAX® Herbicide at 32 fl oz/acre *plus* dicamba *or* 2,4-D LV4 at 0.5 lb a.e./acre
Add Residual Herbicides
Rowel™ Herbicide at 2 to 4 oz/acre *or* Rowel™ FX Herbicide at 3 to 5 oz/acre; *or* Valor® at 2 to 4 oz/acre *or* Valor® XLT at 3 to 5 oz/acre; *or* Authority® XL at 6.4 oz/acre *or* Authority® MTZ at 14 oz/acre; *or* metribuzin at 6 to 8 oz/acre
All treatments should be applied when weeds are less than 4 inches tall. Increase the Roundup WeatherMAX® Herbicide or Roundup PowerMAX® Herbicide rate to 44 ounces if weeds exceed 12 inches tall.
Ammonium sulfate, at 8.5 to 17 pounds per 100 gallons of water, should be the first product added to the tank. Use 10 to 15 gallons of water per acre. Do not use AMS in glyphosate + dicamba tank mixtures, use a non-AMS water conditioner.

Summary

Fall herbicide applications should be part of a comprehensive weed management program in corn and soybeans. 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: [1] Bradley, K. 2013. Considering fall herbicides applications: It's not just about the weeds. University of Missouri. [2] Peterson, D., and Shoup, D. 2011. Weed of the month: Marestail. Kansas State University. Web sources checked 08/20/2015.

Figure 3. Dandelion rosette.

Figure 4. Purple deadnettle (left) Henbit (right).

Figure 5. Common chickweed. Ohio State Weed Lab Archive, The Ohio State University, bugwood.org

For additional information, contact your local seed representative. Developed in partnership with Technology, Development & Agronomy by Monsanto.