Efficacy of fungicides for soybean disease control based on appropriate application timing*

Fungicide(s)							Cer-	-	Phomopsis/			
Class	Active ingredient (%)	Product/ Trade name	Rate/A (fl oz)	Aerial web blight	An- thracno se	Brown spot	cos- pora leaf blight ²	Frogeye leaf spot ³	Diaporthe (Pod and stem blight)	Soybean rust	White mold ⁴	Harvest restriction ⁵
Qol Strobilurins Group 11	Azoxystrobin 22.9%	Quadris 2.08 SC	6.0-15.5	VG	VG	G	F	VG	_6	G-VG	NL	14 days
	Pyraclostrobin 23.6%	Headline 2.09 EC/ 2.08 SC	6.0-12.0	VG	VG	G	F	VG	_6	G-VG	NL	21 days
DMI Triazoles Group 3	Cyproconazole 8.9%	Alto 100SL	2.75-5.5	_6	_6	VG	_6	F	_6	VG	NL	30 days
	Flutriafol 11.8%	†Topguard 1.04 SC ⁷	7.0-14.0	NL	NL	VG	F	VG	NL	Е	G	21 days
	Propiconazole 41.8%	Tilt 3.6 EC	4.0-6.0	P	VG	G	NL	F	NL	VG	NL	R5 (beginning seed)
	Prothioconazol 41.0%	Proline 480 SC ⁸	2.5-4.3	NL	NL	NL	NL	VG	NL	VG	G	21 days
MBC Thiophanates Group 1	Thiophanate- methyl	Topsin-M 70 WP/ Multiple Generics	0.5-1.0 lb	_6	_6	_6	NL	VG	_6	NL	G	21 days
SDHI Carboximides Group 7		Endura 0.7 DF	3.5-11.0	_6	NL	VG	_6	Р	NL	NL	G	21 days
Mixed Mode of Action	Azoxystrobin 18.2% Difenconazole 11.4%	Quadris Top 2.72 SC	8.0-14.0	_6	_6	_6	_6	VG	_6	VG	NL	14 days
	Azoxystrobin 7.0% Propiconazole 11.7%	Avaris 1.66 SC Quilt 1.66 SC	14.0- 20.5	I	_6	G	_6	G	_6	VG	NL	21 days
	Azoxystrobin 13.5% Propiconazole 11.7%	Quilt Xcel 2.2 SE	10.5- 21.0	Е	VG	G	F	VG	_6	VG	NL	R6
	Trifloxystrobi n 32.3% Prothioconazol e 10.8%	Stratego YLD 4.18 SC ^{9, 10}	4.0-4.65	VG	VG	VG	F	VG	_6	VG	NL	21 days

^{*}This information was adapted for New York by Gary C. Bergstrom, Cornell University, from information developed by the North Central Regional Committee on Soybean Diseases and the Regional Committee for Soybean Rust Pathology (NCERA-212 and NCERA-208) 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 fungicides available that have been tested over multiple years and locations. The table is not intended to be a list of all labeled products¹. Efficacy categories: NR=Not Recommended; P=Poor; F=Fair; G=Good; VG=Very Good; E=Excellent; NL = Not Labeled for use against this disease. 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. (Continued on next page)

(Continued) 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.

¹Some fungicides not in this table may be labeled for soybean rust only, powdery mildew, and alternaria leaf spot. 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 later applications.

³ Fungicides with a solo or mixed QoI mode of action may not be effective in areas where QoI-resistance has been detected in the fungal population that causes frogeye leaf spot.

⁴ White mold efficacy is based on an R1 application timing, and lower efficacy is obtained at an R3 application timing, or if disease symptoms are already present at the time of application.

⁵Harvest 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.

⁶Insufficient data is available at this time to make statements about efficacy of these products for diseases listed in the table.

⁷No sale, use, or distribution of Topguard in Nassau or Suffolk Counties in New York.

⁸Proline is labeled for use on white mold in IL, IN, IA, MI, MN, NE, ND, OH, SD, WI. However, a 2ee recommendation for New York exists for white mold.

⁹Stratego YLD has a supplemental label (2ee) for white mold on soybean only in IL, IN, IA, MI, MN, NE, ND, OH, SD, WI, but not in New York.

¹⁰Aerial application is not allowed in New York.