



European Canker Solutions

Omnia Technical Bulletin

March/April 2011

EUROGEL

Fungicide for the post harvest control of European canker on pipfruit.

GREENSEAL™ ULTRA

Pruning and canker wound dressing containing fungicides and bactericide.

For control of European Canker (*Neonectria galligena*)

Introduction

European Canker (*Neonectria galligena*) disease is favoured by high rainfall. In districts where the disease is established it is a serious problem as it kills spurs and branches, reducing fruit wood, spoiling tree shape and in many cases girdling the main stem, killing the tree.

Trees of all ages may be attacked by the fungus. Dwarfing root stocks appear to be more prone to this disease.

Symptoms

Initially, infection shows as small lesions that develop rapidly from pruning cuts, picking wounds or on leaf scars, eventually turning purplish brown. The resulting "canker" will expand over time and eventually girdle the stem. *N.galligena* also attacks pears forming cankers similar to those formed on apple.

Life cycle

The fungus is an Ascomycete with two spore

stages (conidia & ascospores). Both stages enter through wounds in the bark, particularly pruning cuts, picking wounds and leaf scars. Infection moves rapidly along branches forming elliptical cankers. (See Figures 1 and 2.)

European Canker treatment regime

It should be noted that since inoculum is always present, good control of European Canker is not achieved quickly and several seasons of prolonged and sustained efforts may be required to reach and maintain a high level of control of this aggressive disease.

The following control measures are essential and it will be necessary to take these steps to reduce infection levels in 3 stages:

1) Post harvest & leaf fall:

Because the extent of European Canker is naturally variable, it is recommended that on

blocks that have a history of high infection levels and extensive numbers of cankers, growers will need to consider multiple applications of **Eurogel** to achieve good control. The timings of these applications are listed below:

Post harvest spray: Apply **Eurogel** as two post harvest sprays to protect picking wounds from *Neonectria* infection.

Application notes

- Apply **Eurogel** at 300 – 500 ml/ 100 litres of water at a rate of 1000 litres of water per hectare.
- Commence first application at leaf fall followed by a reapplication to protect fresh leaf fall wounds.
- Use the 500 ml/ 100 litres of water rate in highly infected orchards.
- Reduce the rate to 300 ml/ 100 litres of water when maintenance sprays are required.
- Do not apply **Eurogel** (as a spray) to crops during the fruit bearing stage of the season.
- **Eurogel** is rapidly absorbed within one hour of application so rainfall following application is not critical.

DO NOT GRAZE ANIMALS IN ORCHARDS FOR 28 DAYS AFTER A EUROGEL SPRAY APPLICATION.

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2) Pruning time:

- Routine pruning wounds and sites where cankers have been removed should always be painted with a generous coating of **Greenseal Ultra™**, paying particular attention to large wounds made to the main stem.
- Apply **Greenseal Ultra™** at a rate between 6 and 12 litres per hectare, according to wound numbers and size.

Please remember to remove and burn or bury infected material as this will continually provide inoculum to reinfest the trees in the coming months.

3) All year round canker vigilance:

- Inspect trees on an ongoing basis and remove all infected twigs/cankers.
- Large cankers should be cut out with a sharp knife and dark-stained tissue removed. Immediately following surgery, a generous coat of **Eurogel** or **Greenseal Ultra™** must be applied to the wound site.

The Omnia European Canker control products

1) **Eurogel** contains highly active fungicides and a bactericide specifically formulated to control European Canker. **Eurogel** also contains unique “penetrants” which assist the movement of fungicide into the plant tissue, providing effective disease control.

The **Eurogel** formulation has the consistency of a “gel” that provides a medium to hold the active ingredients on the surface of leaves, stems and wound sites, thereby assisting with penetration of plant tissue.

2) **Greenseal Ultra™** is New Zealand’s leading pruning wound treatment with full label claims for European Canker control. Its unique acrylic resin base contains two active fungicide ingredients and a bactericide to provide superior disease control.

AVAILABILITY

Eurogel is available in 10 litre and 20 litre jerry cans.

Greenseal Ultra™ is available in 2 litre or 10 litre containers.

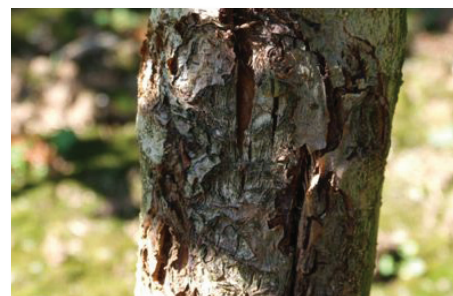


Figure 1. A typical canker forming on an apple stem. During the spring/summer following infection, creamy masses of conidia appear on cankers. In autumn and winter red perithecia form buff coloured ascospores. Accordingly, spores are produced throughout the year. Both spore stages can form cankers.

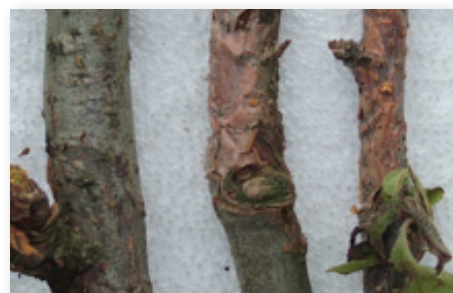


Figure 2. Cankered twigs of Royal Gala apples



Figure 3. Excised cankers on 3 year old Jazz treated with Eurogel.

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