

HIGH-PERFORMANCE YOU CAN SPOT.

First discovered in the United States in 2015, tar spot (*Phyllachora maydis*) is a fungal disease of increasing agronomic importance in corn. As of 2021 it has been confirmed in an expanding swath of counties in the central and eastern Corn Belt. Some hybrids show more tolerance to the disease than others. Corteva scientists have been studying tar spot and screening hybrids for tolerance.

Map Source: Integrated Pest Management, corn/ipmpipe.org/tarspot



Confirmed Tar Spot Counties



Significant yield loss can occur under favorable environmental conditions for disease development. As the name implies, tar spot can be identified by small black and circular lesions. They are slightly raised, and bumps can be felt on affected plant tissue. Lesions can appear on leaves, husks or stalks and are often surrounded by a light tan-colored halo. Lesions are caused by fungal structures called stromata that cannot be rubbed off affected plant tissues.

Symptoms appear most frequently from silking through late grain fill. Under severe infestation, where most of a field shows 50% severity on the ear leaf during grain fill, **significant yield losses of 20-60 bu/A have been reported.**

Brevant® brand products demonstrate their agronomic strength in a field in Jefferson County, Wisconsin, infected with tar spot.

RM	Brevant® Brand Family	Rating	RM	Brevant® Brand Family	Rating
94	B94Z97	★	106	B06Y18	★
95	B95R21	✓	107	B07H01	✓
95	B95V86	✓	108	B08C92	★
97	B97G09	✓	108	B08G23	★
97	B97K12	★	109	B09K10	★
99	B99A24	✓	109	B09Z08	✓
100	B00M18	★	110	B10A20	★
101	B01V22	★	110	B10H24	★
101	B01Z88	★	110	B10Y21	★
102	B02V87	★	111	B11Y01	★
103	B03R87	★	112	B12C01	★
104	B04R11	✓	112	B12M18	★
104	B04Z92	★	113	B13A10	★
106	B06F91	★	113	B13J23	★
106	B06V25	★	113	B13K20	★

Corteva scientists have been studying tar spot and screening hybrids to develop a rating scale that accurately communicates a given hybrid's level of tolerance. The ratings provided to the left are based on multiple years of observations. Ratings denoted with an asterisk (*) reflect preliminary data subject to change when additional data becomes available.

★ **Highly Suitable - Key Strength** ✓ **Suitable - Meets Standards**

Information and ratings are based on comparisons with other products sold by Brevant seeds. Scores represent an average of performance data across areas of adaptation, multiple growing conditions, and a wide range of both climate and soil types, and may not predict future results. Individual product responses are variable and subject to a variety of environmental, disease and pest pressures. Please use this information as only one component of your product positioning decision.



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Roundup Ready 2 Xtend[®] is a registered trademark of Monsanto Technology LLC used under license.

Xtend[®] technology unless you use a dicamba herbicide product that is specifically labeled for that use in the location where you intend to make the application. IT IS A VIOLATION OF FEDERAL AND STATE LAW TO MAKE AN IN-CROP APPLICATION OF ANY DICAMBA HERBICIDE PRODUCT ON SOYBEANS WITH Roundup Ready 2 Xtend[®] technology, OR ANY OTHER PESTICIDE APPLICATION, UNLESS THE PRODUCT LABELING SPECIFICALLY AUTHORIZES THE USE. 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 soybeans with Roundup Ready 2 Xtend[®] technology.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Soybeans with Roundup Ready 2 Xtend[®] technology contain genes that confer tolerance to glyphosate and dicamba. Glyphosate herbicides will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba.

Roundup Ready 2 Yield[®] is a trademark of Bayer group.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready[®] technology contains genes that confer tolerance to glyphosate, an active ingredient in Roundup[®] brand agricultural herbicides. Agricultural herbicides containing glyphosate will kill crops that are not tolerant to glyphosate.

Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

Do not export alfalfa seed or crops containing Roundup Ready[®] technology including hay or hay products, to China pending import approval. In addition, due to the unique cropping practices, do not plant this product in Imperial County, California. Purchase and use of HarvXtra[®] alfalfa with Roundup Ready[®] technology is subject to a Seed and Feed Use Agreement.

Always read and follow pesticide label directions. Alfalfa with Roundup Ready[®] technology provides crop safety for over-the-top applications of labeled glyphosate herbicides when applied according to label directions. Glyphosate agricultural herbicides will kill crops that are not tolerant to glyphosate. ACCIDENTAL APPLICATION OF INCOMPATIBLE HERBICIDES TO THIS VARIETY COULD RESULT IN TOTAL CROP LOSS.

Corteva Agriscience is a member of Excellence Through Stewardship[®] (ETS). Products are commercialized in accordance with ETS Product Launch Stewardship Guidance and in compliance with the Pioneer policies regarding stewardship of those products. Crops and materials containing biotech traits may only be exported to or used, processed, or sold in jurisdictions where all necessary regulatory approvals have been granted for those crops and materials. It is a violation of national and international laws to move materials containing biotech traits across borders into jurisdictions where their import is not permitted. Growers should discuss these issues with their purchaser or grain handler to confirm the purchaser or handler's position on products being purchased. Excellence Through Stewardship[®] is a registered trademark of the Excellence Through Stewardship.

Optimum[®] AcreMax[®] (AM) Insect protection

Optimum[®] AcreMax[®] Insect Protection system with YGCB, HX1, LL, RR2. Contains a single-bag integrated refuge solution for above-ground insects. In EPA-designated cotton growing counties, a 20% separate corn borerrefuge must be planted with Optimum AcreMax products.

Optimum[®] AcreMax[®] Xtra (AMX) Insect protection

Optimum[®] AcreMax[®] Xtra Insect Protection system with YGCB, HXX, LL, RR2. Contains a single-bag integrated refuge solution for above- and below-ground insects. In EPA designated cotton growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax Xtra products.

Optimum[®] AcreMax[®] XTreme (AMXT) Insect protection

Contains a single-bag integrated refuge solution for above- and below-ground insects. The major component contains the Agrisure[®] RW trait, a Bt trait, and the Herculex[®] XTRA genes. In EPA-designated cotton growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax XTreme products.

Optimum[®] AcreMax[®] Leptra[®] Insect protection

Optimum[®] AcreMax[®] Leptra[®] products with AVBL, YGCB, HX1, LL, RR2. Contains a single-bag integrated refuge solution for above-ground insects. In EPA-designated cotton growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax Leptra products.

*In cotton growing regions, a separate 20% structured refuge is still required for Refuge Advanced. Agrisure[®] and Agrisure Viptera[®] are trademarks of, and used under license from, a Syngenta Group Company. Agrisure[®] technology incorporated into these seeds is commercialized under a license from Syngenta Crop Protection AG.

Corn Suffix / Trait Listing

Trait

Corn Suffix / Trait Listing	Trait
R	Roundup Ready [®] Corn 2
ER	Enlist [™] Roundup Ready [®] Corn 2
PW	PowerCore [®]
PWRA	PowerCore [®] Refuge Advanced [®]
PWE	PowerCore [®] Enlist [™]
SX	SmartStax [®]
SXRA	SmartStax [®] Refuge Advanced [®]
SXE	SmartStax [®] Enlist [™]
AM	Optimum [®] AcreMax [®]
AMX	Optimum [®] AcreMax [®] Xtra
AML	Optimum [®] AcreMax [®] Leptra [®]
AMXT	Optimum [®] AcreMax [®] XTreme
Q	Qrome [®]

Soybean Suffix

Trait

Soybean Suffix	Trait
EE	Enlist E3 [®]
RX	Roundup Ready 2 Xtend [®]
LL	LibertyLink [®]

Sunflower Suffix

Trait

Sunflower Suffix	Trait
CL	IMI Tolerant
CP	CLEARFIELD [®] Plus
E	ExpressSun [®]

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