# *Performance of XtendFlex® Soybeans Under Irrigated and Dryland Environments*

## *Trial Objective*

- The characterization of new products helps provide product information for consumers and Bayer representatives.
- The objective of this comparison was to evaluate XtendFlex® soybeans under dryland and irrigated environments.

## *Research Site Details*

| Location | Soil Type | Previous Crop | Tillage Type | Planting Date | Harvest Date | Potential Yield (bu/acre) | Seeding Rate (seeds/acre) |
|---|---|---|---|---|---|---|---|
| Gothenburg, NE | Hord silt loam | Corn | Strip till | 6/1/20 | 10/2/20 | 80 | 160,000 |

- Twenty-six XtendFlex soybeans and seven Roundup Ready 2 Xtend® soybeans were grown under dryland and irrigated conditions.
- This comparison used single-replication, large plots of 0.13 acres and 0.03 acres for dryland and irrigated, respectively.
- No statistical analysis was performed.
- The irrigated plots were sprinkler-irrigated.
- Fertility applied with Chafer Fertilizer Streambar on 4/14/20 included 50 lb phosphorus/acre, 11 lb sulfur/acre, and 20 lb nitrogen/acre.
- Weeds were controlled as necessary and no other pesticides were used in this study.

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***Figure 1. Irrigated 2.5 maturity group (MG) Roundup Ready 2 Xtend® soybeans (left) and 2.5 MG XtendFlex® soybeans (right). Bayer Crop Science, Gothenburg Water Utilization Learning Center, Gothenburg, NE (2020).***

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## *Understanding the Results*

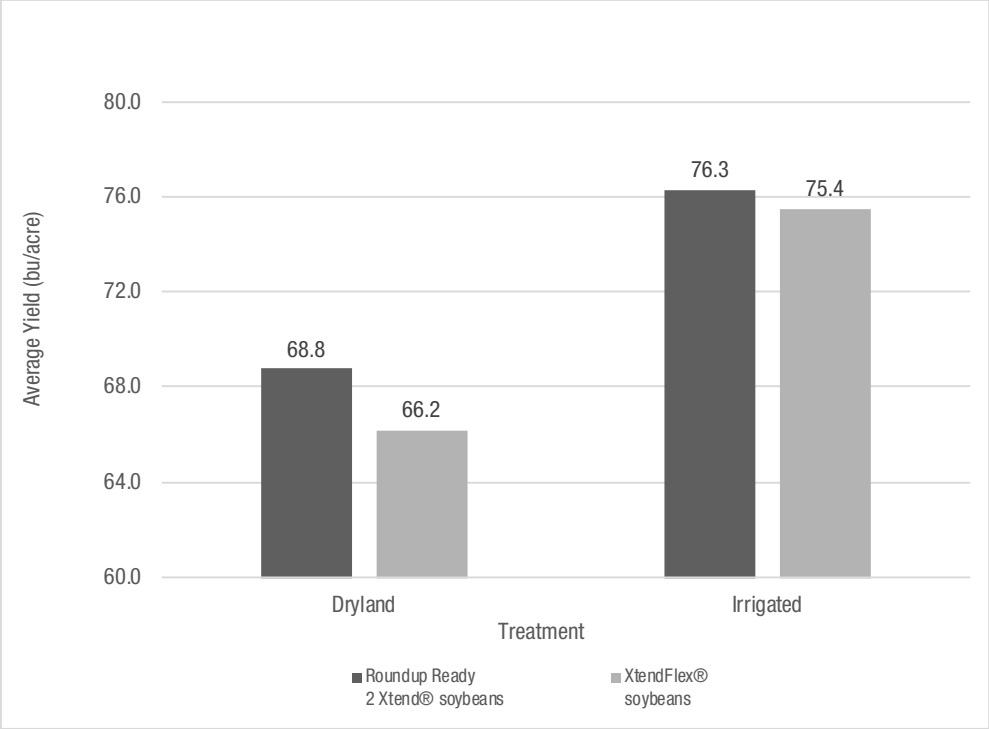


***Figure 2. Average yield of 7 Roundup Ready 2 Xtend® soybeans and 26 XtendFlex® soybeans under dryland and irrigated environments. Bayer Crop Science, Gothenburg Water Utilization Learning Center, Gothenburg, NE (2020).***

- In this trial, the XtendFlex® soybeans yielded similar to the Roundup Ready 2 Xtend® soybeans under both dryland and irrigated environments.
- The XtendFlex soybeans responded positively to irrigation with over a 9 bu/acre increase compared to the dryland environment.

## *Key Learnings*

- The average yield of the XtendFlex soybeans tested was similar to the average yield of the Roundup Ready 2 Xtend soybeans tested with the added benefit of a third mode of action (glufosinate herbicide) for weed control.

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## *Legal Statements*

The information discussed in this report is from a single site, nonreplicated 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.

Bayer is a member of Excellence Through Stewardship® (ETS). Bayer products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Bayer'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.

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. NOT ALL formulations of dicamba or glyphosate are approved for in-crop use with Roundup Ready 2 Xtend® soybeans. NOT ALL formulations of dicamba, glyphosate or glufosinate are approved for in-crop use with products 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 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. Products 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 Bayer Technology Use Guide for recommended weed control programs.