

Weed Management in Roundup Ready 2 Xtend[®] Soybeans

- Establishing a comprehensive weed management program is essential for maintaining farm productivity and reducing weed populations and proliferation.
- To help maximize soybean yields, weed control programs should include an herbicide burndown or tillage and residual herbicides applied pre- or postemergence.
- Roundup Ready 2 Xtend[®] soybeans have tolerance to dicamba and glyphosate herbicides.

Scouting and documentation of weed growth throughout the growing season is an important part of weed management. Observing and identifying weeds present during harvest and knowing the potential for winter annual growth can be the foundation for a successful herbicide program for the following year. An herbicide program can start with a fall or early-winter herbicide application to control early emerging winter annuals, and in the spring, be mindful of the Roundup Ready[®] Xtend Crop System recommendations.

The Roundup Ready Xtend Crop System recommends the use of Roundup Ready 2 Xtend[®] soybeans, XtendiMax[®] herbicide with VaporGrip[®] Technology (a Restricted Use Pesticide (RUP)), and a soil-applied residual herbicide. XtendiMax with VaporGrip Technology helps with the management of tough-to-control broadleaf weeds, including glyphosate-resistant Palmer amaranth, waterhemp, and marestail (horseweed), and can be applied before, at, and after the planting of Roundup Ready 2 Xtend soybeans (Table 1).

The label for XtendiMax with VaporGrip Technology MUST be followed to ensure application requirements are met. Please visit <http://xtendimaxapplicationrequirements.com/Pages/default.aspx> for important XtendiMax with VaporGrip Technology information.

Starting with a clean field at planting is an essential step for proper weed management. A preplant burndown herbicide treatment applied before weeds reach 4 inches in height or tillage can remove early weed infestations that can inhibit proper seed placement and compete for nutrients and water. When using Roundup Ready 2 Xtend soybeans in a minimum tillage system, an effective tank-mix burndown program includes 22 or 44 fl oz/acre of XtendiMax with VaporGrip Technology plus 32 fl oz/acre of Roundup PowerMAX[®] herbicide plus an approved drift reducing adjuvant (DRA) along with a Group 14 or 15 residual herbicide. In a conventional tillage system, especially under dry conditions, apply XtendiMax with VaporGrip Technology tank mixed with a Group 14 or 15 residual herbicide at planting.

During the growing season, weed growth should be addressed before weeds reach 4 inches in height. A POST application of 22 fl oz/acre of XtendiMax with VaporGrip Technology plus 32 fl oz/acre of Roundup PowerMAX herbicide and an approved DRA with 3 pts/acre of Warrant[®] Herbicide or 50 fl oz/acre of Warrant[®] Ultra Herbicide is recommended to control the continuous germination of problematic weed species like Palmer amaranth, marestail, and waterhemp.

Please visit www.RoundupReadyPLUS.com for specific localized weed management recommendations.

Weed Management in Roundup Ready 2 Xtend[®] Soybeans

TABLE 1. GENERAL WEED MANAGEMENT RECOMMENDATIONS FOR ROUNDUP READY 2 XTEND[®] SOYBEANS¹

Application Timing	Treatment
Burndown	Roundup PowerMAX [®] herbicide (32 fl oz/acre) + XtendiMax [®] herbicide with VaporGrip [®] Technology (RUP)* (22 to 44 fl oz/acre) + labeled drift reducing adjuvant (DRA)
PRE at Planting ²	Valor [®] SX Herbicide (2 oz wt/acre), Valor [®] XLT Herbicide (3 oz wt/acre), Fierce [®] Herbicide (3 oz wt/acre), Fierce [®] XLT Herbicide (3.75 oz wt/acre), Warrant [®] Ultra Herbicide (50 fl oz/acre) or Warrant [®] Herbicide (3 to 4 pt/acre) + metribuzin (rate based on soil type and pH)
POST ^{3,4} (ideally 20 to 30 days after planting when weeds are less than 4 inches in height)	Roundup PowerMAX [®] herbicide (32 fl oz/acre) + XtendiMax [®] herbicide with VaporGrip [®] Technology (RUP) (22 fl oz/acre) + labeled DRA + Warrant [®] Herbicide (3 pt/acre) or Warrant [®] Ultra Herbicide (50 fl oz/acre)
If necessary, follow up with an additional labeled herbicide treatment postemergence to control any weed escapes.	
Always refer to product labels for use rates, application guidelines, and rotational restrictions.	
*RUP = Restricted Use Pesticide	
¹ Visit www.RoundupReadyPLUS.com web site for specific local recommendations.	
² PRE herbicides may also include other herbicides based on local weeds and preferences. Roundup PowerMAX [®] herbicide, Gramoxone [®] SL herbicide, or XtendiMax [®] herbicide with VaporGrip [®] Technology may be needed for burndown of existing weeds.	
³ Two applications of Warrant [®] Herbicide can be applied per season, one application of Warrant [®] Ultra Herbicide can be applied per season, or one application of Warrant Herbicide and one application of Warrant Ultra Herbicide can be applied per season on the same acre. See label for Warrant Ultra Herbicide for rate, geography, and use restrictions.	
⁴ The maximum combined total amount for XtendiMax herbicide with VaporGrip Technology is 88 fl oz/acre per year. See state and local recommendations for XtendiMax herbicide with VaporGrip Technology application window.	
Check with your local Bayer dealer or representative or U.S. EPA and your state pesticide regulatory agency for the product registration status and additional restrictions in your state.	

Legal Statements

Monsanto Company is a member of Excellence Through Stewardship[®] (ETS). Monsanto products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Monsanto's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. Commercialized products have been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from this product can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Excellence Through Stewardship[®] is a registered trademark of Excellence Through Stewardship.

XtendiMax[®] herbicide with VaporGrip[®] Technology is part of the Roundup Ready[®] Xtend Crop System and is a restricted use pesticide. ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. It is a violation of federal and state law to use any pesticide product other than in accordance with its labeling. XtendiMax[®] herbicide with VaporGrip[®] Technology may not be approved in all states and may be subject to use restrictions in some states. Check with your local product dealer or representative or U.S. EPA and your state pesticide regulatory agency for the product registration status and additional restrictions in your state. For approved tank-mix products and nozzles visit XtendiMaxApplicationRequirements.com.

NOT ALL formulations of dicamba or glyphosate are approved for in-crop use with Roundup Ready 2 Xtend[®] soybeans. ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED FOR SUCH USES AND APPROVED FOR SUCH USE IN THE STATE OF APPLICATION. Contact the U.S. EPA and your state pesticide regulatory agency with any questions about the approval status of dicamba herbicide products for in-crop use with Roundup Ready 2 Xtend[®] soybeans or products with XtendFlex[®] Technology.

Performance may vary, from location to location and from year to year, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on the grower's fields.

Roundup Ready 2 Xtend[®] soybeans contain genes that confer tolerance to glyphosate and dicamba. Glyphosate will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Contact your seed brand dealer or refer to the Monsanto Technology Use Guide for recommended weed control programs.

Not all products are registered in all states and may be subject to use restrictions. The distribution, sale, or use of an unregistered pesticide is a violation of federal and/or state law and is strictly prohibited. Check with your local dealer or representative for the product registration status in your state. 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. Not all tank mix product formulations have been tested 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 2 Xtend[®], VaporGrip[®], Warrant[®] and XtendiMax[®] are registered trademarks of Bayer Group. Gramoxone[®] is a registered trademark of a Syngenta group company. Fierce[®] and Valor[®] are registered trademarks of Valent U.S.A. Corporation. Some of the product(s) discussed herein are restricted use pesticide(s) and may not be registered in all states. The distribution, sale, or use of an unregistered pesticide is a violation of federal and/or state law and is strictly prohibited. Check with your local dealer or product representative for the product registration status in your state. ©2020 Bayer Group. All rights reserved. 4003_S3