## SOYBEAN – SEED TREATMENTS

Travis Faske and Terry Kirkpatrick

<table>
<thead>
<tr>
<th>Disease</th>
<th>Fungicide</th>
<th>Active Ingredient</th>
<th>FRAC Code*</th>
<th>Rate/cwt Seed</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Rots</td>
<td>Trilex 2000</td>
<td>trifloxystrobin +</td>
<td>11</td>
<td>1.6 fl oz</td>
<td></td>
</tr>
<tr>
<td>Damping-Off Complex</td>
<td></td>
<td>metalaxyl</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Seedling Diseases)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Pythium, Rhizoctonia, etc.)</td>
<td>CruiserMaxx</td>
<td>mefenoxam +</td>
<td>4</td>
<td>2.95 fl oz</td>
<td>Dealer only.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>fludioxonil +</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>thiamethoxam</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CruiserMaxx</td>
<td>thiamethoxam +</td>
<td>---</td>
<td>3.22 fl oz</td>
<td>Commercial seed treatment only.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mefenoxam +</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>fludioxonil +</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>sedaxane</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maxim 4FS or Allegiance LS or Apron XL</td>
<td>fludioxonil</td>
<td>12</td>
<td>0.08 - 0.16 fl oz</td>
<td>For on-farm or commercial use with slurry or mist treaters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>metalaxyl</td>
<td>4</td>
<td>1.2 - 2.4 fl oz</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>mefenoxam</td>
<td>4</td>
<td>0.16 - 0.64 fl oz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vitavax M + Alleliance LS</td>
<td>carboxin +</td>
<td>7</td>
<td>9 - 12 fl oz</td>
<td>For on-farm or commercial use with slurry or mist treaters or as a planter-box treatment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>thiram +</td>
<td>M3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>molybdenum +</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>metalaxyl</td>
<td>4</td>
<td>1.2 - 2.4 fl oz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ApronMaxx RFC</td>
<td>mefenoxam +</td>
<td>4</td>
<td>1.5 fl oz</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>fludioxonil</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EverGol Energy</td>
<td>prothioconazole +</td>
<td>3</td>
<td>1 oz</td>
<td>Commercial seed treatment only.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>penflufen +</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>metalaxyl</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stamina</td>
<td>pyraclostrobin</td>
<td>11</td>
<td>0.4 fl oz</td>
<td>For use by commercial seed treaters only.</td>
</tr>
<tr>
<td></td>
<td>Vibeance</td>
<td>sedaxane</td>
<td>7</td>
<td>0.08 - 0.16 fl oz</td>
<td>Specific for Rhizoctonia pathogens.</td>
</tr>
<tr>
<td></td>
<td>ILeVO</td>
<td>fluopyram</td>
<td>7</td>
<td>0.15 - 0.25 mg ai/seed</td>
<td>Suppression of seedling infection of sudden death syndrome. Commercial seed treatment only. Do not feed as forage or hay to livestock</td>
</tr>
</tbody>
</table>

*FRAC Code – Fungicides with the same FRAC Code have the same mode of action. See [http://www.frac.info/](http://www.frac.info/) for an explanation of the FRAC Codes. Rotation of fungicides with different FRAC Codes could minimize the development of fungicide-resistant strains.

**NOTE:** Metalaxyl and mefenoxam have activity against Pythium and Phytophthora fungi while all others listed are more active against Rhizoctonia, Fusarium and various fungi. A combination of the two chemistries provides broadest spectrum control. If an inoculant is to be used, it should be applied after fungicide seed treatments have dried and/or right before planting. Seed treatments often have not resulted in improved stands or yields in University trials unless less-than-optimum planting conditions are prevalent (early planting, heavy clay soils, cool, wet conditions, etc.).
### SOYBEAN – FOLIAR DISEASES

Travis Faske and Terry Spurlock

<table>
<thead>
<tr>
<th>Disease</th>
<th>Fungicide</th>
<th>Active Ingredient</th>
<th>FRAC Code*</th>
<th>Rate/Acre</th>
<th>Days to Harvest</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerial Blight</td>
<td>Quadris 2.08 SC or Equation 2.08 SC</td>
<td>azoxystrobin</td>
<td>11</td>
<td>6 - 15.5 fl oz</td>
<td>14</td>
<td>Apply at first sign of disease for maximum control. Applications after significant disease development will result in poor control. Use the high rates under conditions favorable for severe disease development, dense plant canopies or when highly susceptible varieties are planted.</td>
</tr>
<tr>
<td></td>
<td>Headline**</td>
<td>pyraclostrobin</td>
<td>11</td>
<td>6 - 12 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadris Top SB**</td>
<td>azoxystrobin + difenoconazole</td>
<td>11 + 3</td>
<td>8 - 14 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quilt Xcel**</td>
<td>azoxystrobin + propiconazole</td>
<td>11 + 3</td>
<td>10.5 - 14 fl oz</td>
<td>See label</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affiance**</td>
<td>azoxystrobin + tetraconazole</td>
<td>11 + 3</td>
<td>14 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aproach Prima**</td>
<td>picoxystrobin + cyproconazole</td>
<td>11 + 3</td>
<td>5 - 6.8 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stratego**</td>
<td>trifloxystrobin + propiconazole</td>
<td>11 + 3</td>
<td>10 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stratego YLD**</td>
<td>trifloxystrobin + prothioconazole</td>
<td>11 + 3</td>
<td>4 - 4.6 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Priaxor**</td>
<td>pyraclostrobin + fluxapyroxad</td>
<td>11 + 7</td>
<td>4 - 8 fl oz</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

**Frogeye Leaf Spot:**
Apply in presence of disease for maximum control on susceptible varieties. Applications between R3 and R4 growth stages have been effective when conditions favor disease on susceptible variety. A strobilurin fungicide (FRAC Code 11) alone will not adequately control strains for frogeye leaf spot that are resistant to this class of fungicide.

**General Seed Quality:** An application between R2 and late R5 has been used by seed producers for general seed quality protection.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Fungicide</th>
<th>Active Ingredient</th>
<th>FRAC Code*</th>
<th>Rate/Acre</th>
<th>Days to Harvest</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthracnose, Frogeye leaf spot, Pod and stem blight, Cercospora leaf blight, and general seed quality diseases</td>
<td>Cercobin</td>
<td>thiophanate-methyl</td>
<td>1</td>
<td>10.9 - 21.8 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thiophanate-Methyl 85 WDG</td>
<td>thiophanate-methyl</td>
<td>1</td>
<td>0.4 - 0.8 lb</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topsyin 4.5 L</td>
<td>thiophanate-methyl</td>
<td>1</td>
<td>10 - 20 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topsyin 70 WDG</td>
<td>thiophanate-methyl</td>
<td>1</td>
<td>0.5 - 1 lb</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alto</td>
<td>cyproconazole</td>
<td>3</td>
<td>4 - 5.5 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topguard</td>
<td>flutriafol</td>
<td>3</td>
<td>7 - 14 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tilt, or Bumper, or several generics 41.8 EC</td>
<td>propiconazole</td>
<td>3</td>
<td>4 - 6 fl oz</td>
<td>See label</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proline 480 SC</td>
<td>prothioconazole</td>
<td>3</td>
<td>2.5 - 3 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Domark 230 ME</td>
<td>tetraconazole</td>
<td>3</td>
<td>4 - 5 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vertisan</td>
<td>penthiopyrad</td>
<td>7</td>
<td>10 - 30 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadris 2.08 SC or Equation 2.08 SC</td>
<td>azoxystrobin</td>
<td>11</td>
<td>6 - 15.5 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evito 480 SC or Aftershock</td>
<td>fluoxastrobin</td>
<td>11</td>
<td>2 - 5.7 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aproach 2.08 SC</td>
<td>picoxystrobin</td>
<td>11</td>
<td>6 - 12 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Headline</td>
<td>pyraclostrobin</td>
<td>11</td>
<td>6 - 12 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEM</td>
<td>trifloxystrobin</td>
<td>11</td>
<td>3 - 3.5 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topsin XTR</td>
<td>thiophanate-methyl + tebuconazole</td>
<td>1 + 3</td>
<td>20 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadris Xtra</td>
<td>azoxystrobin + cyproconazole</td>
<td>11 + 3</td>
<td>5 - 6.8 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadris Top SB</td>
<td>azoxystrobin + difenoconazole</td>
<td>11 + 3</td>
<td>8 - 14 fl oz</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

(continued)
### SOYBEAN – FOLIAR DISEASES (continued)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Fungicide</th>
<th>Active Ingredient</th>
<th>FRAC Code*</th>
<th>Rate/Acre</th>
<th>Days to Harvest</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthracnose, Frogeye leaf spot, Pod and stem blight, Cercospora leaf blight, and general seed quality diseases (cont.)</td>
<td>Custodia</td>
<td>azoxystrobin + tebuconazole</td>
<td>11 + 3</td>
<td>8.6 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quilt Xcel</td>
<td>azoxystrobin + propiconazole</td>
<td>11 + 3</td>
<td>10.5 - 14 fl oz</td>
<td>See label</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affiance</td>
<td>azoxystrobin + tetraconazole</td>
<td>11 + 3</td>
<td>10 - 14 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fortix</td>
<td>fluoxastrobin + flutriafol</td>
<td>11 + 3</td>
<td>5 - 6 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evito T</td>
<td>fluoxastrobin + tebuconazole</td>
<td>11 + 3</td>
<td>4 - 6 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aproach Prima</td>
<td>picoxystrobin + cyproconazole</td>
<td>11 + 3</td>
<td>5 - 6.8 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stratego</td>
<td>trifloxystrobin + propiconazole</td>
<td>11 + 3</td>
<td>10 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stratego YLD</td>
<td>trifloxystrobin + prothioconazole</td>
<td>11 + 3</td>
<td>4 - 4.6 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Priaxor</td>
<td>pyraclostrobin + fluxapyroxad</td>
<td>11 + 7</td>
<td>4 - 8 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Soybean Rust</td>
<td>Alto</td>
<td>cyproconazole</td>
<td>3</td>
<td>4 - 5.5 fl oz</td>
<td>30</td>
<td>When soybean rust is present and conditions favor disease development, use high rates combined with additional triazole for improved rust control.</td>
</tr>
<tr>
<td></td>
<td>Topguard</td>
<td>flutriafol</td>
<td>3</td>
<td>7 - 14 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tilt, or Bumper, or several generics 41.8 EC</td>
<td>propiconazole</td>
<td>3</td>
<td>4 - 6 fl oz</td>
<td>See label</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proline 480 SC</td>
<td>prothioconazole</td>
<td>3</td>
<td>2.5 - 3 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>tebuconazole (several generics 3.6 F)</td>
<td>3</td>
<td>3 - 4 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Domark 230 ME</td>
<td>tetraconazole</td>
<td>3</td>
<td>4 - 5 fl oz</td>
<td>See label</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadris 2.08 SC</td>
<td>azoxystrobin</td>
<td>11</td>
<td>6 - 15.5 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evito 480 SC or Aftershock</td>
<td>fluoxastrobin</td>
<td>11</td>
<td>2 - 5.7 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Headline</td>
<td>pyraclostrobin</td>
<td>11</td>
<td>6 - 12 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topsin XTR</td>
<td>thiophanate-methyl + tebuconazole</td>
<td>1 + 3</td>
<td>20 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quadris Xtra</td>
<td>azoxystrobin + cyproconazole</td>
<td>11 + 3</td>
<td>5 - 6.8 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quilt Xcel</td>
<td>azoxystrobin + propiconazole</td>
<td>11 + 3</td>
<td>14 - 21 fl oz</td>
<td>See label</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affiance</td>
<td>azoxystrobin + tetraconazole</td>
<td>11 + 3</td>
<td>10 - 14 fl oz</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aproach Prima</td>
<td>picoxystrobin + cyproconazole</td>
<td>11 + 3</td>
<td>5 - 6.8 fl oz</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stratego</td>
<td>trifloxystrobin + propiconazole</td>
<td>11 + 3</td>
<td>10 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stratego YLD</td>
<td>trifloxystrobin + prothioconazole</td>
<td>11 + 3</td>
<td>4 - 4.6 fl oz</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Priaxor</td>
<td>pyraclostrobin + fluxapyroxad</td>
<td>11 + 7</td>
<td>4 - 8 fl oz</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

*FRAC Code* – Fungicides with the same FRAC Code have the same mode of action. See [http://www.frac.info/](http://www.frac.info/) for an explanation of the FRAC Codes. Rotation of fungicides with different FRAC Codes could minimize the development of fungicide-resistant strains.

**Use for control of aerial blight is based on other states’ data.
Management of Soybean Diseases – Fungicide Efficacy for Control of Foliar Soybean Diseases (April 2015)

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. This 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. 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.

**NOTE:** This guideline was a composite of several field trials from multiple states across the U.S. soybean belt and may not always reflect fungicide efficacy observed in Arkansas.

<table>
<thead>
<tr>
<th>Fungicide(s)</th>
<th>Class</th>
<th>Active Ingredient (%)</th>
<th>Product/Trade Name</th>
<th>Rate/A (fl oz)</th>
<th>Aerial Web Blight</th>
<th>Anthracnose</th>
<th>Brown Spot</th>
<th>Cercospora Leaf Blight (^2)</th>
<th>Frogeye Leaf Spot (^3)</th>
<th>Phomopsis/ Diaporthe (Pod and Stem Blight)</th>
<th>Soybean Rust</th>
<th>Harvest Restriction (^4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strobilurins Group 11</strong></td>
<td></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>Azoxystrobin 22.9%</td>
<td>OLC</td>
<td>Quadris 2.08 SC</td>
<td>6 - 15.5</td>
<td>VG</td>
<td>VG</td>
<td>G</td>
<td>F</td>
<td>P</td>
<td>U</td>
<td>G-VG</td>
<td>14 days</td>
<td></td>
</tr>
<tr>
<td>Fluoxastrobin 40.3%</td>
<td>OLC</td>
<td>Aftershock 480 SC</td>
<td>2 - 5.7</td>
<td>VG</td>
<td>G</td>
<td>G</td>
<td>F</td>
<td>P</td>
<td>U</td>
<td>U</td>
<td>R5 (beginning seed) 30 days</td>
<td></td>
</tr>
<tr>
<td>Picoxystrobin</td>
<td>OLC</td>
<td>Aproach 2.08 SC</td>
<td>6 - 12</td>
<td>VG</td>
<td>G</td>
<td>G</td>
<td>F</td>
<td>P</td>
<td>U</td>
<td>G</td>
<td>14 days</td>
<td></td>
</tr>
<tr>
<td>Pyraclostrobin 23.6%</td>
<td>OLC</td>
<td>Headline 2.09 EC/SC</td>
<td>6 - 12</td>
<td>VG</td>
<td>VG</td>
<td>G</td>
<td>F</td>
<td>P</td>
<td>U</td>
<td>VG</td>
<td>21 days</td>
<td></td>
</tr>
<tr>
<td><strong>Triazoles Group 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Cyproconazole 8.9%</td>
<td>DMI</td>
<td>Alto 100 SL</td>
<td>2.75 - 5.5</td>
<td>U</td>
<td>U</td>
<td>VG</td>
<td>F</td>
<td>F</td>
<td>U</td>
<td>VG</td>
<td>30 days</td>
<td></td>
</tr>
<tr>
<td>Flutriafol 11.8%</td>
<td>DMI</td>
<td>Topguard 1.04 SC</td>
<td>7 - 14</td>
<td>U</td>
<td>VG</td>
<td>VG</td>
<td>F</td>
<td>VG</td>
<td>U</td>
<td>VG-E</td>
<td>21 days</td>
<td></td>
</tr>
<tr>
<td>Propiconazole 41.8%</td>
<td>DMI</td>
<td>Tilt 3.6 EC Multiple Generics(^5)</td>
<td>4 - 6</td>
<td>P</td>
<td>VG</td>
<td>G</td>
<td>NL</td>
<td>F</td>
<td>NL</td>
<td>VG</td>
<td>R6</td>
<td></td>
</tr>
<tr>
<td>Prothioconazole 41.0%</td>
<td>DMI</td>
<td>Proline 480 SC</td>
<td>5 - 5.7</td>
<td>NL</td>
<td>NL</td>
<td>NL</td>
<td>NL</td>
<td>G-VG</td>
<td>NL</td>
<td>VG</td>
<td>21 days</td>
<td></td>
</tr>
<tr>
<td>Tetraconazole 20.5%</td>
<td>DMI</td>
<td>Domark 230 ME Multiple Generics</td>
<td>4 - 5</td>
<td>NL</td>
<td>VG</td>
<td>VG</td>
<td>F</td>
<td>G</td>
<td>U</td>
<td>VG-E</td>
<td>R5 (beginning seed)</td>
<td></td>
</tr>
<tr>
<td>Thiophanate-methyl</td>
<td>MBC</td>
<td>Tospin-M Multiple Generics</td>
<td>10 - 20</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>F</td>
<td>VG</td>
<td>U</td>
<td>G</td>
<td>21 days</td>
<td></td>
</tr>
<tr>
<td><strong>Carboximides Group 7</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Boscalid 70%</td>
<td>SDHI</td>
<td>Endura 0.7 DF</td>
<td>3.5 - 11</td>
<td>U</td>
<td>NL</td>
<td>VG</td>
<td>P</td>
<td>U</td>
<td>NL</td>
<td>NL</td>
<td>21 days</td>
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</tbody>
</table>

(continued)
### Management of Soybean Diseases – Fungicide Efficacy for Control of Foliar Soybean Diseases (April 2015) (continued)

<table>
<thead>
<tr>
<th>Class</th>
<th>Active Ingredient (%)</th>
<th>Product/Trade Name</th>
<th>Rate/A (fl oz)</th>
<th>Aerial Web Blight</th>
<th>Anthracnose</th>
<th>Brown Spot</th>
<th>Cercospora Leaf Blight(^2)</th>
<th>Frogeye Leaf Spot(^3)</th>
<th>Phomopsis/Diaporthe (Pod and Stem Blight)</th>
<th>Soybean Rust</th>
<th>Harvest Restriction(^4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>VG</td>
<td>U</td>
<td>U VG</td>
<td>U</td>
<td>14 days</td>
</tr>
<tr>
<td>Mixed Modes of Action Group 11 + 3 or 7</td>
<td>A azoxystrobin 18.2% Difenoconazole 11.4%</td>
<td>Quadris Top 2.72 SC</td>
<td>8 - 14</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>VG</td>
<td>U</td>
<td>U VG</td>
<td>U</td>
<td>14 days</td>
</tr>
<tr>
<td></td>
<td>A azoxystrobin 7.0% Propiconazole 11.7%</td>
<td>Avaris 1.66 SC Quilt 1.66 SCHM-0812 1.66 SC</td>
<td>14 - 20.5</td>
<td>U</td>
<td>U</td>
<td>G</td>
<td>U</td>
<td>F</td>
<td>U VG</td>
<td>U</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>A azoxystrobin 13.5% Propiconazole 11.7%</td>
<td>Quilt Xcel 2.2 SE</td>
<td>10.5 - 21</td>
<td>E</td>
<td>VG</td>
<td>G</td>
<td>F</td>
<td>F</td>
<td>U VG</td>
<td>R6</td>
<td>14 days</td>
</tr>
<tr>
<td></td>
<td>C pyroconazole 7.17% Picoxystrobin 17.94%</td>
<td>Aproach Prima 2.34 SC</td>
<td>5 - 6.8</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>G</td>
<td>U U</td>
<td>14 days</td>
<td>30 days</td>
</tr>
<tr>
<td></td>
<td>F fluoxastrobin 18.0% Tebuconazole 25.0%</td>
<td>Evito T 3.99 F</td>
<td>4 - 6</td>
<td>U</td>
<td>F</td>
<td>VG</td>
<td>P-F</td>
<td>F</td>
<td>U U</td>
<td>U</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>F flutriafol 19.3% Fluoxastrobin 14.84%</td>
<td>Fortix</td>
<td>4 - 6</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>G</td>
<td>U</td>
<td>U U</td>
<td>U</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>F pyraclostrobin 28.58% Fluxapyroxad 14.33%</td>
<td>Priaxor 4.17 SC</td>
<td>4 - 8</td>
<td>E</td>
<td>VG</td>
<td>E</td>
<td>F</td>
<td>F</td>
<td>U VG</td>
<td>21 days</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>F pyraclostrobin 28.58% Fluxapyroxad 14.33%Tetraconazole 20.50%</td>
<td>Priaxor D 4.17 SC 1.9 SC</td>
<td>4 (each compon-ent)</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>G</td>
<td>U</td>
<td>U</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>F trifloxystrobin 32.3% Prothioconazole 10.8%</td>
<td>Stratego YLD 4.18 SC</td>
<td>4 - 4.65</td>
<td>VG</td>
<td>VG</td>
<td>VG</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>U</td>
<td>VG</td>
</tr>
</tbody>
</table>

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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. 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.
SOYBEAN – NEMATODES
Terry Kirkpatrick and Travis Faske

<table>
<thead>
<tr>
<th>Nematode</th>
<th>Nematicide</th>
<th>Formulation</th>
<th>Active Ingredient</th>
<th>Rate/Acre</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybean Cyst, Root-Knot, Reniform,</td>
<td>Telone II¹</td>
<td>Liquid</td>
<td>1,3-dichloropropene</td>
<td>3 - 6 gal</td>
<td>Inject 12 inches below planting depth and seal immediately with appropriate bedding equipment. Wait 7 - 14 days before planting.</td>
</tr>
<tr>
<td>and Lesion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>K-Pam or Vapam¹</td>
<td>Liquid</td>
<td>potassium N-methyldithiocarbamate or sodium methyldithiocarbamate</td>
<td>See label.</td>
<td>Inject 12 inches below planting depth and seal immediately 14 - 21 days before planting.</td>
</tr>
<tr>
<td></td>
<td>Avicta 500 FS</td>
<td>Seed treatment</td>
<td>abamectin</td>
<td>3 oz/cwt</td>
<td>For use by commercial seed treaters only. Use in conjunction with moderately resistant cultivars. Avicta Complete Beans is Avicta 500 FS + CruiserMaxx.</td>
</tr>
<tr>
<td></td>
<td>Poncho/Votivo</td>
<td>Seed treatment</td>
<td>clothianidin + Bacillus firmus I-1582</td>
<td>0.13 mg ai/seed</td>
<td>Commercial seed treatment equipment only.</td>
</tr>
<tr>
<td></td>
<td>Clariva pn</td>
<td>Seed treatment</td>
<td>Pasturia nishizawae</td>
<td>2 fl oz/cwt</td>
<td>Biological control specific to soybean cyst nematodes. Clariva Complete Beans implies Clariva pn + CruiserMaxx + Vibrance.</td>
</tr>
</tbody>
</table>

¹Use where nematode pressure is severe.

RESTRICTED USE PESTICIDES – For sale and use only by licensed/certified applicators or persons under their direct supervision. These are dangerous pesticides – use caution in handling and read and follow current label directions. If nematodes are suspected to be causing problems, a diagnostic soil sample should be taken to your county agent for submission to the Cooperative Extension Service Nematode Diagnostic Laboratory. A small fee is required.

NOTE: The economic value of using nematicides on Arkansas soybeans is sometimes questionable. The value of soybeans in today’s market must be considered. Planting resistant varieties or using crop rotation offers more economical control.