

# Using XtendiMax<sup>®</sup> Herbicide with VaporGrip<sup>®</sup> Technology in Cotton

XtendiMax<sup>®</sup> herbicide with VaporGrip<sup>®</sup> Technology, a restricted use pesticide, is a low-volatility dicamba (Group 4) formulation for in-crop use in cotton with XtendFlex® Technology. Two herbicide-tolerant cotton technologies are associated with this herbicide, Bollgard II<sup>®</sup> XtendFlex<sup>®</sup> cotton technology and Bollgard® 3 XtendFlex® cotton technology. These are triple-stacked herbicide tolerant technologies with tolerance to dicamba, glyphosate, and glufosinate herbicides. Cotton tolerance to these three herbicides, each with a different site of action, provides for a weed management system that is flexible for herbicide selection and tank-mixing with approved products per label instructions. Additionally, Bollgard II<sup>®</sup> XtendFlex<sup>®</sup> cotton technology provides two unique Bacillus thuringiensis (B.t.) proteins and Bollgard® 3 XtendFlex® cotton technology provides three unique B.t. proteins to protect cotton bolls from Lepidopteran insect pests.

The <u>label for XtendiMax with VaporGrip Technology</u> MUST be read and followed.\* Only certified, dicamba- or auxin-specific trained applicators can apply XtendiMax with VaporGrip Technology. Application requirement information can be found at <u>www.</u> <u>xtendimaxapplicationrequirements.com</u>. Stewardship, label, and educational information can be found at <u>www.roundupreadyxtend.com</u> and <u>www.roundupreadyplus.com</u>. Contact state regulatory agencies for the most current local guidelines for use in

\*Growers/applicators MUST read and follow the labels of ALL products applied to XtendFlex® cotton. XtendiMax with VaporGrip Technology and products with XtendFlex Technology may not be approved in all states and may be subject to use restrictions in some states.

the area where an application will be made.

Preplant Applications to XtendFlex Technology Cotton:

XtendiMax with VaporGrip Technology can be used preplant in cotton with XtendFlex Technology. The maximum combined amount for preplant applications must not exceed 44 fl oz/acre (1.0 lb a.e. dicamba). Do not apply less than 22 fl oz/acre (0.5 lb a.e. dicamba).

Special Note: XtendiMax with VaporGrip Technology can be used as a burndown in fields to be planted with conventional cotton at a maximum rate of 11 fl oz/acre. There should be a minimum accumulation of 1 inch of rainfall or overhead irrigation following the application and a minimum of 21 days should occur between the application and planting of conventional cotton. The maximum combined amount of this product is 11 fl oz/acre.

## In-Crop Applications to XtendFlex Technology Cotton:

XtendiMax with VaporGrip Technology can be used incrop to control broadleaf weeds in cotton with XtendFlex Technology. In-crop applications can be made up to the mid-bloom stage or no more than 60 days after planting\*, whichever occurs first. The maximum and minimum rate for a single in-crop application is 22 fl oz/acre (0.5 lb a.e. dicamba). Spray weeds early when they are less than 4 inches tall. A second application of 22 fl oz/acre can be made at least 7 days after the first application based on growth stage and timing restrictions. The combined total in-crop applications must not exceed 44 fl oz/acre (1.0 lb a.e. dicamba). Regardless of application timing, the total per year of all applications must not exceed 88 fl oz/acre (2.0 lb a.e. dicamba).

\*There may be additional use restrictions in place for XtendiMax<sup>®</sup> with VaporGrip<sup>®</sup> Technology in certain states. Please visit the XtendiMax<sup>®</sup> State Approvals Map, which provides updated information on applicable state regulations and FIFRA Special Local Need labeling, and states that have approved in-crop applications of XtendiMax<sup>®</sup> with VaporGrip<sup>®</sup> Technology in cotton with XtendFlex<sup>®</sup> Technology.

# Certified Applicator Preparation for Applying XtendIMax with VaporGrip Technology:

The label for XtendiMax with VaporGrip Technology defines the procedures, environmental conditions, and proper equipment for an application to help reduce the potential for drift. Per label, applicators must adhere to federal label and any state restrictions regarding application timing, record keeping, protection of sensitive crops and endangered species, and proper downwind buffer. An overview of application requirements includes these items, among others:

- Applicators must attend mandatory training and certification training.
- Applicators must have all federal labeling with them at the time of use, and they MUST read and follow ALL label directions.

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- Applications must occur between 1 hour after sunrise and 2 hours before sunset. (DO NOT spray during an INVERSION).
- The certified applicator MUST fill out required records within 72 hours of spraying and keep them for a period of 2 years.
- DO NOT apply when wind is blowing toward adjacent sensitive crops.
- In specific counties where endangered species may exist, additional protection measures are required.
- Maintain the minimum downwind buffer of 110 ft at the 22 fl oz/acre rate.

# Sprayer Setup and Application

- Ensure that the entire sprayer system is properly cleaned before AND after using XtendiMax with VaporGrip Technology to avoid potential contamination.
- Apply in a minimum of 15 gallons of spray solution per acre.
- DO NOT exceed 15 mph ground speed.
- DO NOT exceed a boom height of 24 inches above the target pest or cotton canopy.
- Apply when wind speed, measured at boom height, is between 3 and 10 mph. (DO NOT spray during an INVERSION.)
- Use only approved nozzles within the specified pressure. A current list of approved nozzles and proper range of pressure to ensure use of ultra-coarse droplets can be found at www.stendimexapplicationrequirements.com

### www.xtendimaxapplicationrequirements.com.

- Use only approved tank-mix partners. DO NOT use ammonium sulfate (AMS) and ammonium-based additives in applications that include XtendiMax with VaporGrip Technology. Find approved tank-mix partners and non-AMS water conditioners at <u>www.xtendimaxapplicationrequirements.com</u>. An approved nonionic surfactant (NIS) with at least 70% active ingredient can be used at 0.25% v/v. An approved crop oil concentrate, high surfactant oil concentrate, or methylated seed oil adjuvants can be substituted for a NIS but some products may cause a temporary crop response.
- DO NOT make an application if rain is expected in the next 24 hours or if conditions favor surface runoff.
  DO NOT apply to sandy soils with less than 3% organic matter where ground water depth is shallow.

• Rainfall or irrigation within 4 hours after an in-crop cotton application may reduce product effectiveness.

#### Weed Resistance Management

Some naturally occurring weed biotypes that are tolerant to dicamba may exist in a weed population. Repeated use of herbicides with the same site of action may lead to selection for resistant weeds. To help minimize the selection for resistant weeds, DO NOT use less than 22 fl oz/acre of XtendiMax with VaporGrip Technology in a single application and follow integrated weed management principles. Should weed escapes be observed after a labeled application of XtendiMax with VaporGrip Technology, applicators should call 844 RRXTEND and report the incident in order to aid in monitoring for potential weed resistance.

## Legal Statements

For additional agronomic information, please contact your local seed representative. Developed in collaboration with Technology Development & Agronomy by Bayer Group.

XtendiMax<sup>®</sup> herbicide with VaporGrip<sup>®</sup> Technology is part of the Roundup Ready<sup>®</sup> Xtend Crop System and is a restricted use pesticide. ALWAYS READ AND FOLLOW DIRECTIONS FOR USE ON PESTICIDE LABELING. It is a violation of federal and state law to use any pesticide product other than in accordance with its labeling. XtendiMax<sup>®</sup> herbicide with VaporGrip<sup>®</sup> Technology and products with XtendFlex<sup>®</sup> 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. Monsanto Company is a member of Excellence Through Stewardship<sup>®</sup> (ETS). Monsanto products are commercialized in accordance with ETS Product Launch Stewardship<sup>®</sup> (ETS). Monsanto products has 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, 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<sup>®</sup> is a registered trademark of Excellence Through Stewardship.

ALWAYS READ AND FOLLOW DIRECTIONS FOR USE ON PESTICIDE LABELING. IT IS A VIOLATION OF FEDERAL AND STATE LAW to use any pesticide product other than in accordance with its labeling. NOT ALL formulations of dicamba, glyphosate or glufosinate are approved for in-crop use with cotton with XtendFlex® Technology. 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 cotton with XtendFlex® Technology. Cotton with XtendFlex® Technology contains genes that confer tolerance to glyphosate, glufosinate and dicamba. Glyphosate will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Glufosinate will kill crops that are not tolerant to glufosinate. Contact your seed brand dealer or refer to the Monsanto Technology Use Guide for recommended weed control programs. B.t. products may not yet be registered in all states. Check with your seed brand representative for the registration status in your state. 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. ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Warrant® Herbicide is not 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. Bayer, Bayer Cross Design, Bollgard II<sup>®</sup>, Bollgard<sup>®</sup>, Respect the Refuge and Cotton Design<sup>®</sup>, Roundup Ready PLUS<sup>®</sup>, Roundup Ready<sup>®</sup>, VaporGrip<sup>®</sup>, Warrant<sup>®</sup>, XtendFlex<sup>®</sup> and XtendilMax<sup>®</sup> are registered trademarks of Bayer Group. Dual Magnum<sup>®</sup> is a registered trademark of a Syngenta group company. LibertyLink® and the Water Droplet Design® is a trademark of BASF 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 Insect control technology provided by Vip3A is utilized under license from Syngenta Crop Protection AG. All other trademarks are the property of their respective owners. ©2019 Bayer Group. All rights reserved. 1004\_S2

