Control of Powdery Mildew in Strawberries

Effectiveness of OxiDate 2.0 for Strawberries, 2012

**Researcher:** Surendra Dara, UC Cooperative Extension, San Luis Obispo, CA

**Crop:** Strawberries (*Fragaria x ananassa*)

**Organism:** Powdery Mildew (*Sphaerotheca macularis*)

Powdery mildew is a common and often serious disease in strawberry crops. The powdery mildew pathogen will cause white patches of mold to appear on young leaves, and then progress to older leaves, and eventually the fruit itself. Fruit infections can lead to significantly reduced strawberry yields, along with lower marketability and value.

A recent study performed by the University of California Cooperative Extension shows that treating strawberries with OxiDate 2.0 bactericide/fungicide will significantly reduce disease incidence and severity on strawberries.

OxiDate 2.0 offers superior crop protection against fungal pathogens in strawberry crops. It is ideal for curative and preventative applications, and can be tank mixed with other chemistries to improve immediate knockdown control. OxiDate 2.0 has no mutational resistance, no residual and can be applied throughout the growing season.

**Features & Benefits**

- EPA registered/labeled for powdery mildew
- Exempt from pesticide tolerances
- Zero-hour REI and zero days to harvest
- Active ingredients: hydrogen dioxide and peroxyacetic acid
- Available in 2.5, 5, 30, 55 & 275 gallon containers
Summary and Results

OxiDate 2.0 treatments on the strawberries in this trial showed reductions in incidence and severity of powdery mildew, as well as post-harvest storage mold. OxiDate 2.0 was successful in suppressing powdery mildew on its own or when used in rotation with conventional fungicides. Both methods of applying OxiDate 2.0 showed significantly larger total and average strawberry yields, along with much higher average and total weights of uninfected strawberry yields.

Treatments and Rates

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<tr>
<th>Treatment</th>
<th>Rate</th>
<th>Total Applications and Interval</th>
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<tbody>
<tr>
<td>OxiDate 2.0 + Organic Based Surfactant</td>
<td>1.0% v/v &amp; 0.125% v/v</td>
<td>5 applications applied at 7–14 day interval</td>
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<tr>
<td>OxiDate 2.0 + Procure alternated with OxiDate 2.0 + Pristine</td>
<td>0.5% v/v &amp; 6.0 fl. oz./acre alternated with 0.5% v/v &amp; 18.5 fl. oz./acre</td>
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Figure 1. Effect of OxiDate 2.0 on Powdery Mildew and Severity

Figure 2. OxiDate 2.0 and Total Yield of Strawberries

For full results, please contact BioSafe Systems.