

**TRICHO PROTECTION**<sup>TM</sup>  
*healthy plants*



# Sentinel<sup>®</sup>

Living barrier against botrytis

NATURAL PROTECTANT BIO-FUNGICIDE WP FOR BOTRYTIS

Registered pursuant to the ACVM Act 1997 No.P7235 and manufactured by Agrimm Technologies Ltd



Sentinel is a newly registered bio-fungicide for grapes, proven to protect against the grey mould *Botrytis cinerea* (which causes bunch rot), a disease that also attacks many other crops including berryfruits, cut flowers and tomatoes, to name but a few.



**Sentinel**<sup>®</sup>  
Living barrier against botrytis

Botrytis can also be associated with secondary infections in grapes such as sour rot which taint the grape juice and inhibit the wine making process. Direct losses attributed to botrytis infection and associated control costs have been estimated to cost the New Zealand wine and grape growing industry alone \$30 million per annum.





# Stay on guard with Sentinel

## very COMPETITIVE

In conjunction with the Bio-Protection Centre at Lincoln University, Sentinel has been developed from a unique strain of Trichoderma, LC52, a beneficial fungus and living barrier which aggressively colonises leaves, flowers and fruit bunches where it actively competes with and repels invasion by botrytis and other diseases in vine crops, vegetables, tree fruit and cut flowers.

## naturally BETTER

Sentinel is the natural choice - with nil withholding period, it allows the grower to apply the fungicide right up until harvest. It is a Bio-Gro certified organic product with no negative effects on vintification and produces no residue in wine.

Sentinel has been tested and proven as a protectant in grape crop trials over the past 3 years and is cost effective with no added premium for using such an environmentally friendly product.

## very COMPATIBLE

Sentinel is another powerful weapon in the growers' integrated pest management (IPM) arsenal and can be used in conjunction with conventional chemical fungicides to develop a sustainable botrytis protection programme.

Although botrytis is widely renowned for developing resistance to conventional fungicides, no such resistance to Sentinel is likely to occur due to its biological activity.

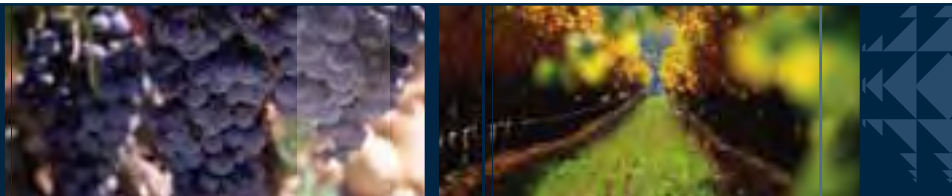


**A wettable powder formulation that  
Actively repels invasion by  
crops, vegetables, tree fruit and cut**

# - proven treatment in the battle against botrytis

## mode of ACTION

Sentinel effectively blocks the development of bunch rot in grapes by aggressive colonisation of the sites normally attacked and infected by the grey mould, botrytis. Sentinel protects grapes by competitively excluding botrytis from uninfected sites and will also help to contain the spread of pre-existing botrytis to new sites. In this way, Sentinel acts as a protectant bio-fungicide and not a curative with knock-down or reach-back impact on botrytis infections. Sentinel should be applied with Nu Film 17®, which acts as an adjuvant wetter/sticker and also acts to protect the biological active ingredient against desiccation and UV exposure.



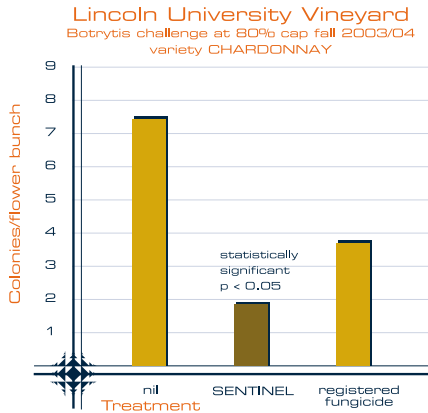
**leaves no colour residue on the crop.  
botrytis and other diseases in vine  
flowers - naturally.**

## KEY FEATURES OF SENTINEL

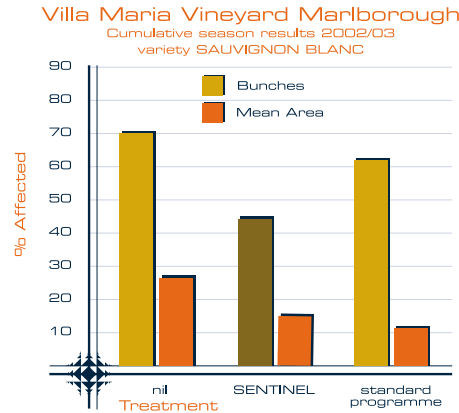
- ❖ Cost effective with proven efficiency as a protectant fungicide.
- ❖ A wettable powder (WP) formulation, leaves no coloured residue on the crop.
- ❖ Nil Withholding Period. Use right up until harvest.
- ❖ No negative effect on vintification, nil residue in wine.
- ❖ Organic product. Bio-Gro certified.
- ❖ Compatible and Flexible. Use with conventional fungicides in IPM programme.
- ❖ New technology from Bio-Protection Centre at Lincoln University.
- ❖ No safety issues with spray drift.

## SENTINEL - the proven performer

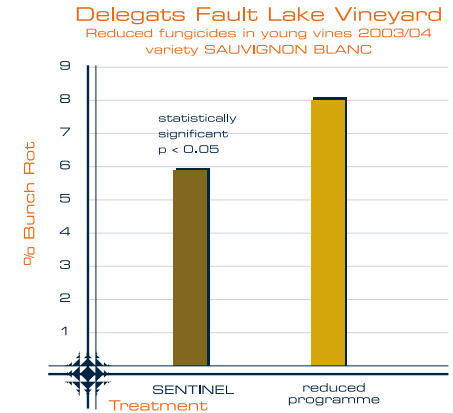
The ability of Sentinel\* to prevent botrytis was compared in field trials with industry standard fungicides. The level of botrytis infection in trial samples was rigorously determined by laboratory testing performed by Plantwise Services, Lincoln. Trial samples (bunches) were incubated at 25°C with high humidity for 4-6 days and then assessed for the number of botrytis induced lesions.



Products were applied at 80% cap fall prior to challenge with live botrytis spores. Samples were subsequently taken for analysis of botrytis on each flower bunch. Results are the mean of replicate samples.

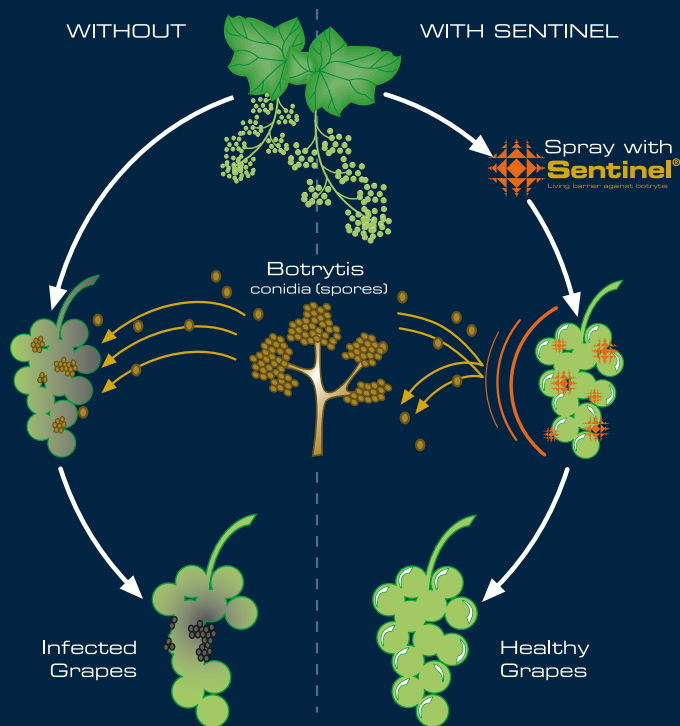


Sentinel was applied to vines and compared to the industry standard fungicide programme (five applications through the season). Samples were regularly taken for analysis of botrytis infection. Mean results of the five periodic assessments were not statistically significant.



Sentinel was applied on young vines late in the season and compared to a reduced fungicide programme. Samples were taken prior to harvest for analysis of bunch rot. Results are the mean of replicate samples.

proven cost effective biological treatment



### Safety:

Non-toxic to humans, animals, wildlife and the environment, with no withholding periods.

### Compatibility:

Sentinel is compatible with Teldor®; may be applied 5 days after Scala®; a minimum 21 day period should be left before application of any other botryticides such as Switch®; or Rovral®.\* Please contact Agrimm on 0800 424 746 for further details on fungicide compatibility.

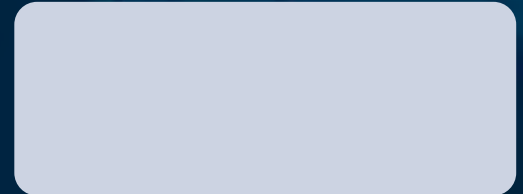
\*Teldor, Scala and Rovral are Registered Trademarks of Bayer Crop Science. Switch is a Registered Trademark of Syngenta.

### Packaging:

Sentinel is available in foil sachets of 200g for treatment of 1 hectare. Store in a cool place. Optimum storage conditions: 4°C. Do not freeze.

**ALWAYS READ THE LABEL COMPLETELY BEFORE USE**

Available from:



Sentinel is available from leading horticultural merchants. Further information is available by contacting: Agrimm Technologies Ltd, Phone: 0800 424-746 or Key Industries, Phone 09 483-5526. [www.tricho.com](http://www.tricho.com). Sentinel is a registered trademark of Agrimm Technologies Ltd.

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**KI KEY INDUSTRIES LTD**  
Tel (09) 483 5526 Fax (09) 917 1793