# AG42XF1 BRAND

**Relative Maturity** 

4.2

Trait



# **Key Strengths**

Tall plant with ability to maintain height under tough growing conditions.

- Phytophthora protection from the Rps1c gene and good field tolerance
- Very good tolerance to southern stem canker
- Average tolerance to sudden death syndrome

# PLANT DESCRIPTION 4.2 **RELATIVE MATURITY** HERBICIDE TOLERANCE TRAIT CANOPY MB **GROWTH HABIT** INDETERMINATE FLOWER COLOR PURPLE PUBESCENCE COLOR G HILUM COLOR ΙB ΤN POD WALL COLOR PLANT HEIGHT CATEGORY Т PROTEIN CONTENT OIL CONTENT

#### PRODUCTION

EMERGENCE	2
STANDABILITY	4
NO-TILL ADAPTABILITY	1
IRON CHLOROSIS	5

### **SENSITIVITY**

CHLORIDE SENSITIVITY	INC

#### **DISEASE RATINGS**

SOYBEAN CYST NEMATODE	R3
PRR RESISTANCE	RPS1C
PRR FIELD TOLERANCE	5
WHITE MOLD	-
BROWN STEM ROT	-
SUDDEN DEATH SYNDROME	5
FROGEYE LEAF SPOT	5
SOUTHERN STEM CANKER	3
SOUTHERN ROOT KNOT (M. INCOGNITA)	S

#### LEGEND

Rating Scale: 1 = Excellent; 9 = Poor; - = None

A rating of "1" in standability is a soybean product with excellent standability.

A rating of "1" in brown stem rot is a product with excellent tolerance to brown stem rot. For white mold and Phytophthora Field Tolerance, see specific rating scales on this page.

Soybean Cyst Nematode: R = Resistant; MR = Moderately Resistant; MR/MS = Moderately Resistant to Moderately Susceptible; S - Susceptible; # = Race 1, 3, 5, 9 or 14

A recent publication suggests that soybean cyst nematode populations should be described by a different method called HG type, instead of races. The Race 3 population used in our evaluations would be equivalent to "HG Type 0" and the Race 14 population would be equivalent to "HG Type 1.3" under the direction of the paper.

## Phytophthora Gene-Specific Resistance

Susc. Susceptible

Rps1a denotes resistance to Races 1, 2, 10, 11, 13-18, 24, 26, 27, 31, 32 & 36.

Rps1c denotes resistance to Races 1-3, 6-11, 13, 15, 17, 21, 23, 24, 26, 28-30, 32, 34 & 36.

Rps1k denotes resistance to Races 1-11, 13-15, 17, 18, 21-24, 26, 36 & 37.

Rps2 denotes resistance to Races 1-5, 9-29, 33, 34 & 36-39.

Rps3a denotes resistance to Races 1-5, 8, 9, 11, 13, 14, 16, 18, 23, 25, 28, 29 & 31-35.

Rps6 denotes resistance to Races 1-4, 10, 12, 14-16, 18-21 & 25.

Rps7 denotes resistance to Races 2, 12, 16, 18, 19, 33, 35 & 36.

**HERBICIDE TOLERANT TRAITS:** CONV = CONVENTIONAL; RR2Y = ROUNDUP READY 2 YIELD®; SR = SULFONYLUREA READY (TOLERANCE TO SULFONYLUREA-BASED HERBICIDES)

#### Phytophthora Field Tolerance

Phytophthora field tolerance is a form of partial genetic resistance whereby the plant can maintain some level of productivity while infected with the pathogen. Phytophthora field tolerance scores represent relative responses to the following races of Phytophthora sojae.

Reaction to Phytophthora sojae Race 25 for products with Rps1a, Rps1c, Rps1k and Rps7.

Reaction to Phytophthora sojae Race 17 and/or Race 30 for products with Rps2, Rps3a and Rps6.

Phytophthora field tolerance scores indicate the following levels of tolerance: < 4 = Very Good; 4 = Good; 5 = Above Average; 6 = Average; 7 = Below Average; >7 = Poor

#### White Mold

White mold, caused by Sclerotinia sclerotiorum, is a soybean disease for which there is currently no know form of complete genetic resistance. Scores represent relative levels of tolerance to the disease, as outlined below.

< 4 = Very Good; 4 = Good; 5 = Above Average; 6 = Average; 7 = Below Average; >7 = Poor

Southern Root Knot: R = Resistant; MR = Moderately Resistant; MS = Moderately Susceptible; S = Susceptible

**Chloride Sensitivity:** Inc. = Includer; Exc. = Excluder

Excluder products have increased tolerance to elevated soil chloride levels compared to includers. Excluder products partition chloride in the root systems and reduce the amount transported to more sensitive above-ground tissue.

Plant Height: S = Short, MS = Medium-Short; M = Medium; MT = Medium-Tall; T = Tall

**Growth Habit:** D = Determinate; I = Indeterminate

Plant Type: M = Medium; MB = Medium-Bushy

Flower Color: P = Purple; W = White

Pubescene Color: G = Gray; T = Tawny; LT = Light-Tawny

Hilium Color: BL = Black; G = Gray; IB = Imperfect Black; BR = Brown; BF = Buff

Pod Wall Color: BR = Brown; TN = Tan

Asgrow Soybeans: RR2X = Roundup Ready 2 Xtend® soybeans, RR2Y = Roundup Ready 2 Yield® soybeans, SR = sulfonylurea resistance

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. This product 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, 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. ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED FOR SUCH USES AND APPROVED FOR SUCH USES 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 cotton 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 Technology contains genes that confer tolerance to glyphosate. 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.

Asgrow and the A Design®, Asgrow®, Bayer, Bayer Cross Design, Roundup Ready 2 Xtend®, Roundup Ready 2 Yield®, Roundup Ready®, SR and Design® are registered trademarks of Bayer Group. ©2019 Bayer Group. All rights reserved.