**eco**
carb is a contact fungicide containing food grade Potassium Bicarbonate, specially formulated to make it biologically active against fungal diseases. **eco**
carb contains a unique surfactants system that enables it to be used at low rates with maximum efficacy and low risk of burn. When applied on a regular basis, **eco**
carb has been proven to control Powdery Mildew in most horticultural crops. It is APVMA registered for the control of Powdery Mildew in grapes and roses.

**eco**
carb is an organic alternative to conventional fungicides. It is safe to use in environmentally sensitive areas within IPM systems and unlike other “soft” Powdery Mildew sprays like milk or whey, it is effective under low light levels without the risks of lactose residues.

**HOW DOES eco**
carb **WORK?**

When applied to fruit or foliage, **eco**
carb changes the pH on the surfaces creating a more alkaline environment. This pH change disrupts the cellular processes of germinating fungal spores, inhibiting their growth and preventing their spread. **eco**
carb also damages the cell wall of fungal cells resulting in the dehydration and death of fungal vegetation, providing effective disease control.

**eco**
carb IS REGISTERED EFFECTIVE AGAINST

- Powdery Mildew in grape vines
- Powdery Mildew in roses

**eco**
carb POWDERY MILDEW trials results in some key horticultural crops

**Powdery Mildew Control in Grapes**

(%) mean incidence and severity February 16, 2004

<table>
<thead>
<tr>
<th>Percentage</th>
<th>MEAN SEVERITY</th>
<th>MEAN INCIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.008</td>
<td>0.4</td>
<td>11.6</td>
</tr>
</tbody>
</table>

(40 leaves assessed per plot) very early veraison

EcoCarb 4gm/L + Syn.Horti 2.5ml/L

Untreated

**Control of Powdery Mildew**

in a variety of crops using ecocarb (4gm) + Syn. Horti

- Cucumbers: 99.82%
- Roses: 99.93%
- Tomatoes: 99.98%

Dr. Peter Crisp, Uni. Adelaide 2001-02

Dr. Kathy Evans TAS. DPI, Pooley’s Vineyard 2003-04
Studies conducted at the National Centre for Greenhouse Horticulture have revealed that *Encarsia formosa* when exposed to direct sprays and residues of *eco*carb and Synertrol Horti Oil had almost no effect on mortality rates. Trials conducted on *Phytoseiulus persimilis* (phytoseiid predatory mite) also resulted in no significant reduction in mite numbers after three applications of a combination of *eco*-oil 2.5ml/L and *eco*carb at 3gm/L.

Adelaide University Researchers have discovered the importance of tiny mites called Tydied mites in grape vines that actively feed on Powdery Mildew spores. *eco*carb appears to have the least impact on their numbers. Safety to *P. persimilis* and Tydied mites would also indicate safety to other beneficial predatory mites like *Amblyseius victoriensis* and *Typhlodromus* spp. These mites are an essential part of IPM in many horticultural crops making *eco*carb an attractive alternative to current fungicides like sulphur.

*eco*carb USE PATTERN

Always use Synertrol Horti Oil with *eco*carb. Field Trials over the past five years have proven that the addition of Synertrol Horti Oil increases the efficacy of *eco*carb against Powdery Mildew.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Disease</th>
<th>Rate</th>
<th>Critical Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grapevines</td>
<td>Powdery Mildew</td>
<td>400 g/ 100 L plus 200 ml Synertrol Horti-Oil</td>
<td>Begin application at first sign of disease. Repeat applications at intervals of 10 to 14 days as new growth or infection occurs, or if conditions favour disease. Apply to ensure complete and thorough coverage of foliage.</td>
</tr>
<tr>
<td>Roses</td>
<td>Powdery Mildew</td>
<td>300-400 g/ 100 L plus 200 ml Synertrol Horti-Oil</td>
<td>Begin application at first sign of disease. Repeat applications at intervals of 10 days or more as new growth or infection occurs, or if conditions favour disease.</td>
</tr>
</tbody>
</table>

*eco*carb AND POTASSIUM RESIDUES

Trials conducted by the University of Western Sydney (Hawkesbury) have proven that the Potassium in *eco*carb does not enter the plant or berry and will not impact on juice or wine quality.