Management of Soybean Diseases
Foliar Fungicide Efficacy for Control of Foliar Soybean Diseases — July 2018

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The North Central Regional Committee on Soybean Diseases (NCERA-137) has developed the following information on foliar fungicide efficacy for control of major foliar soybean diseases 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 ratings are based upon level of disease control achieved by product and are not necessarily reflective of yield increases obtained from product application. Efficacy depends upon proper application timing, rate and application method 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, unless otherwise noted. Table includes systemic fungicides available that have been tested over multiple years and locations. The table is not intended to be a list of all labeled products[1].** *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 efficacy.*

Fungicide(s)												
Class	Active ingredient (%)	Product/Trade name	Rate/A (fl oz)	Anthracnose	Brown spot	Cercospora leaf blight[2]	Frogeye leaf spot[3]	Soybean rust	*Phomopsis/Diaporthe (Pod and stem light)*	Target Spot	Harvest restriction[4]
Qol Strobilurins Group 11	Azoxystrobin 22.9%	Quadris 2.08 SC Multiple Generics[5]	6.0 - 15.5	VG	G	P	P	G-VG	U	P-F	14 days
	Fluoxastrobin 40.3%	Aftershock 480 SC Evito 480 SC	2.0 - 5.7	G	G	P	P	U	U	U	R5 (beginning seed) 30 days
	Picoxystrobin 22.5%	Aproach 2.08 SC	6.0 - 12.0	G	G	P	P	G	U	U	14 days
	Pyraclostrobin 23.6%	Headline 2.09 EC/SC	6.0 - 12.0	VG	G	P	P	VG	U	P-F	21 days
DMI Triazoles Group 3	Cyproconazole 8.9%	Alto 100 SL	2.75 - 5.5	U	VG	F	F	VG	U	U	30 days
	Flutriafol 11.8%	Topguard 1.04 SC	7.0 - 14.0	VG	VG	P-G	VG	VG-E	U	P	21 days
	Propiconazole 41.8%	Tilt 3.6 EC Multiple Generics[5]	2.0 - 4.0	VG	G	NL	F	VG	NL	U	R5 (beginning seed)
	Prothioconazole 41.0%	Proline 480 SC	5.0 - 5.7	NL	U	NL	G-VG	VG	NL	U	21 days
	Tetraconazole 20.5%	Domark 230 ME	4.0 - 5.0	VG	VG	P-G	G-VG	VG-E	U	P	R5 (beginning seed)
MBC Thiophanates Group 1	Thiophanate-methyl 45.0%	Topsin-M Multiple Generics[5]	10.0 - 20.0	U	U	F	VG	G	U	U	21 days
SDHI Carboximides Group 7	Boscalid 70%	Endura 0.7 DF	3.5 - 11.0	NL	VG	U	P	NL	NL	U	21 days

Fungicide(s)				Anthracnose	Brown spot	Cercospora leaf blight	Frogeye leaf spot	Soybean rust	*Phomopsis/Diaporthe (Pod and stem light)*	Target Spot	Harvest restriction
Class	**Active ingredient (%)**	**Product/Trade name**	**Rate/A (fl oz)**								
Mixed mode of action	**Azoxystrobin 25.3% Flutriafol 18.63%**	**Topguard EQ 4.29 SC**	**5.0 – 7.0**	U	U	U	F-G	U	U	P	21 days
	Azoxystrobin 18.2% Difenoconazole 11.4%	**Quadris Top 2.72 SC**	**8.0 - 14.0**	U	G-VG	P-G	VG	VG	U	P	14 days
	Azoxystrobin 19.8% Difenoconazole 19.8%	**Quadris Top SBX 3.76 SC**	**7.0-7.5**	U	U	U	G-VG	U	F-G	F-G	14 days
	Azoxystrobin 7.0% Propiconazole 11.7%	**Quilt 1.66 SC Multiple Generics[5]**	**14.0 - 20.5**	U	G	F	F	VG	U	U	21 days
	Azoxystrobin 13.5% Propiconazole 11.7%	**Quilt Xcel 2.2 SE**	**10.5 - 21.0**	VG	G	F	F	VG	U	P	R6
	Bensovindiflupyr 10.27% Azoxystrobin 13.5% Propiconazole 11.7%	**Trivapro**	**13.7-20.7**	U	VG	U	VG	U	G	U	14 days R6
	Tetraconazole 7.48% Azoxystrobin 9.35%	**Affiance 1.5 SC**	**10.0-14.0**	VG	VG	F	G	U	U	U	R5 14 days
	Cyproconazole 7.17% Picoxystrobin 17.94%	**Aproach Prima 2.34 SC**	**5.0 - 6.8**	U	VG	P-G	G	U	U	F-G	14 days
	Fluoxastrobin 18.0% Tebuconazole 25.0%	**Evito T 3.99 F**	**4.0 - 6.0**	F	VG	P-F	F	U	U	U	30 days
	Flutriafol 19.3% Fluoxastrobin 14.84%	**Fortix SC Preemptor SC**	**4.0 - 6.0**	U	G	U	G	U	U	P	R5 (beginning seed)
	Pyraclostrobin 28.58% Fluxapyroxad 14.33%	**Priaxor 4.17 SC**	**4.0 - 8.0**	VG	E	P-G	P-F	VG	U	F-G	21 days
	Pyraclostrobin 28.58% Fluxapyroxad 14.33% Tetraconazole 20.50%	**Priaxor D 4.17 SC 1.9 SC**	**4.0 (each component)**	U	VG	U	G-VG	U	G	U	21 days R5 (beginning seed)
	Trifloxystrobin 32.3% Prothioconazole 10.8%	**Stratego YLD 4.18 SC**	**4.0 - 4.65**	VG	VG	F	F-VG	VG	U	P	21 days
	Tebuconazole 7.5% Thiophanate-methyl 37.5%	**Topsin XRT Multiple Generics[5]**	**20**	U	U	U	G-VG	U	**U**	**F-G**	21 days
	Tetraconazole 4.2% Thiophanate-methyl 21.3%	**Acropolis**	**20.0-23.0**	U	U	U	VG-E	VG-E	U	U	R5 14 days

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

[2] Cercospora leaf blight efficacy relies on accurate application timing, and 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]Harvest restrictions are listed for soybean harvested for grain. Restrictions may vary for other types of soybean (edamame, etc.) and soybean for other uses such as forage or fodder.

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

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. Please read and follow all specific use restrictions prior to fungicide use. This information is provided only as a guide. It is the responsibility of the pesticide applicator by law to read and follow all current label directions. Reference to products in this publication is not intended to be an endorsement to the exclusion of others that may be similar. Persons using such products assume responsibility for their use in accordance with current directions of the manufacturer. Members or participants in the NCERA-212 or NCERA- 208 group assume no liability resulting from the use of these products.

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