CADET® herbicide: Weed Control & White Mold Suppression

Systemic Acquired Resistance is a “Whole Plant” resistance that occurs following an earlier localized exposure to a plant pathogen, predator feeding OR a stress. The response in plants is similar to the immunity that animals are born with to fight disease as well as adjusting to environmental and physiological stresses. The heightened level of response by the soybean plant is driven by the production of specific stress reducing substances in soybeans, called phytoalexins. The phytoalexins move throughout the soybean plant, triggering the production of specific natural compounds that neutralize and suppress the White Mold Infection and maintain yield.

**Apply Cadet® herbicide one week before first flower up to first flower (R1) for suppressing White Mold in Soybeans.**

**Michigan Test Plot #1 Heavy Pressure 2015 Side By Side Plots**

- **✓ CADET® herbicide 0.6 oz + Glyphosate 24 oz + AMS increased soybean yields - by suppressing high white mold infection**
- **✓ Healthier soybeans where Cadet® herbicide was applied**

<table>
<thead>
<tr>
<th>R1 First Bloom</th>
<th>R1 First Bloom</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADET® herbicide</td>
<td>Glyphosate 24 oz + AMS 2.5 lbs</td>
</tr>
<tr>
<td>0.6 oz + Glyphosate</td>
<td></td>
</tr>
<tr>
<td>24 oz + AMS 2.5 lbs</td>
<td></td>
</tr>
</tbody>
</table>

| 57 Bu/A | 34 Bu/A |

2015 Yield Increase (Bu/A) adding Cadet® herbicide to Glyphosate POST Applications Suppressing White Mold

**Commercial Strip Trials**

<table>
<thead>
<tr>
<th></th>
<th>Michigan Site 1</th>
<th>Michigan Site 2</th>
<th>Michigan Site 3</th>
<th>Ohio Site 1</th>
<th>Ohio Site 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield Increase by Cadet® herbicide Suppressing White Mold</td>
<td>23</td>
<td>32</td>
<td>7</td>
<td>18</td>
<td>21</td>
</tr>
</tbody>
</table>

2014 Selected Fungicide Treatments Affect Upon Soybean Yield Suppressing White Mold (Sclerotinia sclerotiorum) in Susceptible Soybean Cultivar (AG29311) near Gustavus, Ohio.

(Data Courtesy Ohio State OARDC – Dr. Anne Dorrance)

<table>
<thead>
<tr>
<th></th>
<th>Yield (Bu/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadet 0.5 oz/A</td>
<td>52.6</td>
</tr>
<tr>
<td>Tonsin M 1 lb/A</td>
<td>44.2</td>
</tr>
<tr>
<td>Untreated</td>
<td>41.3</td>
</tr>
</tbody>
</table>

FMC

Authored by Dr. Joseph P, Reed
FMC Tech Service Mgr – East Region
(217) 649-3249

- Stu Throop FMC Western MI
  RMM (443) 271-4191
- Lisa Stiles FMC Southeast MI.
  (989) 780-2032
- Scott Fries Northern Ohio
  RMM (937) 605-1903
- Ryan Mc丹iel南 Southern Ohio
  RMM (937) 508-7204
- Tyler Williams DE, MD, VA, WV
  RMM (270) 403-1467
## Cadet® Herbicide Applied Post Emergence

**EPA Reg. No. 279-3338**

Cadet® Herbicide applied post emergence alone or in combination with Glyphosate or Cercobin® Fungicide or Cercobin® Tospin® M Fungicide for suppression of White Mold (*Sclerotinia sclerotiorum*) in soybeans.

### CROP | PEST | RATE OF APPLICATION
--- | --- | ---
Soybeans | White Mold (*Sclerotinia sclerotiorum*) (Suppression only) | Cadet 0.5 – 0.9 fluid ounces/acre alone.  
0.4 – 0.6 fluid ounces/acre + Glyphosate 0.75 lb ai/A minimum.  
0.4 – 0.6 fluid ounces/acre + Cercobin labeled minimum rate OR Tospin M labeled minimum rate

### DIRECTIONS FOR USE:

The effect of Cadet on white mold is not a fungicidal response, but one that involves Systemic Acquired Resistance (SAR). Higher rates will not increase the level of white mold suppression. For optimum reduction in incidence of White Mold apply foliar broadcast to soybeans one week prior to first flower up to first flower (R1). Refer to the federal label for spray volumes and tank mix additives. Cadet may be applied alone in either conventional Non-GMO soybeans or Glyphosate resistant soybeans.

### RESTRICTIONS:

- Do not apply more than 1.25 fl oz/acre or 0.0089 lb ai/A per season
- Do not apply within 60 days of soybean harvest.

---

**2(ee) Recommendation**

FOR DISTRIBUTION AND USE ONLY IN THESE REGISTERED STATES: MICHIGAN, OHIO, PENNSYLVANIA, DELAWARE, MARYLAND, VIRGINIA

THIS PRODUCT BULLETIN CONTAINS NEW OR ADDITIONAL DIRECTIONS FOR USE WHICH ARE RECOMMENDED BY FMC CORPORATION UNDER FIFRA SECTION 2(ee)

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING

---

ALL APPLICABLE DIRECTIONS, RESTRICTIONS, WORKER PROTECTION STANDARDS REQUIREMENTS AND PRECAUTIONS ON THE EPA REGISTERED CADET HERBICIDE, EPA REG.NO. 279-3338, LABEL MUST BE FOLLOWED. THIS LABEL MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.
CADET® herbicide – Versatile, Flexible and Reliable Corn & Soybean Postemergence Herbicide

2015 Selected Treatments from Authority MTZ Programs in LL Soybeans
% Control of Velvetleaf, Lambquarters, Common Ragweed and Grass at 28 DAT
(Data Courtesy Michigan State University East Lansing, Michigan)

- % Velvetleaf Control 28 DAT
- % Lambquarters Control 28 DAT
- % Common Ragweed Control 28 DAT
- % Annual Grass Control 28 DAT

2014 Commercial Strip Plot 10 Days After Treatment Showing Excellent Control of Morningglories, Velvetleaf and Lambquarters.

Cadet® herbicide 0.6 oz + Glyphosate 32 oz + NIS + AMS
Untreated

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, Ethos XB Insecticide/Fungicide and Gladiator Insecticide/Miticide are Restricted Use Pesticides. NOTE FOR CALIFORNIA: Accurate Extra herbicide, Aim EC herbicide, Anthem 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, Report Extra Herbicide, Solstice herbicide, Spartan 4F herbicide, Spartan Charge herbicide, Spartan Elite herbicide, Zeus Prime XC herbicide, Zeus XC herbicide, Capture 3RIVE 3D insecticide, Ethos XB Insecticide/Fungicide, Hero Insecticide, Mustang Maxx Insecticide, Topguard Terra Fungicide, Topguard Fungicide Specialty Crops fungicide, Display cotton harvest aid are not registered for sale or use in California. Beleaf and Carbine are trademarks of Ishihara Sangyo 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, Fortix, Fracture, Pyfan, Gladiator, Hero, Koverall, LFR, Marvel, Mustang, Nimble, Obey, Pounce, Report, Rhyme, Rovral, Shark, Solida, Solstice, Spartan, Stallion, Topguard, Topguard Terra 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.

Topsin-M is a registered trademark of United Phosphorus, Inc.
Liberty is a registered trademark of Bayer Crop Science.
Roundup is a registered trademark of Monsanto.