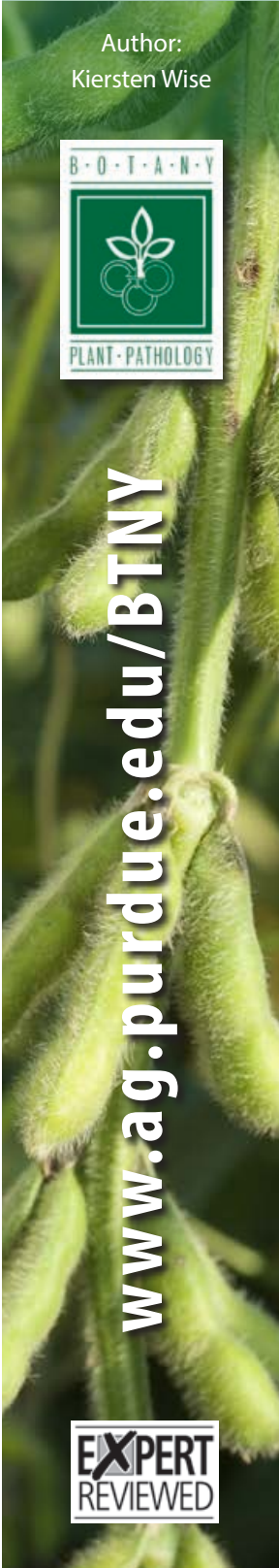


DISEASES OF SOYBEANS

Fungicide Efficacy for Control of Soybean Foliar Diseases



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The North Central Regional Committee on Soybean Diseases (NCERA-137) developed this information about foliar fungicide efficacy for control of major foliar soybean diseases in the United States. The efficacy rating for each fungicide was determined by field-testing the materials over multiple years and locations by the members of the committee. Efficacy ratings are based on the level of disease control the product achieved. Ratings do not necessarily reflect yield increases from applying the product.

A product's efficacy depends on proper application timing, rate, and application method as determined by the product label and overall level of disease in the field. Members of the committee determined differences in efficacy among each fungicide product by directly comparing products in field tests using a single application of the labeled rate (unless otherwise noted).

The table includes systemic fungicides that have been tested over multiple years and locations — it is not intended to be a list of all labeled products.

Multiple fungicides are labeled only for soybean rust, powdery mildew, and Alternaria leaf spot, including tebuconazole (multiple products) and myclobutanil (Laredo®). Contact fungicides (such as chlorothalonil) may also be labeled for use. 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 specific use restrictions before application.

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, process, or service, or the use of any trade, firm, or corporation name is for general informational purposes only and does not constitute an endorsement, recommendation, or certification of any kind by Purdue Extension, or NCERA-137. Individuals using such products assume responsibility for their use in accordance with current directions of the manufacturer.

Find Out More

For control of seedling diseases, see *Diseases of Soybean: Fungicide Efficacy for Control of Soybean Seedling Diseases* (Purdue Extension publication BP-163-W). This and other publications in the *Diseases of Soybean* series are available from the Purdue Extension Education Store:
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Fungicide Efficacy for Control of Soybean Foliar Diseases¹

BP-161-W

Class	Fungicide(s)		Aerial Web Blight	Anthracnose	Brown Spot	Cercospora Leaf Blight ²	Frogeye Leaf Spot ³	Phomopsis/ Diaporthe (Pod And Stem Blight)	Soybean Rust	White Mold ⁴	Harvest Restriction ⁵
	Active ingredient (%)	Trade name									
QoI Strobilurins Group 11	azoxystrobin 22.9%	Quadris 2.08SC® multiple generics ⁶	VG	VG	G	P	P	U	G-VG	P	14 days
	fluoxastrobin 40.3%	Aftershock 480SC® Evito 480SC®	VG	G	G	P	P	U	U	NL	R5 (beginning seed) 30 days
	picoxystrobin 22.5%	Approach 2.08SC®	VG	G	G	P	P	U	G	G-VG ⁷	14 days
	pyradlostrobin 23.6%	Headline 2.09EC/SC®	VG	VG	G	P	P	U	VG	NL	21 days
	cyproconazole 8.9%	Alto 100SL®	U	U	VG	F	F	U	VG	NL	30 days
DMI Triazoles Group 3	flutriafol 11.8%	Topguard 1.04SC®	U	VG	VG	P-G	VG	U	VG-E	F	21 days
	propiconazole 41.8%	Tilt 3.6EC® multiple generics ⁶	P	VG	G	NL	F	NL	VG	NL	R5 (beginning seed)
	prothioconazole 41.0%	Proline 480SC® ⁸	NL	NL	NL	NL	G-VG	NL	VG	F	21 days
	tetraconazole 20.5%	Domark 230ME®	NL	VG	VG	P-G	G-VG	U	VG-E	F	R5 (beginning seed)
	thiophanate-methyl	Topsin-M® multiple generics	U	U	U	F	VG	U	G	F	21 days
2,6-dinitro-anilines Group 29	fluzinam 40.0%	Omega 500DF®	NL	NL	NL	NL	NL	NL	NL	G	R3 (beginning pod)
SDHI Carboxamides Group 7	boscalid 70%	Endura 0.7DF®	U	NL	VG	U	P	NL	NL	VG	21 days

Fungicide Efficacy for Control of Soybean Foliar Diseases¹ (continued)

Class	Fungicide(s)		Rate/A (fl oz)	Aerial Web Blight	Anthracnose	Brown Spot	Cercospora Leaf Blight ²	Frogeye Leaf Spot ³	Phomopsis/ Diaporthe (Pod And Stem Blight)	Soybean Rust	White Mold ⁴	Harvest Restriction ⁵	
	Active ingredient (%)	Trade name											
Mixed Modes of Action	azoxystrobin 18.2% difenoconazole 11.4%	Quadris Top 2.72SC ⁶	8.0-14.0	U	U	G-VG	P-G	VG	U	VG	NL	14 days	
	azoxystrobin 19.8% difenoconazole 19.8%	Quadris Top SBX 3.76SC ⁶	7.0-7.5	U	U	U	U	G-VG	U	U	U	14 days	
	azoxystrobin 7.0% propiconazole 11.7%	Quilt 1.66SC ⁶ multiple generics ⁶	14.0- 20.5	U	U	G	F	F	U	VG	NL	21 days	
	azoxystrobin 13.5% propiconazole 11.7%	Quilt Xcel 2.25E ⁶	10.5- 21.0	E	VG	G	F	F	U	VG	NL	R6	
	bensovindiflupyr 10.27% azoxystrobin 13.5% propiconazole 11.7%	Trivapro A 0.83 ⁶ + Trivapro B 2.25E ⁶	A=4.0 B=10.5	E	U	VG	U	VG	U	U	U	NL	A=14 days B=R6
	cyproconazole 7.17% picoxystrobin 17.94%	Approach Prima 2.34SC ⁶	5.0-6.8	U	U	VG	P-G	G	U	U	U	NL	14 days
	flutriafol 19.3% fluxastrobin 14.84%	Fortix SC ⁶ Preemptor SC ⁶	4.0-6.0	U	U	G	U	G	U	U	U	U	R5
	pyradostrobin 28.58% fluxapyroxad 14.33%	Priaxor 4.17SC ⁶	4.0-8.0	E	VG	E	P-G	P-F	U	U	VG	P	21 days
	pyradostrobin 28.58% fluxapyroxad 14.33% tetraconazole 20.50%	Priaxor D ⁶ 4.17SC 1.9 SC	4.0 (each compo- nent)	U	U	VG	U	G-VG	U	U	U	P	21 days R5
	trifloxystrobin 32.3% prothioconazole 10.8%	Stratego YLD 4.18SC ^{6,9}	4.0-4.65	VG	VG	VG	F	F	U	U	VG	NL	21 days
	tetraconazole 7.48% azoxystrobin 9.35%	Affiance 1.5SC ⁶	10.0- 14.0	U	VG	VG	F	G	U	U	U	U	R5 14 days

¹ Efficacy ratings: 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.

² Cercospora leaf blight efficacy relies on accurate application timing. Standard R3 application timings may not provide adequate disease control. Fungicide efficacy may improve with earlier or later applications. However, efficacy has been inconsistent with some products. Fungicides with a solo or mixed QoI or MBC mode of action may not be effective in areas where QoI or MBC resistance has been detected in the fungal population that causes Cercospora leaf blight.

³ In areas where QoI fungicide-resistant isolates of the frogeye leaf spot pathogen are not present, QoI fungicides may be more effective than indicated in this table.

⁴ White mold efficacy is based on R1-R2 application timing. Lower efficacy is obtained with R3 or later application timings, or if disease symptoms are already present at the time of application.

⁵ Harvest restrictions are listed for soybean harvested for grain. Restrictions may vary for other types of soybean (edamame, etc.) or soybean for other uses (such as forage or fodder).

⁶ Multiple generic products containing this mode of action may also be labeled in some states.

⁷ Rating is based on two applications of Approach[®] at 9 fl oz/A at R1 and R3.

⁸ Proline[®] has a supplemental label (2ee) for soybean that is only for use on white mold in Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, North Dakota, and Wisconsin. A separate 2ee for New York exists for white mold.

⁹ Stratego YLD[®] has a supplemental label (2ee) for white mold on soybean only in Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, North Dakota, and Wisconsin.