

Fungicide Efficacy for Control of Wheat Diseases

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 United States.

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. The table includes most widely marketed products, and is not intended to be a list of all labeled products.

Many products have specific use restrictions. Restrictions may be present on the amount of active ingredient that can be applied within a period of time or on the number of sequential applications that can occur. **Read and follow all use restrictions before applying any fungicide.**



Fusarium head blight
Craig Grau

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.

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We Are Extension

This publication was developed by members of NCERA-184 and compiled by Kelsey Andersen Onofre, Kansas State University.

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Leaf rust
Craig Grau



Fungicide Efficacy for Control of Wheat Diseases Table (04/2024)

Efficacy categories:

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 mode of action groups:

Group 11 QoI Strobilurins Group 3 DMI Triazoles Group 7 SDHI

	Active ingredient (%)	Product/Trade name	Rate/A (fl oz)	Powdery mildew	Stagonospora nodorum blotch	Septoria tritici blotch	Tan spot	Stripe rust	Leaf rust	Stem rust	Head scab ⁴	Harvest Restriction	
Strobilurins	11	Picoxystrobin 22.5%	Approach SC	6.0 - 12.0	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	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 ⁶	G	VG	VG	E	E	E	VG	NL	Feekes 10.5.4
Triazoles	3	Tebuconazole 38.7%	Folicur 3.6 F, multiple generics ⁵	4.0	NL	NL	NL	E	E	E	E	F	30 days
		Prothioconazole 41.0%	Proline 480 SC	5.0 - 5.7	--	VG	VG	VG	VG	VG	VG	G	30 days
		Prothioconazole 19.0%	Prosaro 421 SC	6.5 - 8.2	G	VG	VG	VG	E	E	E	G	30 days
		Tebuconazole 19.0%											
		Propiconazole 41.8%	Tilt 3.6 EC, multiple generics ⁵	4.0	VG	VG	VG	VG	VG	VG	VG	P	Feekes 10.5.4
		Metconazole 10.91%	Sphaerex	4.0 - 7.3	VG	VG	VG	VG	E	E	E	G	30 days
Mixed modes of action ⁸	3	Prothioconazole 18.19%											
		Tebuconazole 22.6%	Absolute Maxx SC	5.0	G	VG	VG	VG	VG	E	VG	NL	35 days
	11	Trifloxystrobin 22.6%											
	3	Cyproconazole 7.17%	Approach Prima SC	3.4 - 6.8	VG	VG	VG	VG	E	VG	U	NR	45 days
	11	Picoxystrobin 17.94%											
	3	Prothioconazole 16.0%	Delaro 325 SC	8.0	G	VG	VG	VG	VG	VG	VG	NL	Feekes 10.5
	11	Trifloxystrobin 13.7%											
	7	Pydiflumetofen 13.7%	Miravis Ace SE	13.7	VG	VG	VG	VG	VG	VG	VG	G	Feekes 10.5.4
	3	Propiconazole 11.4%											
	7	Fluxapyroxad 2.8%	Nexicor EC	7.0 - 13.0	VG	VG	E	E	E	E	VG	NL	Feekes 10.5
	11	Pyraclostrobin 18.7%											
	3	Propiconazole 11.7%											
	7	Fluxapyroxad 14.3%	Priaxor	4.0 - 8.0	G	VG	VG	E	VG	VG	G	NL	Feekes 10.5
	11	Pyraclostrobin 28.6%											
	3	Prothioconazole 17.39%	Prosaro Pro SC	10.3 - 13.6	G	VG	VG	VG	E	E	E	G	30 days
	3	Tebuconazole 8.7%											
	7	Fluopyram 8.7%											
	3	Propiconazole 11.7%	Quilt Xcel 2.2 SE, multiple generics ⁵	10.5 - 14.0 ⁷	VG	VG	VG	VG	E	E	VG	NL	Feekes 10.5.4
11	Azoxystrobin 13.5%												
3	Prothioconazole 10.8%	Stratego YLD ⁹	4.0	G	VG	VG	VG	VG	VG	VG	NL	Feekes 10.5	
11	Trifloxystrobin 32.3%												
7	Benzovindiflupyr 2.9%	Trivapro SE	9.4 - 13.7	VG	VG	VG	VG	E	E	VG	NL	Feekes 10.5.4	
3	Propiconazole 11.9%												
11	Azoxystrobin 10.5%												
3	Flutriafol 18.63%	Topguard EQ	4.0 - 7.0	VG	NL	VG	VG	E	E	VG	NL	Feekes 10.5.4	
11	Azoxystrobin 25.30%												

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

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

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

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

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

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

⁷ A 7 oz/A rate has been approved in several states (Kansas, Nebraska, Colorado, South Dakota) for flag leaf applications when disease levels are low

⁸ Products with mixed modes of action generally combine triazole and strobilurin active ingredients. Miravis Ace, Nexicor, Priaxor, and Trivapro include carboxamide active ingredients.

⁹ Stratego 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)