### Fungicide Efficacy for Control of Wheat Diseases (Revised 3-30-16)

The multi-state 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 in the U.S. Efficacy ratings for each fungicide listed were determined by field testing over multiple years and locations. Efficacy is determined by direct comparisons among products in field tests. The products are used in a manner consistent with label instructions. This table includes most widely marketed products. It is not intended to be a list of all labeled fungicide products.

<table>
<thead>
<tr>
<th>Fungicides</th>
<th>Active ingredient</th>
<th>Product Rate oz/ac</th>
<th>Powdery mildew</th>
<th>Stag. leaf blotch</th>
<th>Septoria leaf spot</th>
<th>Tan spot</th>
<th>Stripe rust</th>
<th>Leaf rust</th>
<th>Stem rust</th>
<th>Head scab</th>
<th>Harvest Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strobilurin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picoxystrobin 22.5%</td>
<td>Aproach SC</td>
<td>6.0 – 12.0</td>
<td>G¹</td>
<td>VG</td>
<td>VG²</td>
<td>VG</td>
<td>E³</td>
<td>VG</td>
<td>VG</td>
<td>G</td>
<td>NL</td>
</tr>
<tr>
<td>Fluoxastrobin 40.3%</td>
<td>Evito 480 SC</td>
<td>2.0 – 4.0</td>
<td>G</td>
<td>--</td>
<td>--</td>
<td>VG</td>
<td>--</td>
<td>VG</td>
<td>--</td>
<td>NL</td>
<td>Feekes 10.5 &amp; 40 days</td>
</tr>
<tr>
<td>Pyraclostrobin 23.6%</td>
<td>Headline SC</td>
<td>6.0 - 9.0</td>
<td>G</td>
<td>VG²</td>
<td>VG²</td>
<td>E</td>
<td>E³</td>
<td>E</td>
<td>G</td>
<td>NL</td>
<td>Feekes 10.5</td>
</tr>
<tr>
<td><strong>Triazole</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metconazole 8.6%</td>
<td>Caramba 0.75 SL</td>
<td>10.0 - 17.0</td>
<td>VG</td>
<td>VG</td>
<td>--</td>
<td>VG</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>G</td>
<td>30 days</td>
</tr>
<tr>
<td>Propiconazole 41.8%</td>
<td>Tilt 3.6 EC²</td>
<td>4.0</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>G</td>
<td>P</td>
<td>Feekes 10.5</td>
</tr>
<tr>
<td>Prothioconazole 41%</td>
<td>Proline 480 SC</td>
<td>5.0 - 5.7</td>
<td>--</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>G</td>
<td>30 days</td>
<td></td>
</tr>
<tr>
<td>Tebuconazole 38.7%</td>
<td>Folicur 3.6 F²</td>
<td>4.0</td>
<td>NL</td>
<td>NL</td>
<td>NL</td>
<td>NL</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>F</td>
<td>30 days</td>
</tr>
<tr>
<td>Prothioconazole 19%</td>
<td>Prosaro 421 SC</td>
<td>6.5 - 8.2</td>
<td>G</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>G</td>
<td>30 days</td>
</tr>
<tr>
<td><strong>Mixed modes of action</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tebuconazole 22.6%</td>
<td>Absolute Maxx SC</td>
<td>5.0</td>
<td>G</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>E</td>
<td>VG</td>
<td>NL</td>
<td>35 days</td>
</tr>
<tr>
<td>Fluoxastrobin 14.8%</td>
<td>Fortix</td>
<td>4.0 - 6.0</td>
<td>--</td>
<td>--</td>
<td>VG</td>
<td>VG</td>
<td>E</td>
<td>VG</td>
<td>--</td>
<td>NL</td>
<td>Feekes 10.5 &amp; 40 days</td>
</tr>
<tr>
<td>Benzoindiflupyr 10.3%</td>
<td>Trivapro A EC</td>
<td>4.0</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>E</td>
<td>E</td>
<td>VG</td>
<td>NL</td>
<td>Feekes 10.5.4</td>
</tr>
<tr>
<td>Propiconazole 11.7%</td>
<td>+ Trivapro B SE</td>
<td>10.5</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>E</td>
<td>E</td>
<td>VG</td>
<td>NL</td>
<td>Feekes 10.5</td>
</tr>
<tr>
<td>Metconazole 7.4%</td>
<td>TwinLine 1.75 EC</td>
<td>7.0 – 9.0</td>
<td>G</td>
<td>VG</td>
<td>VG</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>VG</td>
<td>NL</td>
<td>Feekes 10.5</td>
</tr>
<tr>
<td>Pyraclostrobin 12%</td>
<td>Priaxor</td>
<td>4.0 - 8.0</td>
<td>G</td>
<td>VG</td>
<td>VG</td>
<td>E</td>
<td>VG</td>
<td>VG</td>
<td>G</td>
<td>NL</td>
<td>Feekes 10.5</td>
</tr>
<tr>
<td>Propiconazole 11.7%</td>
<td>+ Azoxystrobin 13.5%</td>
<td>Quilt Xcel 2.2 SE²</td>
<td>10.5 - 14.0</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>E</td>
<td>E</td>
<td>VG</td>
<td>NL</td>
<td>Feekes 10.5</td>
</tr>
<tr>
<td>Prothioconazole 10.8%</td>
<td>+ Triflurostrobil 32.3%</td>
<td>4.0</td>
<td>G</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>NL</td>
<td>Feekes 10.5</td>
<td>35 days</td>
</tr>
<tr>
<td>Cyproconazole 7.17%</td>
<td>Aproach Prima SC</td>
<td>3.4 - 6.8</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>E</td>
<td>VG</td>
<td>--</td>
<td>NR</td>
<td>45 days</td>
<td></td>
</tr>
<tr>
<td><strong>Picoxystrobin 17.94%</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

⁵ Products with mixed modes of action generally combine triazole and strobilurin active ingredients. However, Priaxor and the Trivapro co-pack also include carboxamide active ingredients.

For more information, contact Martin Nagelkirk nagelkir@msu.edu or Martin Chilvers chilvers@msu.edu