T-77 *

Biological fungicide (*Trichoderma atroviride*) for plant wound protection and the control of pathogens like Botrytis

* Further Brand Eco-77
**Trichoderma atroviride colonises and protects plant wounds**

The biological control product T-77 contains the beneficial fungus *Trichoderma atroviride* 77B which colonises plant wounds, including pruning wounds, and prevents entry of harmful pathogens such as Botrytis and Eutypa, a pathogen that enters pruning wounds and slowly kills the grapevine.

The active ingredient in T-77 is the fungus *Trichoderma atroviride* strain 77B. This strain was specially selected by researchers for its ability to control Botrytis. Botrytis is a major disease problem in greenhouses. Any areas where plant tissues are damaged, such as pruning wounds where side shoots are removed provide an easy entry point for Botrytis. The disease thrives in the moist, humid conditions prevalent in greenhouses.

**Mode of Action**

The fungus in T-77 colonizes plant wounds and prevents pathogens like Botrytis from gaining entrance to the plant. It will colonise any plant wound and stop disease in its tracks and is also effective against Botrytis on the leaves, flowers and fruits. In the same way, T-77 protects pruning wounds on grapevines and other fruit trees, by colonising the pruning site and preventing the entry of pathogens. The protecting fungus may still be active at these sites a year after application, as shown in grapevine trials against *Eutypa lata*, where Trichoderma was readily isolated from pruning wounds a year after application.
**Cucumbers**

<table>
<thead>
<tr>
<th>Healthy pruning wounds [%]</th>
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<tr>
<td>0 10 20 30 40 50 60 70 80 90 100</td>
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<tr>
<td>T-77</td>
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<tr>
<td>Standard Fungicide</td>
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<td>Untreated</td>
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Pruning wounds artificially inoculated with Botrytis on cucumber were efficiently controlled with T-77. T-77 performed better than the untreated control and slightly better than the chemical standard fungicide, resulting in more than 80% wound protection.

**Method of Application**

T-77 is mixed directly with water (at a rate of 1 g/2 l water) and applied either as a full cover spray over the crop or as a directed spray onto pruned surfaces. T-77 is not compatible with several broad spectrum fungicides.

**Grapevines**

Grapes treated with T-77 against Botrytis: T-77 had an obvious effect, resulting in almost no infected grapes and surpassing the results produced by the chemical standard.
T-77

✔ Prevents pathogens like Botrytis from gaining entrance to the plant

✔ Fewer plant losses resulting from wood rot pathogens (e.g. Eutypa)

✔ Sustainable, long term wound protection

✔ Vineyard’s productive life is extended as a result of disease prevention

✔ Versatile application strategies, can be applied as directed or full cover spray