



Fall Burndown Options Prior to Planting Soybeans

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 is generally easier to control in the fall
- Roundup WeatherMAX® and Roundup PowerMAX® herbicides with the addition of dicamba and other tank mix partners can improve control of most winter annuals including marestail

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 weeds where these pests overwinter.



Figure 2. Marestail seedling.



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 the right).

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. 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 weed size 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 and crop establishment. Soil warming from the sun can also be blocked when a thick mat of weeds forms on the soil surface.

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 because they will bolt or shoot a main stem in the spring, making it more difficult to control with a spring burndown herbicide application.



Fall Burndown Options Prior to Planting Soybeans (continued)

Herbicide Recommendations

Roundup WeatherMAX[®] and Roundup PowerMAX[®] herbicides 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 agricultural herbicides) and may require additional dicamba for good marestail control.

Check individual product labels to determine crop planting restrictions with residual herbicides just in case planting intentions change. Any crop can be planted 4 months after an application of dicamba. The plant back restriction for corn is 10 months for Valor[®] XLT and 10 to 18 months for Authority[®] products.

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.

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:

¹Bradley, K. 2013. Considering fall herbicides applications: It's not just about the weeds. University of Missouri.

²Peterson, D., and D. Shoup. 2011. Weed of the month: Marestail. Kansas State University.

Tier 1: Burndown plus Residual Activity

Roundup WeatherMAX[®] or Roundup PowerMAX[®] at 32 fl oz/acre,
plus dicamba (Clarity[®]) at 16 fl oz/acre,
plus Valor[®] at 2 oz/A or Valor[®] XLT at 3 oz/A or Authority[®] XL at 4 oz/A or Authority[®] MTZ at 11 oz/acre.

Tier 2: Burndown plus Limited Residual Activity

Roundup WeatherMAX[®] or Roundup PowerMAX[®] at 32 fl oz/acre,
plus dicamba (Clarity[®]) at 16 fl oz/acre,
plus metribuzin at 6 to 8 oz/acre.

Tier 3: Burndown Activity

Roundup WeatherMAX[®] or Roundup PowerMAX[®] at 32 fl oz/acre,
plus dicamba (Clarity[®]) at 16 fl oz/acre.

- All treatments should be applied when weeds are less than 4 inches tall. Increase the Roundup WeatherMAX[®] or Roundup PowerMAX[®] rate to 44 ounces if weeds exceed 12 inches.
- 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.

Roundup Technology[®] includes Monsanto's glyphosate-based herbicide technologies. Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Tank mixtures: The applicable labeling for each product must be in the possession of the user at the time of application. Follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank mixture. Monsanto has not tested all tank mix product formulations for compatibility or performance other than specifically listed by brand name. Always predetermine the compatibility of tank mixtures by mixing small proportional quantities in advance. Roundup PowerMAX[®], Roundup Ready PLUS[®] and Roundup Technology[®] and Roundup WeatherMAX[®] are registered trademarks of Monsanto Technology LLC. Leaf Design[®] is a registered trademark of Monsanto Company. Authority[®] is a trademark of FMC Corporation. Valor[®] is a registered trademark of Valent U.S.A. Corporation. All other trademarks are the property of their respective owners. ©2014 Monsanto Company. 121022013207 09232014JSC.