2018 IR-4 Annual Meeting
<table>
<thead>
<tr>
<th>Formulation</th>
<th>Swinglea glutinosa extract; (SL, 82%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRAC:</td>
<td>NC – Not Classified yet</td>
</tr>
<tr>
<td>Registration:</td>
<td>Federally registered, states pending</td>
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<tr>
<td>Action:</td>
<td>Contact Preventative &amp; Curative</td>
</tr>
<tr>
<td>Movement:</td>
<td>SAR</td>
</tr>
<tr>
<td>Crop Safety:</td>
<td>Strong across all labeled crops</td>
</tr>
<tr>
<td>Residual:</td>
<td>7 - 10 days</td>
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<tr>
<td>Rates:</td>
<td>1.5 to 2 pints/acre or /100 gallon</td>
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**Chemical Class:** Biological Extract
Ecoswing™ provides **curative activity** of some fungal pathogens by drying cell structures at 1 ml/L.

Viable conidias of *Sphaeroteca pannosa* (powdery mildew)

Desicated conidias of *Sphaeroteca pannosa* (powdery mildew)
Ecoswing™ provides preventative activity against non-systemic fungi by activating natural plant defenses.

Even in the absence of disease, Ecoswing™ promotes plant production of oxidizing agents (brown rings). These oxidizers, including hydrogen peroxide ($H_2O_2$), are powerful antiseptics and plant defense mechanisms.

Wounds without Ecoswing™

Wounds with Ecoswing™
EcoSwing™ primes defense systems, aiding plants in fighting fungal infestation and preventing the spread of infection.
Heavy residues left by some products can interfere with photosynthesis and require extra washing for fresh market produce.

Ecoswing leaves no visible residue and leaves a noticeably greener and healthier looking foliage.
Ecoswing™ is tough on pathogens and easy on beneficials

% Mortality of *Phytoseiulus persimilis*

% Mortality of *Orius spp.*

Gowan USA
Although **Ecoswing™** has curative properties it should only be applied in a *preventative* manner to assure plant activation prior to pathogen growth.

**Application Timing**

- Increase volume to insure adequate coverage
- Nozzle orientation, **Speed**, pressure

**Proper Coverage**

- For best control, and under heavy pressure keep retreatment intervals as short as possible.
Botrytis Bunch Rot (*Botrytis cinerea*) – Riesling Grapes
Potter Valley, CA – 2015

- Ecoswing - 1.5 pts./A (6X)
- Ecoswing - 2.0 pts./A (6X)
- Pristine - 20.5 oz./A (3X)
- Untreated Control

* 6x = 6 applications, 3x = 3 applications
* All treatments included Latron B 1956 @ 4 oz./100 gal.
Brown Rot Blossom Blight – Almonds
Sanger, CA – 2017

- Rated 4/14/17
- All treatments included Dyne-Amic @ 6 floz/A
- Applications @ 100 GPA
Almond Rust – Almond
Escalon, CA – 2016

- Rated 6/14/16
- 3 applications on 2/15, 2/22, 3/2
- All treatments included R-11 @ 0.05% v/v
- Applications @ 100 GPA
Registration Status - 9/7/18

- **Effective Area**
- **State Registration Pending**
Thank you

Questions
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