



CORN DISEASE MANAGEMENT

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 includes marketed products available that have been tested over multiple years and locations. 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.





Image: Travis Faske

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.

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Fungicide mode of action groups: Group 11 Qol 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

Azocystrobin 22.9% Quadris 2.08 SC, multiple generics 6.0-15.5 VG E VG E G VG NL 7 days Aproach 2.08 SC Aproach 2.08 SC 3.0-12.0 VG VG E E E VG	Fungicide Efficacy for Control of Corn Diseases Table (03/2021)						Common rust	ot	Gray leaf spot	Northern com leaf blight	Southern rust	ot	Harvest restriction ²
Aroxystrbin 22.9% Quadris 2.08 SC, multiple generics 6.0 15.5 VG E VG E G VG NL 7 days 11 Headline 2.09 EC/SC Aproach 2.08 SC Aproac					uthr eaf b	mmo	yesp	iray l	lorth eaf b	outh	ar sp	larve estri	
11 Headline 2.09 EC/SC Headline 2.09 EC/SC 6.0 - 12.0 V/G E E E E E E V/G V/G G G G G 7 days Rutrafol 20.9% Xyway LR 19.25 C 30:58:11.3 NL VG KL VG E G G F NL 30 Propiconazole 1.8% Tilt 3.6 EC, multiple generics 2.0 - 4.0 NL VG E G G F NL 30 30 days Propiconazole 1.7% Folicur 3.6; multiple generics 4.0 - 6.0 U U U E G G F NL 30 days Propiconazole 1.7% Quilt Xcel 2.2 SE, multiple generics 10.5 - 14.0 VG VG E G G G-VG 30 days Propiconazole 1.7% Multi Xcel 2.2 SE, multiple generics 10.5 - 14.0 VG U U U U U U G G-VG 30 days Propiconazole 1.7% Moradh Prima 2.34 SC<			-		. ,	-							
Aproach 2.08 SC Aproach 2.08 SC 3.0 - 12.0 VG VG F-VG VG NL U </td <td>11</td> <td>/</td> <td>· •</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>· · · · ·</td>		11	/	· •									· · · · ·
Flutriafol 20.9% Xyway LR 1.92 SC Xyway 30 2.5 X LFR .76-15.2 30 2.8-11.8 NL U NL VG E G G F NL 30 days Propionazole 41.8% Titl 3.6 E, multiple generics 20 - 4.0 NL VG E U VG G F NL 14 days Protinconazole 41.8% Folicur 3.6 F, multiple generics 20 - 4.0 NL U VG E U VG G NL 14 days Tetuconazole 20.5% Domark 230 ME 40 - 6.0 U U U U VG G G C+QF 81 milki 11 Azoxystrobin 13.5% Quilt Xcel 2.2 SE, multiple generics 10.5 - 14.0 VG VG-E E VG VG G G G-VG 30 days 11 Azoxystrobin 15.5% Timapo 2.21 SE 13.7 U U U E VG VG G G G-VG 30 days 3 Propiconszole 1.7% Aproach Prima 2.34 SC													
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Prothiconazole 10.9% Proine 480 SX 5.7 U VG E U VG G NL U <			Propiconazole 41.8%		2.0 - 4.0	NL	VG	E	G	G	F	NL	30 days
Tetraconazole 20.5% Domark 230 ME 4.0 - 6.0 U U U U E VG G G-VG ³ R(milk) 11 Azoxystrobin 13.5% Quilt Xel 2.25£, multiple generics 10.5 - 14.0 VG VG-E VG VG VG G-VG ³ 30 days 7 Berzovindflapyr 2.9% Trivapro 2.21 SE 13.7 U U U U U E VG G G-VG ³ 30 days 3 Cyproconazole 7.17% Aproach Prima 2.34 SC 3.4 - 6.8 U U U U E VG G G-VG ³ 30 days 11 Proconsazole 7.17% Aproach Prima 2.34 SC 3.4 - 6.8 U U U U E VG G G-VG ³ 30 days 11 Procissonazole 7.17% Aproach Prima 2.34 SC 3.4 - 6.8 U U U U U U U U U U U U U U U U U <td>Prothioconazole 41.0%</td> <td>Proline 480 SC</td> <td>5.7</td> <td>U</td> <td>VG</td> <td>E</td> <td>U</td> <td>VG</td> <td>G</td> <td>NL</td> <td>14 days</td>			Prothioconazole 41.0%	Proline 480 SC	5.7	U	VG	E	U	VG	G	NL	14 days
11 Azoxystrobin 13.5% Propiconazole 11.2% Benzovindifuppr 2.9% Quilt Xkel 2.2 SE, multiple generics 10.5 - 14.0 VG VG-E VE-E VE VG G-VG 30 days 7 Benzovindifuppr 2.9% Trivapro 2.21 SE 13.7 U U U U E VG G G-VG ³ 30 days 3 Propiconazole 11.9% Aroach Prima 2.34 SC 3.4 - 6.8 U U U U E VG G G-VG ³ 30 days 3 Gyproconazole 7.17% Aproach Prima 2.34 SC 3.4 - 6.8 U U U U E VG G G-VG ³ 30 days 3 Flutriafol 18.44% Preemptor 3.22 SC 4.0 -6.0 U U U U VG G G G-VG ³ 7 days 3 Hutriafol 18.63% Lucento 3.0 -5.5 U U U U VG G G G G-VG ³ 7 days 3 Mefentriffuconazole 17.56a ⁵			Tebuconazole 38.7%	Folicur 3.6 F, multiple generics	4.0 - 6.0	NL	U	NL	U	VG	F	NL	36 days
3 Propiconazole 11.7% multiple generics 10.5 · 14.0 VG VG-E VG-E VG-E VG VG VG-G VG VG-G <			Tetraconazole 20.5%	Domark 230 ME	4.0 - 6.0	U	U	U	E	VG	G	G-VG ³	R3 (milk)
11 Azoxystrobin 10.5% Trivapro 2.21 SE 13.7 U U U E VG E G-VG 30 days 3 Cyproconazole 11.9% Aproach Prima 2.34 SC 3.4 - 6.8 U U U E VG G G-VG 30 days 3 Flutriafol 19.3% Fortix 3.22 SC 4.0 -6.0 U U U E VG VG G-VG R4 (dough 3 Flutriafol 19.3% Fortix 3.22 SC 4.0 -6.0 U U U VG VG G-VG R4 (dough 3 Flutriafol 26.47% Lucento 3.0 -5.5 U U U VG G G G Z Zdays 3 Flutriafol 18.63% TopGuard EQ 5.0 -7.0 U F U VG G G G Zdays 3 Mefentrifluconazole 17.565 Veltyma 7.0 -10.0 U U U VG E VG G G Zd			•		10.5 - 14.0	VG	VG-E	VG-E	Ε	VG	VG	G-VG ³	30 days
3 Cyproconazole 7.17% Aproach Prima 2.34 SC 3.4 - 6.8 U U U E VG G G-VG3 30 days 3 Flutriafol 19.3% Fortix 3.22 SC 4.0 -6.0 U U U E VG VG G-VG3 R4 (dougt 3 Flutriafol 19.3% Fortix 3.22 SC 4.0 -6.0 U U U VG VG G-VG3 R4 (dougt 3 Flutriafol 18.48% Preemptor 3.22 SC 4.0 -6.0 U U U VG-E VG VG G-VG3 R4 (dougt 3 Flutriafol 18.63% Lucento 3.0 -5.5 U U U V VG-E VG G G G 7 days 3 Mefentrifluconazole 17.56% Veltyma 7.0 -10.0 U U U VG-E VG-E VG G-VG 21 days 3 Mefentrifluconazole 11.61% Revytek 8.0 -12.0 V U U VG-E VG-E VG		11	Azoxystrobin 10.5%	Trivapro 2.21 SE	13.7	U	U	U	E	VG	E	G-VG	30 days
11 Fluxastrobin 14.84% Preemptor 3.22 SC 4.0 - 6.0 U U U E VG VG G-VG R4 (dougt 3 Flutriafol 26.47% Lucento 3.0 - 5.5 U U U VG G G G R4 3 Flutriafol 18.63% TopGuard EQ 5.0 - 7.0 U F U VG G G G VG 21 days 3 Mefentriffuconazole 17.5645 Veltyma 7.0 - 10.0 U U U VG-E VG G G G-VG 21 days 3 Mefentriffuconazole 17.5645 Veltyma 7.0 - 10.0 U U U VG-E VG G G G-VG 21 days 3 Mefentriffuconazole 11.61% Revytek 8.0 - 15.0 U U U VG-E VG G G-VG G-VG 21 days 7 Fluxapyroxad 7.74% Delaro 25 SC 8.0 - 12.0 VG E VG G VG G-VG G-VG 14 days 3 Prothioconazole 14.9% </td <td rowspan="3"></td> <td></td> <td>Cyproconazole 7.17%</td> <td>Aproach Prima 2.34 SC</td> <td>3.4 - 6.8</td> <td>U</td> <td>U</td> <td>U</td> <td>E</td> <td>VG</td> <td>G</td> <td>G-VG³</td> <td>30 days</td>			Cyproconazole 7.17%	Aproach Prima 2.34 SC	3.4 - 6.8	U	U	U	E	VG	G	G-VG ³	30 days
3 Flutriafol 26.47% Bixafen 15.55% Lucento 3.0-5.5 U U U VG-E VG G G ³ R4 3 Flutriafol 18.63% TopGuard EQ 5.0-7.0 U F U VG G G G G-VG ³ 7 days 3 Mefentrifluconazole 17.56% Veltyma 7.0-10.0 U U U VG-E VG-E VG G G-VG 21 days 3 Mefentrifluconazole 17.56% Veltyma 7.0-10.0 U U U VG-E VG-E VG G-VG 21 days 3 Mefentrifluconazole 11.61% Revytek 8.0-15.0 U U U VG-E VG-E VG G-VG 21 days 7 Fluxapyroxad 7.74% Pertolicocnazole 16.0% Delaro325 SC 8.0-12.0 VG E VG E VG G-VG G-VG 14 days 3 Prothicocnazole 14.9% Trifloxystrobin 13.1% Delaro Complete' 3.83 SC 8.0-12.0 U U E VG G VG G-VG G-VG			Flutriafol 19.3%		4.0 -6.0	U	U	U	E	VG	VG	G-VG ³	R4 (dough)
11 Azoxystrobin 25.30% lopGuard EQ 5.0-7.0 U F U VG G					3.0-5.5	U	U	U	VG-E	VG	VG	G ³	R4
3 Mefentrifluconazole 17.56a5 Pyraclostrobin 17.56% Veltyma 7.0-10.0 U U U VG-E VG-E VG G-VG 21 days 3 Mefentrifluconazole 11.61% Pyraclostrobin 15.49% Revytek 8.0-15.0 U U U VG-E VG-E VG G-VG 21 days 7 Fluxapyroxad 7.74% Revytek 8.0-15.0 U U U VG-E VG-E VG G-VG 21 days 7 Fluxapyroxad 7.74% Delaro 325 SC 8.0-12.0 VG E VG E VG G-VG 14 days 7 Trifloxystrobin 13.7% Delaro Complete ⁴ 3.83 SC 8.0-12.0 U U U E U VG G-VG 35 days 11 Fluxapyroxad 14.9% Protinconazole 10.9% Miravis Neo 2.5 SE 13.7 U U U E VG G-VG G-VG 30 days 7 Pydiflumetofen 7.0% Propiconazole 11.6% Priaxor 4.17 SC 4.0 - 8.0 U				TopGuard EQ	5.0-7.0	U	F	U	VG	G	G	G-VG ³	7 days
3 Mefentrifluconazole 11.61% Revytek 8.0-15.0 U U U U VG-E VG G-VG 21 days 7 Fluxapyroxad 7.74% Prothioconazole 16.0% Delaro325 SC 8.0-12.0 VG E VG E VG G-VG G-VG 14 days 3 Prothioconazole 16.0% Delaro325 SC 8.0-12.0 VG E VG E VG G-VG G-VG 14 days 3 Prothioconazole 14.9% 7 Trifloxystrobin 13.1% Delaro Complete ⁴ 3.83 SC 8.0-12.0 U U U E U VG G-VG 35 days 11 Fluopyram 10.9% Miravis Neo 2.5 SE 13.7 U U E VG G-VG G-VG 30 days 3 Propiconazole 11.6% Priaxor 4.17 SC 4.0 - 8.0 U VG U VG G-VG G-VG 21 days 11 Pyraclostrobin 13.6% Headline AMP 1.68 SC 10.0 - 14.4 U E E				Veltyma	7.0-10.0	U	U	U	VG-E	VG-E	VG	G-VG	21 days
11Trifloxystrobin 13.7%Delaro 325 SC8.0-12.0VGEVGEVGG-VGG-VG14 days3Prothioconazole 14.9%7Trifloxystrobin 13.1%Delaro Complete ⁴ 3.83 SC8.0-12.0UUUEUVGG-VG35 days11Fluopyram 10.9%Pydiflumetofen 7.0%Miravis Neo 2.5 SE13.7UUUEVGG-VG30 days3Propiconazole 11.6%Projeconazole 11.6%Priaxor 4.17 SC4.0 - 8.0UVGUVGVG-EVGG-VG21 days11Pyraclostrobin 13.6%Headline AMP 1.68 SC10.0 - 14.4UEEEVGGVG20 days11Trifloxystrobin 32.3%Stratego YLD 4.18 SC4.0 - 5.0VGEVGEVGGNL14 days3Tetraconazole 7.48%Affiance 1 5 SC10.0 - 14.0UG-VGLG-VGGNL14 days		11	Pyraclostrobin 15.49%	Revytek	8.0-15.0	U	U	U	VG-E	VG-E	VG	G-VG	21 days
7 Trifloxystrobin 13.1% Delaro Complete ⁴ 3.83 SC 8.0-12.0 U U U E U VG G-VG 35 days 11 Fluopyram 10.9% Miravis Neo 2.5 SE 13.7 U U U E VG G-VG 35 days 11 Azoxystrobin 9.3% Miravis Neo 2.5 SE 13.7 U U U E VG G-VG 30 days 3 Propiconazole 11.6% Pripiconazole 11.6% Propiconazole 11.6% VG U VG VG VG G-VG G-VG 30 days 11 Pyraclostrobin 28.58% Priaxor 4.17 SC 4.0 – 8.0 U VG U VG VG G-VG G-VG 21 days 11 Pyraclostrobin 13.6% Headline AMP 1.68 SC 10.0 – 14.4 U E E E VG G G-VG 20 days 11 Trifloxystrobin 32.3% Stratego YLD 4.18 SC 4.0 – 5.0 VG E VG G G NL 14 days 3 Tetraconazole 10.8% Affiance 1 5 SC 10.0 – 14.0 <				Delaro325 SC	8.0-12.0	VG	E	VG	E	VG	G-VG	G-VG	14 days
7 Pydiffumetofen 7.0% 11 Azoxystrobin 9.3% Miravis Neo 2.5 SE 13.7 U U U E VG-E VG G-VG 30 days 3 Propiconazole 11.6% Priaxor 4.17 SC 4.0 – 8.0 U VG U VG VG-E VG G-VG 21 days 11 Pyraclostrobin 28.58% Priaxor 4.17 SC 4.0 – 8.0 U VG U VG VG G-VG G-VG ³ 21 days 11 Pyraclostrobin 13.6% Headline AMP 1.68 SC 10.0 - 14.4 U E E E VG G G-VG 20 days 11 Trifloxystrobin 32.3% Stratego YLD 4.18 SC 4.0 - 5.0 VG E VG G NL 14 days 3 Tetraconazole 7.48% Affiance 1.5 SC 10.0 - 14.0 II G-VG G-VG G G NL 14 days		7	Trifloxystrobin 13.1%	Delaro Complete⁴ 3.83 SC	8.0-12.0	U	U	U	E	U	VG	G-VG	35 days
7 Fluxapyroxad 14.33% Priaxor 4.17 SC 4.0 - 8.0 0 VG 0 VG VG VG G G-VG 21 days 11 Pyraclostrobin 13.6% Metconazole 5.1% Headline AMP 1.68 SC 10.0 - 14.4 U E E E VG G G-VG 20 days 11 Trifloxystrobin 32.3% Prothioconazole 10.8% Stratego YLD 4.18 SC 4.0 - 5.0 VG E VG E VG G NL 14 days 3 Tetraconazole 7.48% Affiance 1.5 SC 10.0 - 14.0 II G-VG G-VG G G NL 14 days		11	Pydiflumetofen 7.0% Azoxystrobin 9.3%	Miravis Neo 2.5 SE	13.7	U	U	U	E	VG-E	VG	G-VG	30 days
3 Metconazole 5.1% Headline AMP 1.68 SC 10.0 - 14.4 U E E E VG G G-VG 20 days 11 Trifloxystrobin 32.3% Stratego YLD 4.18 SC 4.0 - 5.0 VG E VG E VG G NL 14 days 3 Tetraconazole 7.48% Affiance 1.5 SC 10 0-14 0 II G-VG II G-VG G ST days				Priaxor 4.17 SC	4.0 - 8.0	U	VG	U	VG	VG-E	VG	G-VG ³	21 days
3 Prothioconazole 10.8% Stratego YLD 4.18 SC 4.0 - 5.0 VG E VG E VG E VG G NL 14 days 3 Tetraconazole 7.48% Affiance 1.5 SC 10 0-14 0 II G-VG G-VG G-VG G NL 14 days			•	Headline AMP 1.68 SC	10.0 - 14.4	U	E	E	E	VG	G	G-VG	20 days
$4ft_{12}(c_{1}) = 5 S(c_{1}) = 10 (c_{1}/4) = 11 (c_{2}/4) = 12 $				Stratego YLD 4.18 SC	4.0 - 5.0	VG	E	VG	E	VG	G	NL	14 days
				Affiance 1.5 SC	10.0-14.0	U	G-VG	U	G-VG	G-VG	G	G ³	7 days

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 2020. 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. ⁴Delaro Complete is not labeled for use on corn in all states as of January 2021. 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.