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The North Central Regional Committee on Management of Small Grain Diseases (NCERA-184) has developed the following information on fungicide efficacy for control of certain foliar diseases of wheat for use by the grain production industry in the US. Efficacy ratings for each fungicide listed in the table were determined by field testing the materials over multiple years and locations by the members of the committee. Efficacy is based on proper application timing to achieve optimum effectiveness of the fungicide as determined by labeled instructions and overall level of disease in the field at the time of application. Differences in efficacy among fungicide products were determined by direct comparisons among products in field tests and are based on a single application of the labeled rate as listed in the table. Table includes most widely marketed products, and is not intended to be a list of all labeled products. *See next page for table footnotes.*

Efficacy of fungicides for wheat disease control based on appropriate application timing.

Fungicide(s)				Powdery mildew	Stagonospora leaf/glume blotch	Septoria leaf blotch	Tan spot	Stripe rust	Leaf rust	Stem rust	Head scab ⁴	Harvest Restriction
Class	Active ingredient	Product	Rate/A (fl. oz)									
Strobilurin	Picoxystrobin 22.5%	Aproach SC	6.0 - 12	G ¹	VG	VG ²	VG	E ³	VG	VG	NL	Feekes 10.5
	Pyraclostrobin 23.6%	Headline SC	6.0 - 9.0	G	VG ²	VG ²	E	E ³	E	G	NL	Feekes 10.5
	Azoxystrobin 22.9%	Quadris 2.08 SC Multiple generics ⁵	4.0-12.0	G ⁶	VG	VG	E	E	E	VG	NL	Feekes 10.5.4
Triazole	Metconazole 8.6%	Caramba 0.75 SL	10.0 - 17.0	VG	VG	VG	VG	E	E	E	G	30 days
	Tebuconazole 38.7%	Folicur 3.6 F Multiple generics ^{4,5}	4.0	NL	NL	NL	NL	E	E	E	F	30 days
	Prothioconazole 41%	Proline 480 SC	5.0 - 5.7	--	VG	VG	VG	VG	VG	VG	G	30 days
	Prothioconazole 19% Tebuconazole 19%	Prosaro 421 SC	6.5 - 8.2	G	VG	VG	VG	E	E	E	G	30 days
	Propiconazole 41.8%	Tilt 3.6 EC Multiple generics ^{4,5}	4.0	VG	VG	VG	VG	VG	VG	VG	P	Feekes 10.5
	Metconazole 10.91% Prothioconazole 18.19%	Sphaerex	4.0 - 7.3	VG	VG	VG	VG	E	E	E	G	30 days
Mixed modes of action ⁶	Tebuconazole 22.6% Trifloxystrobin 22.6%	Absolute Maxx SC	5.0	G	VG	VG	VG	VG	E	VG	NL	35 days
	Cyproconazole 7.17% Picoxystrobin 17.94%	Aproach Prima SC	3.4 - 6.8	VG	VG	VG	VG	E	VG	--	NR	45 days
	Prothioconazole 16.0% Trifloxystrobin 13.7%	Delaro 325 SC	8.0	G	VG	VG	VG	VG	VG	VG	NL	Feekes 10.5 35 days
	Pydiflumetofen 13.7% Propiconazole 11.4%	Miravis Ace SE	13.7	VG	VG	VG	VG	VG	VG	VG	G ⁷	Feekes 10.5.4
	Fluapyroxad 2.8% Pyraclostrobin 18.7% Propiconazole 11.7%	Nexicor EC	7.0 - 13.0	VG	VG	E	E	E	E	VG	NL	Feekes 10.5
	Fluxapyroxad 14.3% Pyraclostrobin 28.6%	Priaxor	4.0 - 8.0	G	VG	VG	E	VG	VG	G	NL	Feekes 10.5
	Prothioconazole 17.39% Tebuconazole 8.7% Fluopyram 8.7%	Prosaro Pro SC	10.3 - 13.6	G	VG	VG	VG	E	E	E	G	30 days
	Propiconazole 11.7% Azoxystrobin 13.5%	Quilt Xcel 2.2 SE Multiple generics ⁵	10.5 - 14.0	VG	VG	VG	VG	E	E	VG	NL	Feekes 10.5.4
	Prothioconazole 10.8% Trifloxystrobin 32.3%	Stratego YLD ⁸	4.0	G	VG	VG	VG	VG	VG	VG	NL	Feekes 10.5 35 days
	Benzovindiflupyr 10.3% Propiconazole 11.7% Azoxystrobin 13.5%	Trivapro SE	9.4 - 13.7	VG	VG	VG	VG	E	E	VG	NL	Feekes 10.5.4
	Azoxystrobin 25.30% Flutriafol 18.63%	Topguard EQ	4.0 - 7.0	VG	NL	VG	VG	VG	E	E	VG	NL

Footnotes

¹Efficacy categories: NL = Not Labeled; NR = Not Recommended; P = Poor; F = Fair; G = Good; VG = Very Good; E = Excellent; -- = Insufficient data to make statement about efficacy of this product.

²Product efficacy may be reduced in areas with fungal populations that are resistant to strobilurin fungicides.

³Efficacy may be significantly reduced if solo strobilurin products are applied after stripe rust infection has occurred.

⁴Application of products containing strobilurin active ingredients may result in elevated levels of the mycotoxin Deoxynivalenol (DON) in grain damaged by head scab.

⁵Multiple generic products containing the same active ingredients also may be labeled in some states.

⁶Label rate for powdery mildew is 7.5-11.0 fl oz/A

⁶Products with mixed modes of action generally combine triazole and strobilurin active ingredients. Nexicor, Priaxor and the Trivapro include carboxamide active ingredients.

⁷Based on application timing at the beginning of anthesis (Feekes 10.5.1)

⁸Stratego is a product with the same active ingredients as Stratego YLD but a different formulation (11.4% Propiconazole and 11.4% Trifloxystrobin) and higher use rate (10 fl oz/A)

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

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