



Fungicide Efficacy for Control of Corn Diseases

The Corn Disease Working Group (CDWG) developed ratings for how well fungicides control major corn diseases in the United States. The CDWG determined efficacy ratings for each fungicide listed in the table (next page) by field testing the materials over multiple years and locations. Ratings are based on the product's level of disease control and does not necessarily reflect yield increases obtained from product application. A product's efficacy depends upon proper application timing, rate, and application method as determined by the product label and overall disease level in the field at the time of application. Differences in efficacy among each fungicide product were determined by directly comparing products in field tests using a *single* application of the labeled rate. For application timing and use considerations, please contact your local cooperative extension service. The table is not intended to be a list of all labeled products. Additional fungicides are labeled for disease on corn, including contact fungicides such as chlorothalonil. Other fungicides may be available for diseases not listed in the table, including Diplodia, Gibberella, and Fusarium ear rots. Many products have specific use restrictions about the amount of active ingredient that can be applied within a period of time or the amount of sequential applications that can occur. Read and follow all use restrictions prior to applying any fungicide.



Southern rust
Image: Travis Fiske

Find Out More

The Crop Protection Network (CPN) is a multi-state and international collaboration of university and provincial extension specialists, and public and private professionals who provide unbiased, research-based information to farmers and agricultural personnel. Our goal is to communicate relevant information that will help professionals identify and manage field crop diseases.

Find more crop disease resources at CropProtectionNetwork.org



This publication was developed by members of the Corn Disease Working Group. It was compiled and published by Kiersten Wise, University of Kentucky.

We Are Extension

The information in this publication is only a guide, and the authors assume no liability for practices implemented based on this information. Reference to products in this publication is not intended to be an endorsement to the exclusion of others that may be similar. Individuals using such products assume responsibility for their use in accordance with current directions of the manufacturer.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

©2022 by the Crop Protection Network. All rights reserved.



Gray leaf spot
Image: Adam Sisson



Fungicide mode of action groups:

- Group 11 QoI Strobilurins
- Group 3 DMI Triazoles
- Group 7 SDHI

Efficacy categories:

NR=Not Recommended; P=Poor; F=Fair; G=Good; VG=Very Good; E=Excellent; NL=Not Labeled for use against this disease; U=Unknown efficacy or insufficient data to rank product

Fungicide Efficacy for Control of Corn Diseases Table (01/2022)

	Active ingredient (%)	Product/Trade name	Rate/A (fl oz)	Anthracnose leaf blight	Common rust	Eyespot	Gray leaf spot	Northern com leaf blight	Southern rust	Tar spot ¹	Harvest restriction ²
11	Azoxystrobin 22.9%	Quadris 2.08 SC, multiple generics	6.0 - 15.5	VG	E	VG	E	G	VG	NL	7 days
	Pyraclostrobin 23.6%	Headline 2.09 EC/SC	6.0 - 12.0	VG	E	E	E	VG	VG	NL	7 days
	Picoxystrobin	Aproach 2.08 SC	3.0 - 12.0	VG	VG-E	VG	F-VG	VG	G	G ³	7 days
3	Flutriafol 20.9%	Xyway LFR 1.92 SC Xyway 3D 2.5 SC	LFR: 7.6-15.2 3D: 5.8-11.8	NL	U	NL	G	VG	NL	NL	N/A
	Propiconazole 41.8%	Tilt 3.6 EC, multiple generics	2.0 - 4.0	NL	VG	E	G	G	F	NL	30 days
	Prothioconazole 41.0%	Proline 480 SC	5.7	U	VG	E	U	VG	G	NL	14 days
	Tebuconazole 38.7%	Folicur 3.6 F, multiple generics	4.0 - 6.0	NL	U	NL	U	VG	F	NL	36 days
	Tetraconazole 20.5%	Domark 230 ME	4.0 - 6.0	U	U	U	E	VG	G	G ³	R3 (milk)
11	Azoxystrobin 13.5%	Quilt Xcel 2.2 SE, multiple generics	10.5 - 14.0	VG	VG-E	VG-E	E	VG	VG	NL	30 days
3	Propiconazole 11.7%										
7	Benzovindiflupyr 2.9%	Trivapro 2.21 SE	13.7	U	U	U	E	VG	E	G-VG	30 days
11	Azoxystrobin 10.5%										
3	Propiconazole 11.9%										
3	Cyproconazole 7.17%	Aproach Prima 2.34 SC	3.4 - 6.8	U	U	U	E	VG	G	G-VG ³	30 days
11	Picoxystrobin 17.94%										
3	Flutriafol 19.3%	Fortix 3.22 SC Preemptor 3.22 SC	4.0 - 6.0	U	U	U	E	VG	VG	G-VG ³	R4 (dough)
11	Fluoxastrobin 14.84%										
3	Flutriafol 26.47%	Lucento	3.0-5.5	U	U	U	VG-E	VG	VG	G ³	R4
7	Bixafen 15.55%										
3	Flutriafol 18.63%	TopGuard EQ	5.0-7.0	U	F	U	VG	G-VG	G-VG	G-VG ³	7 days
11	Azoxystrobin 25.30%										
3	Mefen trifluconazole 17.56%	Veltyma	7.0-10.0	U	U	U	VG-E	VG-E	VG	VG	21 days
11	Pyraclostrobin 17.56%										
3	Mefen trifluconazole 11.61%	Revytek	8.0-15.0	U	U	U	VG-E	VG-E	VG	VG	21 days
11	Pyraclostrobin 15.49%										
7	Fluxapyroxad 7.74%	Delaro325 SC	8.0-12.0	VG	E	VG	E	VG	G-VG	G-VG	14 days
3	Prothioconazole 16.0%										
11	Trifloxystrobin 13.7%	Delaro Complete 3.83 SC	8.0-12.0	U	U	U	E	VG	G-VG	VG	35 days
3	Prothioconazole 14.9%										
7	Trifloxystrobin 13.1%	Headline AMP 1.68 SC	10.0 - 14.4	U	E	E	E	VG	G	G-VG	20 days
11	Fluopyram 10.9%										
7	Pydiflumetofen 7.0%	Miravis Neo 2.5 SE	13.7	U	U	U	E	VG-E	VG	G-VG	30 days
11	Azoxystrobin 9.3%										
3	Propiconazole 11.6%	Priaxor 4.17 SC	4.0 - 8.0	U	VG	U	VG	VG-E	VG	NL	21 days
11	Pyraclostrobin 28.58%										
7	Fluxapyroxad 14.33%	Stratego YLD 4.18 SC	4.0 - 5.0	VG	E	VG	E	VG	G	NL	14 days
11	Pyraclostrobin 13.6%										
3	Metconazole 5.1%	Affiance 1.5 SC	10.0-14.0	U	G-VG	U	G-VG	G-VG	G	G ³	7 days
11	Trifloxystrobin 32.3%										
3	Prothioconazole 10.8%										

Indicates product with mixed fungicide classes

¹Fungicide application timing is extremely important and needs to be made near the onset of the tar spot symptoms. Efficacy ratings based on limited site locations from 2018 to 2021. ²Harvest restrictions are listed for field corn harvested for grain. Restrictions may vary for other types of corn (sweet, seed, or popcorn, etc.), and corn for other uses such as forage or fodder. ³A 2ee label is available for several fungicides for control of tar spot, however efficacy data are limited. Check 2ee labels carefully, as not all products have 2ee labels in all states. This information is provided only as a guide. It is the applicator's legal responsibility to read and follow all current label directions. Reference in this publication to any specific commercial product is for general information only and does not constitute an endorsement or recommendation by the CDWG. Individuals using such products assume responsibility for their use in accordance with current directions of the manufacturer. Members or participants in the CDWG assume no liability resulting from the use of these products.