



# XtendiMax<sup>®</sup> Herbicide with VaporGrip<sup>®</sup> Technology vs. Competitor Brands: Bare Ground Comparison for Broadleaf Weed Species

## Trial Objectives

- The objectives of this study were to:
  - Demonstrate the length of soil activity with XtendiMax<sup>®</sup> Herbicide with VaporGrip<sup>®</sup> Technology on broadleaf weed species.
  - Evaluate competitor herbicides, Enlist One<sup>®</sup> Herbicide with Colex-D<sup>®</sup> Technology and Enlist Duo<sup>®</sup> Herbicide with Colex-D<sup>®</sup> Technology for soil activity on broadleaf weed species.
- XtendiMax with VaporGrip Technology is most effective when used in conjunction with traditional residual herbicides in pre- and post-emergence applications that have different, effective sites of action, along with other diversified weed management practices.

## Research Site Details

Location	Soil Type	Previous Crop	Tillage Type	Application Date
Benson, MN	Silty clay loam	Soybean	Conventional	7/3/19

- Plot size was 10 x 30 ft with two replications in a randomized complete block design.
- Select Max<sup>®</sup> herbicide was applied to the entire plot before all treatments in this study to remove grass weeds.
- Treatments were applied post-emergence to 4- to 6-inch weeds.
- Weed control was measured at 14 and 21 days after treatment.
- The main weed species present were waterhemp and pigweed.

**Table 1. Treatment List**

Treatments	Product	Rate
1	XtendiMax <sup>®</sup> Herbicide with VaporGrip <sup>®</sup> Technology	22 fl oz
2	Enlist One <sup>®</sup> Herbicide with Colex-D <sup>®</sup> Technology	17 fl oz
3	XtendiMax <sup>®</sup> Herbicide with VaporGrip <sup>®</sup> Technology	22 fl oz
3	Roundup PowerMAX <sup>®</sup> Herbicide	32 fl oz
3	Drift Reducing Adjuvant	0.5% v/v
4	Enlist Duo <sup>®</sup> Herbicide with Colex-D <sup>®</sup> Technology	56 fl oz
5	Enlist Duo <sup>®</sup> Herbicide with Colex-D <sup>®</sup> Technology	76 fl oz
6	Enlist One <sup>®</sup> Herbicide with Colex-D <sup>®</sup> Technology	24 fl oz
7	Enlist One <sup>®</sup> Herbicide with Colex-D <sup>®</sup> Technology	32 fl oz
8	XtendiMax <sup>®</sup> Herbicide with VaporGrip <sup>®</sup> Technology	44 fl oz
9	Liberty <sup>®</sup> 280 SL Herbicide	32 fl oz
9	Ammonium Sulfate	3 % v/v

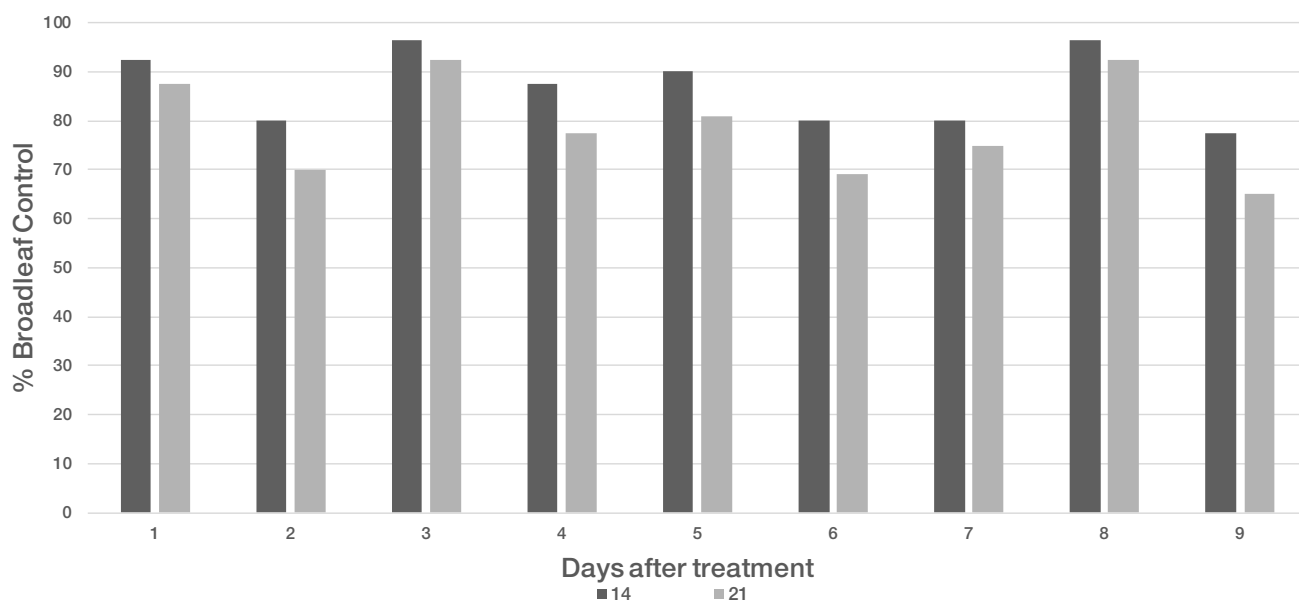
A 1% v/v water conditioner was added to treatments 1 to 8



# XtendiMax<sup>®</sup> Herbicide with VaporGrip<sup>®</sup> Technology vs. Competitor Brands: Bare Ground Comparison for Broadleaf Weed Species

## Understanding the Results

- All plots treated with XtendiMax<sup>®</sup> with VaporGrip<sup>®</sup> Technology had waterhemp and pigweed control at or above 90% at 14 days after treatment. At 21 days, control was less, but still over 85% in all plots treated with XtendiMax with VaporGrip Technology (Figure 1).
- At 21 days after treatment, weed control for competitor products was 80% or less than the treatments with XtendiMax with VaporGrip Technology (Figure 1).
- Other competitor herbicides had no discernable soil activity (Figure 2).
- At 21 days after treatment, new weed emergence was present in all plots. The plots with XtendiMax herbicide showed the higher level of control than the plots treated with competitor herbicides (Figure 2).



**Figure 1. Percent broadleaf weed control at 14 and 21 days after the treatments. 1-9 on the x-axis are the treatments as listed in Table 1.**

# *XtendiMax® Herbicide with VaporGrip® Technology vs. Competitor Brands: Bare Ground Comparison for Broadleaf Weed Species*



**TREATMENT 3**

XtendiMax® Herbicide with VaporGrip® Technology at 22 fl oz + Roundup PowerMAX® Herbicide at 32 fl oz + Drift Reducing Adjuvant



**TREATMENT 4**

Enlist Duo® Herbicide with Colex-D® Technology at 56 fl oz



**TREATMENT 5**

Enlist Duo® Herbicide with Colex-D® Technology at 76 fl oz



**TREATMENT 1**

XtendiMax® Herbicide with VaporGrip® Technology at 22 fl oz



**TREATMENT 7**

Enlist One® Herbicide with Colex-D® Technology at 32 fl oz



**TREATMENT 9**

Liberty® 280 SL Herbicide at 32 fl oz and Ammonium Sulfate 3% v/v

**Figure 2. Weed growth 21 days after the postemergence applications. The top photo collage compares treatments with two herbicide modes of action (Group 4 and 9) at recommended use rates that are listed on the product label. The bottom photo collage compares treatments with single herbicide modes of action that are labeled in herbicide systems for different soybean traits.**



# *XtendiMax<sup>®</sup> Herbicide with VaporGrip<sup>®</sup> Technology vs. Competitor Brands: Bare Ground Comparison for Broadleaf Weed Species*

## **Key Learnings**

- Spraying XtendiMax<sup>®</sup> Herbicide with VaporGrip<sup>®</sup> Technology allows for postemergence control of broadleaf weeds, such as waterhemp and pigweed, and also provides soil activity advantage for up to 14 days. XtendiMax with VaporGrip Technology is available for upfront broadleaf weed control, when added to the residual herbicides like Warrant<sup>®</sup> or Warrant<sup>®</sup> Ultra herbicide provides excellent preemergence weed control.

## **Legal Statements**

The information discussed in this report is from a single site, replicated demonstration. This informational piece is designed to report the results of this demonstration and is not intended to infer any confirmed trends. Please use this information accordingly.

**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 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<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](http://XtendiMaxApplicationRequirements.com).

**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 PowerMAX<sup>®</sup>, VaporGrip<sup>®</sup> and XtendiMax<sup>®</sup> are registered trademarks of Bayer Group. Liberty<sup>®</sup> is a trademark of BASF Corporation. Select Max<sup>®</sup> is a registered trademark of Valent U.S.A. Corporation. All other trademarks are the property of their respective owners. ©2019 Bayer Group. All rights reserved. 4001\_R1

