Plant Health in Soybeans, Protecting Yields and Profitability Begins at R1 With FMC Soybean Fungicides, Insecticides & Herbicide too

- Preemptor™ SC fungicide unique pre-mix of flutriafol (triazole) + fluoxastrobin (strobilurin)
- Two modes of action, resistance management, excellent control and broader spectrum
- Highly systemic in Xylem for immediate activity and unmatched protection
- Systemicity & long residual control provides early application flexibility
- Preemptor SC fungicide may be applied by ground as early as R1 and R3 optimum timing
- May be tankmixed with herbicides, insecticides and foliar nutrient products
- Plant Health with improved stress tolerance contributes to maximum yields

**Application Recommendations**

- Preemptor SC Fungicide 5 oz./A
- Hero® Insecticide 5 oz./A
- 10 GPA Minimum, Ground
- 2 GPA Minimum, Air
- Apply R1-R3 for best results
- Including NIS 0.25% v/v or an oil based adjuvant 0.5-1% v/v may improve spray coverage
- If tank mixed follow adjuvant requirements for tank-mix partner
- If tank mixed with a loaded herbicide formulation no additional adjuvant is required

**Diseases Controlled**
- Alternaria leaf spot, anthracnose, brown spot, cercospora blight, purple seed stain, frogeye leaf spot, pod and stem blight, powdery mildew, rhizoctonia aerial blight, soybean rust

**Diseases Suppressed**
- Sudden death syndrome (see label), Sclerotinia stem rot, White Mold

**Insects Controlled**
- Leaf Feeders
  - Thistle caterpillar, Bean leaf beetle, Mexican bean beetle, Japanese beetle, Webworm, Cloverworm, Rootworm adult and grasshopper
- Stem Borers
  - Soybean Stem Borer
- Pod/Bloom Feeders
  - Stinkbug, Grasshopper, Corn Earworm (Podworm) Bean Leaf Beetle, Brown Marmorated Stinkbug
- Sap feeders
  - Soybean Aphid, Potato Leafhopper, Stinkbug
- Disease Transmitters
  - Bean Leaf Beetles
  - Soybean Aphid

**Relative efficacy of conventional insecticides for control of Brown Marmorated Stinkbug in Soybeans 10 Days After Treatment - Percent Control (%)**

- **Warrior® insecticide 1.92 oz**
  - 98%
- **HERO® insecticide 6.7 oz**
  - 100%
- **HERO® insecticide 10.3 oz**
  - 100%
- **Mustang® MAXX insecticide 4 oz**
  - 98%
- **Orthene® insecticide 12 oz**
  - 96%
- **Baythroid® XL insecticide 2.8 oz**
  - 94%
- **Untreated Check**
  - 90%
Plant Health in Soybeans, Protecting Yields and Profitability Begins at R1 With FMC Soybean Fungicides, Insecticides & Herbicide too

Preemptor™ SC fungicide + HERO® Insecticide, is a top choice for Plant Health

Consider Pest Frequency & Yield Increase

Variation in crop development as well as corn and soybean prices have many producers closely looking at Plant Health input costs in 2017. Geographically this will vary a great deal dependent upon local pest outbreaks, ever changing crop condition throughout the growing season. The response to the plant health application must be factored into the probability of a yield increase based upon observed frequency of positive yield response in credible replicated studies. One such study was conducted in 2005 by Ohio State – OARDC throughout Ohio and showed greater frequency of a yield increase, at 60%, when both an insecticide + fungicide tankmix was used. An Insecticide had a greater frequency providing a yield increase than a fungicide but the preventative nature of plant health applications shows the value of an insecticide + fungicide having a greater frequency of a positive yield response.

2005 Frequency of Yield Increase (%) by Follar Fungicide and Insecticide Applications on Soybean at Ten Ohio Sites (Data Courtesy Dr. Anne Dorrance, Ohio State University OARDC)

<table>
<thead>
<tr>
<th>Yield Increase Frequency (%)</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insecticide + Fungicide</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insecticide</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fungicide</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Application Timing IS Everything

Yield increases may be driven by how timely a Plant Health application is made. Another way to look at timing is how long can an application go before it is too late to get a yield response? Fortunately, Preemptor SC fungicide is highly systemic providing excellent residual activity against many important soybean diseases. Preemptor SC fungicide’s systematicity provides the application flexibility while still protecting soybean yields from yield robbing diseases.

2016 White Mold soybean fungicide timing trial showing influence of Cadet herbicide having fungistatic activity and Preemptor™ SC fungicide and timing upon yield (Bu/A) yield data labeled bars in chart.

(Data Courtesy Michigan State Univ. East Lansing, MI)

Yield (Bu/A)

<table>
<thead>
<tr>
<th>Untreated Check</th>
<th>62.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preemptor™ SC fungicide 5 oz [R3]</td>
<td>69.5</td>
</tr>
<tr>
<td>Cadet herbicide 0.6 oz + NIS 0.25% [R1]</td>
<td>67.9</td>
</tr>
<tr>
<td>Cadet herbicide 0.6 oz + NIS 0.25% [V-6]</td>
<td>72.2</td>
</tr>
<tr>
<td>Cadet herbicide 0.6 oz + NIS 0.25% [V-4]</td>
<td>70.8</td>
</tr>
</tbody>
</table>

Note the plant health effect of suppressing White Mold by various treatments and timing upon Soybean Yield. Soybean yield increases of 5.8 to 10.1 bu/A were observed in this 2016 Michigan State study, Orange Line is the Untreated Check Baseline.

Always read and follow label directions. NOTE REGARDING RESTRICTED USE PESTICIDES: Anthem ATZ herbicide; Athena insecticide, Brigade 2EC Insecticide/Miticide, Brigade WSB Insecticide/Miticide, Brigadier Insecticide Capture 3RIVE 3D insecticide, Capture LFR Insecticide, Declare Insecticide, Hero Insecticide, Mustang Insecticide, Mustang Maxx Insecticide, Pounce 25WP Insecticide, Stallion Brand Insecticide, Temitry LFR Insecticide/Fungicide, Triple Crown Insecticide, Ethos XB Insecticide/Fungicide and Gladiator Insecticide/Miticide are Restricted Use Pesticides. NOTE FOR CALIFORNIA: Accurate Extra herbicide, Aim herbicide, Aim EC herbicide, Aim EW herbicide, Anthem herbicide, Anthem ATZ herbicide, Anthem ATZ herbicide, Anthem Flex herbicide, Anthem MAXX herbicide, Authority Assist herbicide, Authority Elite herbicide, Authority First DF herbicide, Authority MAXX herbicide, Authority MTZ DF herbicide, Authority XL herbicide, Cadet herbicide, Chisum Herbicide, Command 3ME microencapsulated herbicide, Crusher Herbicide, Edition Broadspec herbicide, Edition Tankmix Herbicide, Marvel herbicide, Nimble Herbicide, Nuance Herbicide, Preemptor SC fungicide, Report Extra Herbicide, Solitice Herbicide, Spartan 4F herbicide, Spartan Charge herbicide, Spartan Elite herbicide, Temitry LFR Insecticide/Fungicide, Topguard EQ fungicide, Zeus Prime XC herbicide, Zeus XC herbicide, Capture 3RIVE 3D insecticide, Ethos XB Insecticide/Fungicide, Hero Insecticide, Mustang Maxx Insecticide, Display cotton harvest aid, Zoro Miticide and VGR Soil Amendment are not registered for sale or use in California. VGR Soil Amendment is not a pesticide. Beleaf and Carbine are trademarks of Ishihara Sanyo Kaisha, Ltd. Cercobin is a trademark of Nippon Soda Co., LTD. Sovran is a registered trademark of BASF. FMC, 3RIVE 3D, Accurate, Aim, Anthem, Athena, Authority, Brigade, Brigadier, Cadet, Capture, Chisum, Command, Crusher, Declare, Display, Edition, Ethos, Preemptor, Fracture, Fyfanon, Gladiador, Hero, Koverall, LFR, Marvel, Mustang, Nimble, Obey, Pounce, Report, Rhyme, Rovral, Shank, Solida, Solitice, Spartan, Stallion, Temitry, Topguard, Topguard Terra, VGR and Zeus are trademarks and HatchTrak and Investing in farming’s future are service marks of FMC Corporation or an affiliate. ©2016 FMC Corporation. All rights reserved. 11/16

Baythroid XL, Warrior, Hero, and Mustang Maxx are restricted use pesticides. Baythroid is a trademark of Bayer Crop Science, Warrior is a trademark of Syngenta. Orthene is a trademark of AMVC.