MANAGEMENT OF FUNGAL DISEASES OF CORN									
Disease	Crop rotation	Host resistance	Foliar fungicides						
Northern leaf blight	\checkmark	\checkmark	\checkmark						
Southern corn leaf blight	\checkmark	\checkmark	\checkmark						
Gray leaf spot	\checkmark	\checkmark	$\checkmark\checkmark$						
Southern corn rust		\checkmark	$\checkmark\checkmark$						

Scout for diseases from just prior to silking through the kernel dent stage. Yield loss is most likely to occur if disease is observed at or just after silking. Foliar fungicides are not typically recommended if disease onset is at or following the dent stage.



Disease: Southern corn rust Causal agent: *Puccinia polyspora* Symptoms: Bright orange or golden brown circular to oval pustules Environment: Warm and humid, does not overwinter in VA and NC



Disease: Northern corn leaf blight **Causal agent:** *Exserohilum turcicum* **Symptoms:** Long elliptical, grayishgreen or tan lesions (1-6") on lower leaves, eventually premature death **Environment:** Moderately warm, moist

For more information contact: Dr. Hillary L. Mehl, Extension Plant Pathologist Virginia Tech Tidewater AREC; (757) 657-6450 ext. 423; hlmehl@vt.edu http://blogs.ext.vt.edu/ag-pest-advisory/



Disease: Southern corn leaf blight Causal agent: *Bipolaris maydis* Symptoms: Tan elongated lesions between veins (1") Environment: Warm & moist (warmer than Northern leaf blight)



Disease: Gray leaf spot Causal agent: Cercospora zeaemaydis Symptoms: Gray or pale brown lesions, long and narrow (1/4" x 1") with blunt ends, leaf death Environment: Warm & moist

Fungicide Efficacy for Control of Corn Diseases April 2015

The Corn Disease Working Group (CDWG) has developed the following information on fungicide efficacy for control of major corn 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. 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 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; U = Unknown efficacy or insufficient data to rank product

	Fungicide(s)									
Class	Active ingredient (%)	Product/Trade name	Rate/A (fl oz)	Anthracnose leaf blight	Common rust	Eyespot	Gray leaf spot	Northern leaf blight	Southern rust	Harvest Restriction ²
Qol Strobilurins Group 11	Azoxystrobin 22.9%	Quadris 2.08 SC Multiple Generics	6.0 - 15.5	VG	E	VG	E	G	G	7 days
	Pyraclostrobin 23.6%	Headline 2.09 EC/SC	6.0 - 12.0	VG	E	Е	E	VG	E	7 days
	Picoxystrobin	Aproach 2.08 SC	3.0 – 12.0	VG	VG-E	VG	F-VG	VG	U	7 days
Mixed modes of action DMI Triazoles Group 3	Propiconazole 41.8%	Tilt 3.6 EC Multiple Generics	2.0 - 4.0	NL	VG	E	G	G	G	30 days
	Prothioconazole 41.0%	Proline 480 SC	5.7	U	VG	E	U	VG	G	14 days
	Tebuconazole 38.7%	Folicur 3.6 F Multiple Generics	4.0 - 6.0	NL	U	NL	U	VG	U	36 days
	Tetraconazole 20.5%	Domark 230 ME Multiple Generics	4.0 - 6.0	U	U	U	E	U	G	R3 (milk)
	Azoxystrobin 13.5% Propiconazole 11.7%	Quilt Xcel 2.2 SE Aframe Plus 2.2 SE	10.5 - 14.0	VG	VG-E	VG-E	E	VG	VG	30 days
	Cyproconazole 7.17% Picoxystrobin 17.94%	Aproach Prima 2.34 SC	3.4 - 6.8	U	U	U	E	VG	VG	30 days
	Flutriafol 19.3% Fluoxastrobin 14.84%	Fortix 3.22 SC	4.0 -6.0	U	U	U	E	VG	VG	R4 (dough)
	Pyraclostrobin 13.6% Metconazole 5.1%	Headline AMP 1.68 SC	10.0 - 14.4	U	E	E	E	VG	VG	20 days
	Pyraclostrobin 28.58% Fluxapyroxad 14.33%	Priaxor 4.17 SC	4.0 - 8.0	U	VG	U	VG	U	G	21 days
	Trifloxystrobin 32.3% Prothioconazole 10.8%	Stratego YLD 4.18 SC	4.0 - 5.0	VG	E	VG	E	VG	VG	14 days

¹Additional fungicides are labeled for disease on corn, including contact fungicides such as chlorothalonil. Certain fungicides may be available for diseases not listed in the table, including Gibberella and Fusarium ear rot. Applications of Proline 480 SC for use on ear rots requires a FIFRA Section 2(ee) and is only approved for use in Illinois, Indiana, Iowa, Louisiana, Maryland, Michigan, Mississippi, North Dakota, Ohio, Pennsylvania, and Virginia.

²Harvest restrictions are listed for field corn harvested for grain. Restrictions may vary for other types of corn (sweet, seed or popcorn, etc.), and corn for other uses such as forage or fodder. 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 CDWG assume no liability resulting from the use of these products.