SPOTLESS

For control of Psa

(limited claim*)

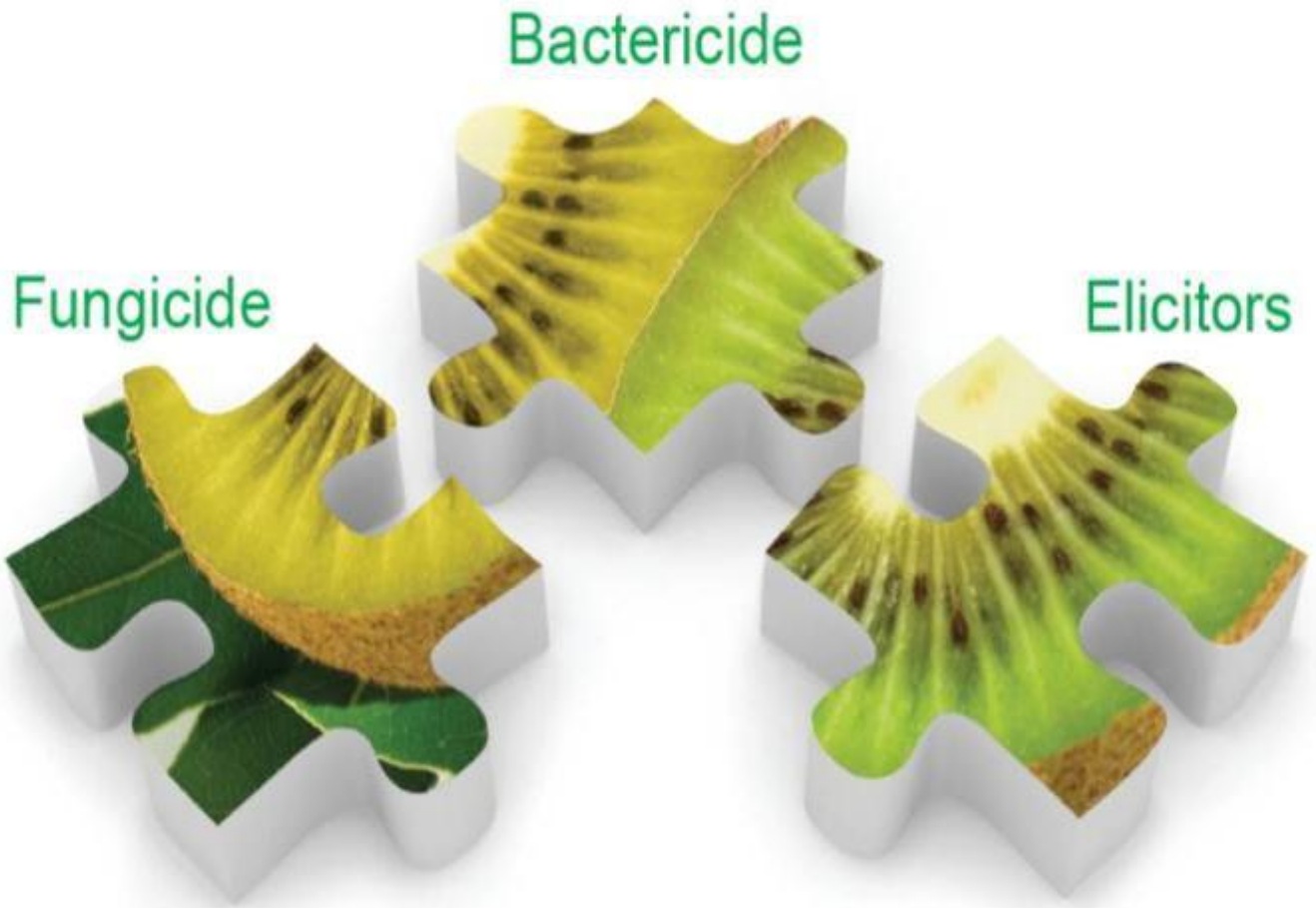
*The efficacy of this product for control of *Pseudomonas syringae pv. actinidiae* (Psa) is currently supported by limited laboratory and greenhouse data and is therefore not fully proven at this stage.

0800 774 629
www.omnia.net.nz

Talk to us, it pays.

omnia NUTRIOLOGY*
*the science of growing

Only Spotless completes the puzzle with unique three way protection



Unique, multi component formulation with 3 way action

- Spotless has fungicidal and bactericidal activity against disease.
- Spotless also contains plant elicitors that turn on the plants defence system which support the action of the product to provide superior disease control.
- Because of the three way action of this product, the opportunity for bacterial resistance build-up is reduced.
- Spotless is bee safe, however, as with all spray applications to kiwifruit vines, apply at times when bees are not ‘working’.
- Available in 10 and 20 litre containers.
- Cost effective at approximately $80/ha + GST

Application Rates

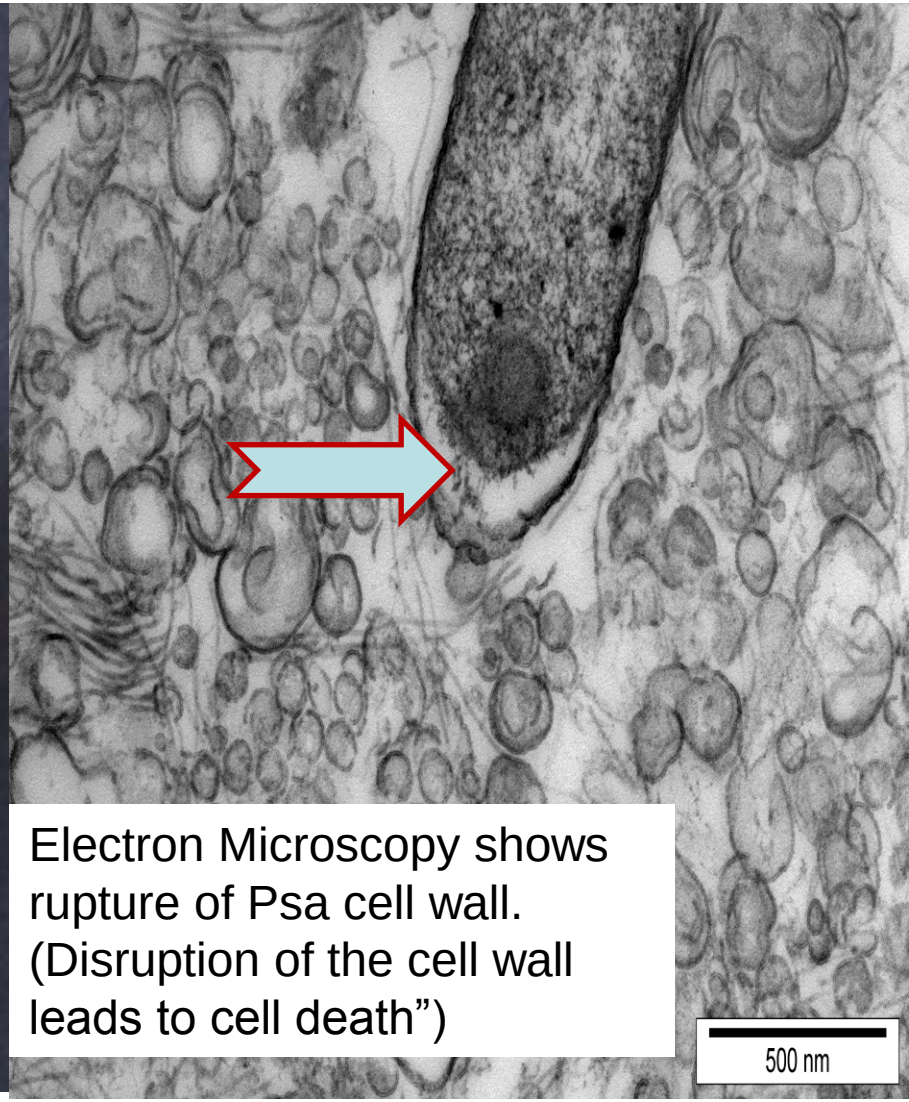
- Used every 10 – 14 days Spotless is ideal for managing the high bacterial infection period from green tip to the end of flowering.

- Highly infected areas should apply Spotless every 10 days, with lesser infected areas every 14 days. Growers should consider their location and weather patterns when deciding on application intervals.

Crop	Disease	Rate	Remarks
Kiwifruit	*Sclerotinia* fruit rot	350 ml / 100 litres of water (minimum of 3.5 litres in 1000 litres of water / ha)	Apply during flowering only. Do not apply after fruitset.
	Limited claim for the control of bacterial canker *Pseudomonas syringae pv. actinidiae* (Psa)	400 ml / 100 litres of water (minimum of 4 litres in 1000 litres of water / ha)	Apply at 10-14 day intervals from green tip to the end of flowering. Do not apply after fruitset. The efficacy of this product for control of Psa is currently supported by limited laboratory and greenhouse data and is therefore not fully proven at this stage. Warning: While crop-safety issues are not expected field data has not been provided to support the earlier timing between green tip and flowering.

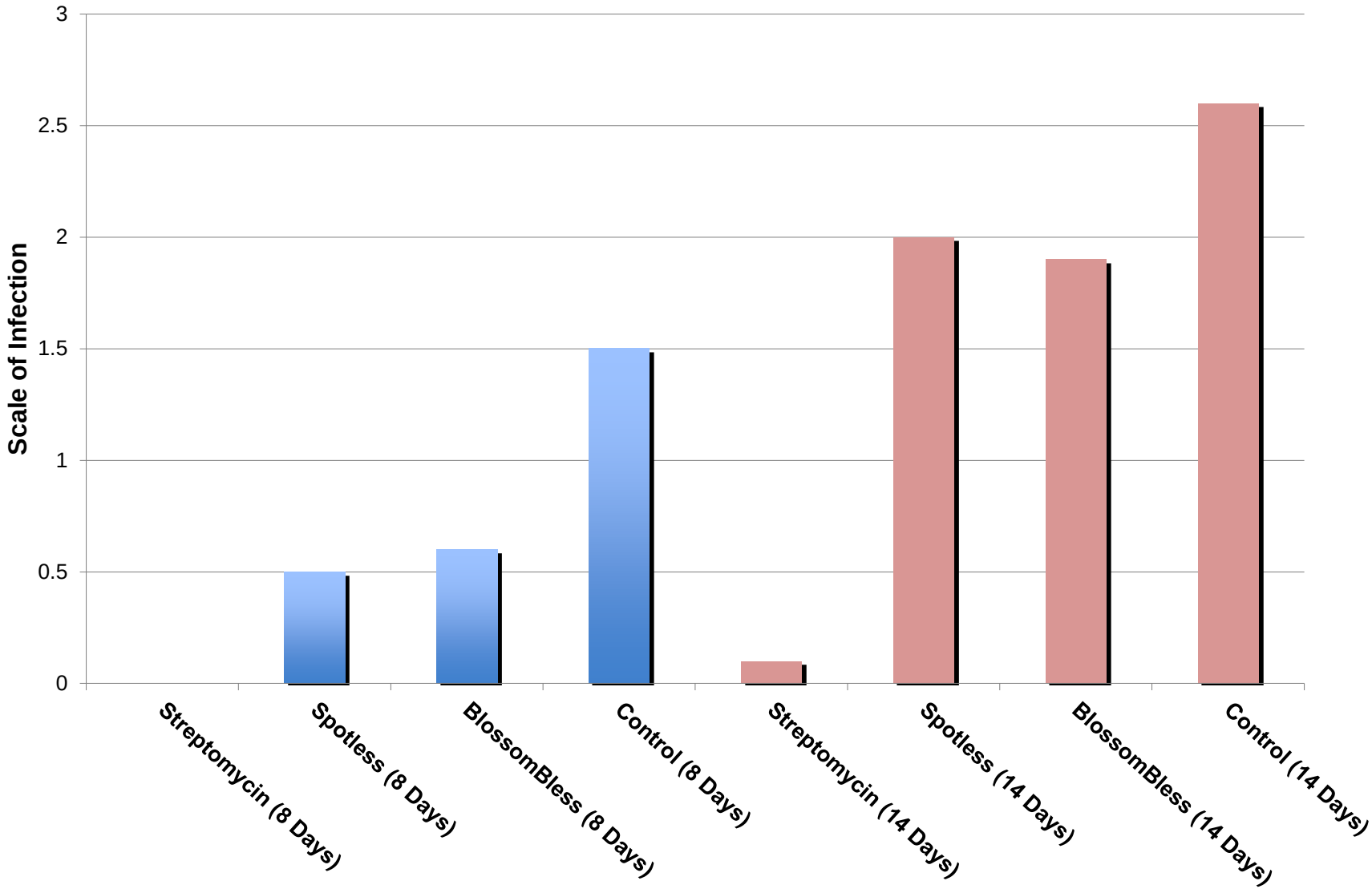
Spotless & Psa V Inhibition on Agar

Spotless @ 4 mls/l



Electron Microscopy shows rupture of Psa cell wall. (Disruption of the cell wall leads to cell death")

Psa Treatments & Severity in Glasshouse Seedling Trials
(Plant & Food 2011 product testing report, *Everett et al* Jan – Feb 2011)



omnia NUTRIOLOGY
"the science of growing"
0800 774 629 www.omnia.net.nz

Summary

- Three way multi-acting protection
- Contains unique plant elicitors
- Approved by Zespri and ACVM
- Bee Safe
- Easy to apply
- Cost effective

- Qualifies for under the KHV spray subsidy program for Psa Management

Information presented here is up to date as of 31/08/2011

Suggested Psa Management Programme, Omnia products for Kiwifruit

Post Harvest to Flowering

Key Products in Kiwifruit Management Programme

- Spotless has fungicidal and bactericidal activity against disease.
- It also contains unique plant elicitors that turn on the plants defence system.
- Cost effective

- Greenseal Ultra™ is ideal for use as part of a hygiene programme in kiwifruit.
- It is the most complete pruning wound dressing; which contains a bactericide that will provide additional protection for pruning wounds from bacterial infection.

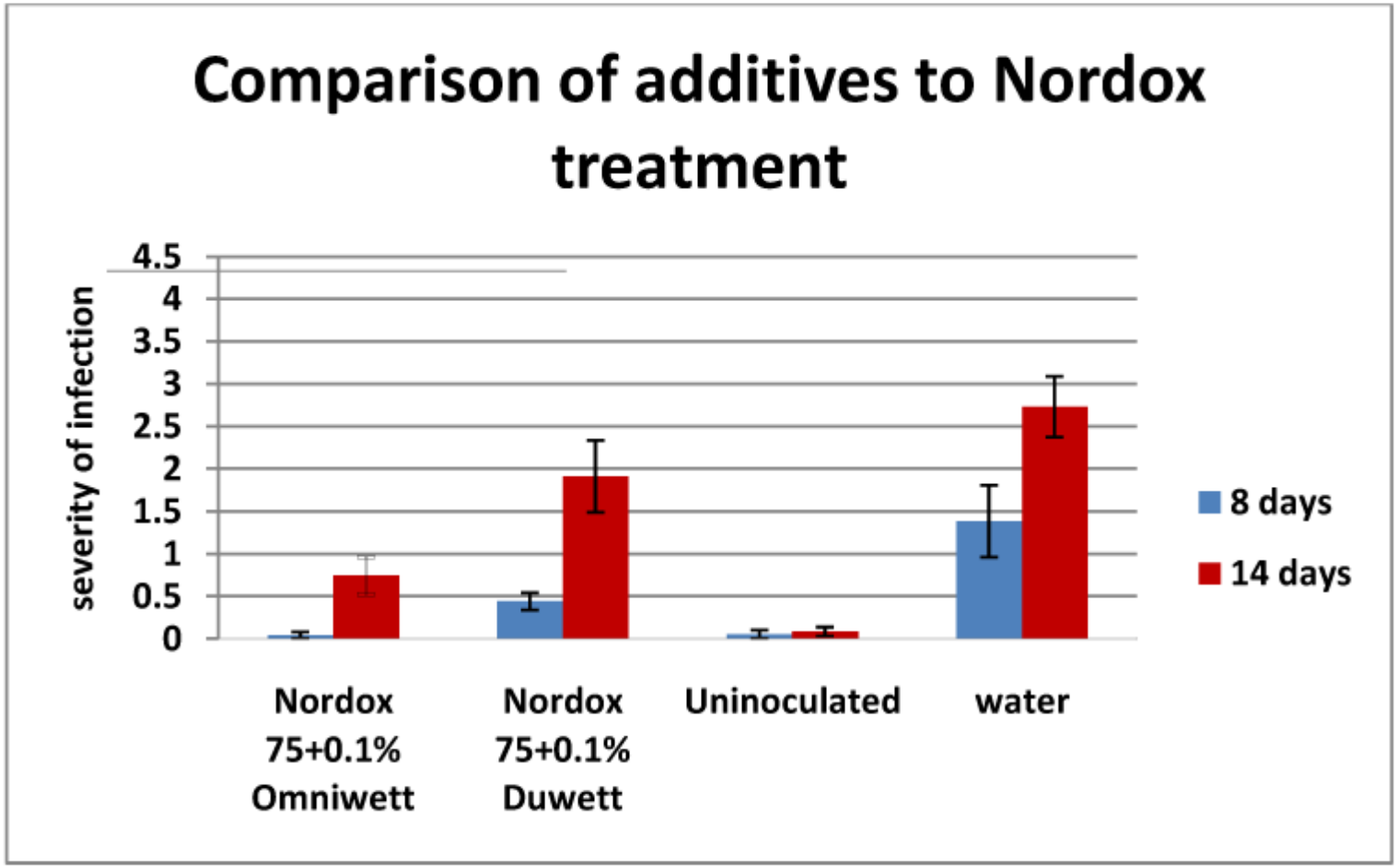
- Omniwett, a proprietary adjuvant formulation, contains surfactants and plant elicitors (plant health activating compounds designed to switch on plant defences) as key active ingredients.
- Omniwett should be used as an adjuvant with Copper up until pre flowering period

Suggested Programme for Kiwifruit

Timing	Product	Rate/ha	Comments
Green tip to the end of flowering	Spotless	4 L/ha	For control of the bacterial canker Psa (limited claim) Apply every 10 – 14 days.
	Omniwett	1 – 2 L/ha	Use Omniwett as an adjuvant to be added with Copper up until pre flowering
Flowering	Spotless	3.5 L/ha	For control of *Sclerotinia.* (See Spotless label for directions.)
Post harvest	Omniwett	1 – 2 L/ha	Use Omniwett as an adjuvant to be added with Copper. Do not use Omniwett 28 days before Hi-Cane® application.
Post harvest	Greenseal Ultra	Approx. 4 – 8 L/ha dependent on pruning wound size.	Protect all pruning wounds with a generous coating, paying particular attention to cuts made to vine leaders.
Pruning	Omniwett	1 – 2 L/ha	Use Omniwett as an adjuvant to be added with Copper. Do not use Omniwett 28 days before Hi-Cane® application.
Before bud burst	Omniwett	1 – 2 L/ha	Use Omniwett as an adjuvant to be added with Copper.

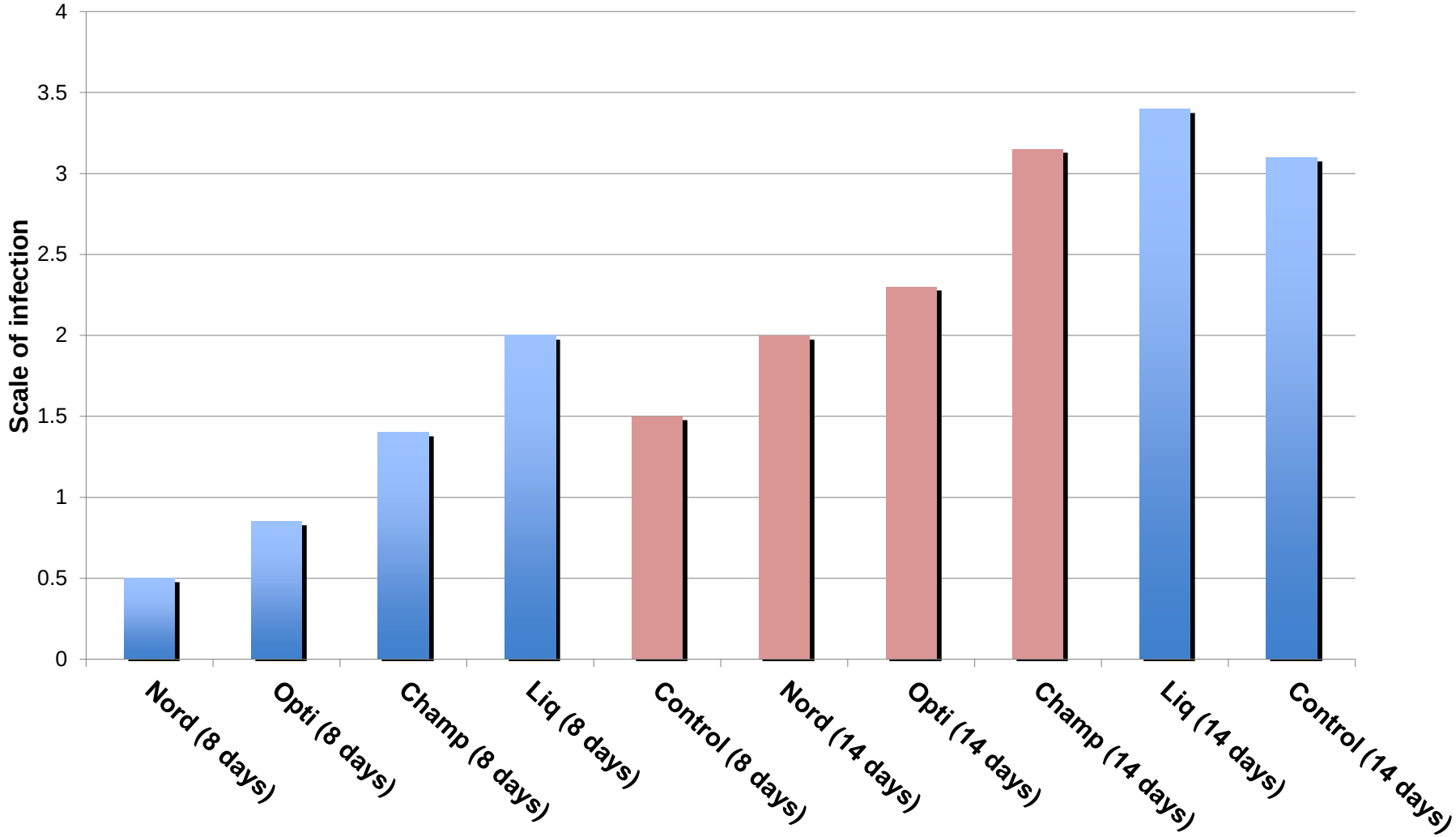
*The efficacy of this product for control of Psa is currently supported by limited laboratory and greenhouse data and is therefore not fully proven at this stage.

Omniwett combining well with Nordox 75 WG (Plant & Food product testing report *Vannetse J.* June 2011)



omnia NUTRIOLOGY "the science of growing"
0800 774 629 www.omnia.net.nz

Psa inoculations and comparative results with copper treatments (Plant & Food product testing reports Jan – June 2011)



omnia NUTRIOLOGY "the science of growing"
0800 774 629 www.omnia.net.nz

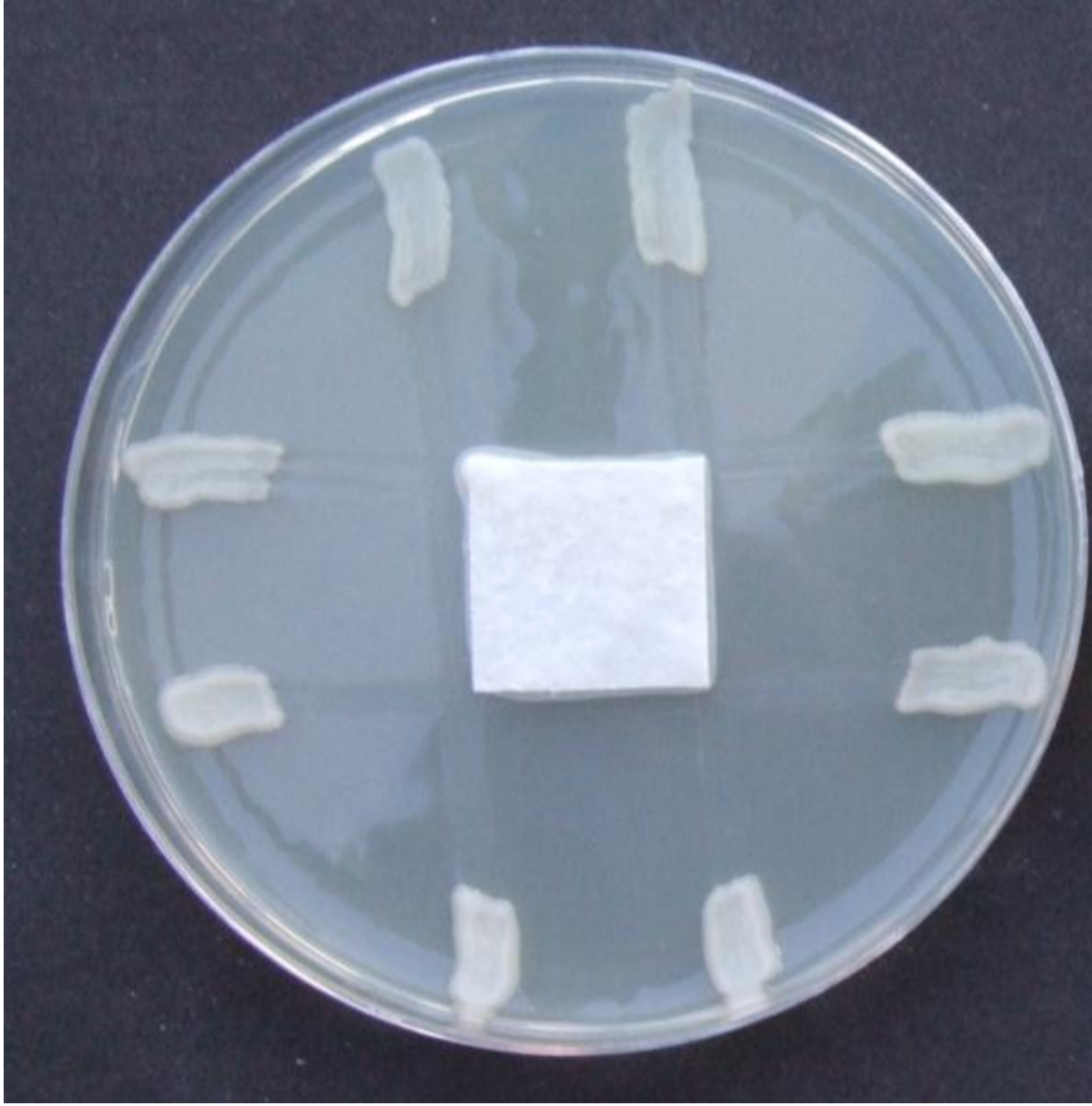
Omnigel

Inhibiting growth of *P.syringae* on agar.

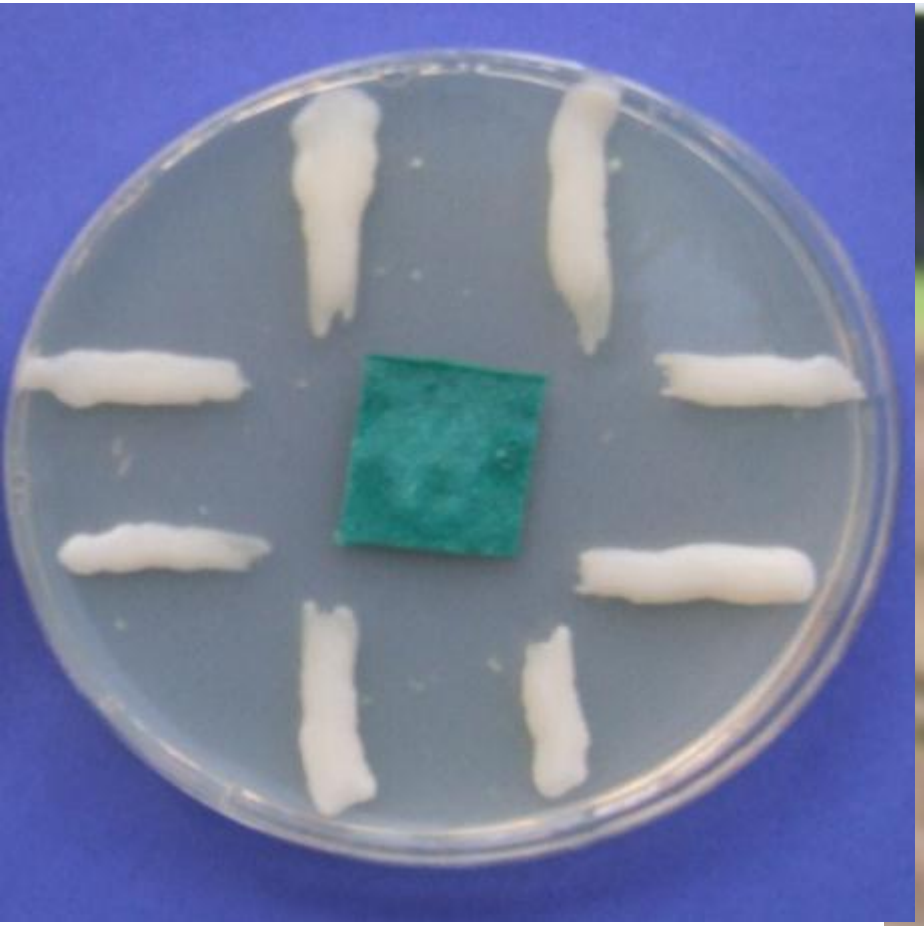
Omnia will apply for limited claim with ACVM shortly. (Post harvest to fruit set)

Allowed in the Zespri CCP “dormant period application”.

Plant & Food testing is ongoing.



Wound Dressings



Greenseal Ultra inhibits *P.syringae* on agar and enhances callus formation. Will play an important part in grafting and other vine ‘surgery’ applications.

Summary

Omnia is committed to finding NZ solutions for NZ crops.

Unique range of Psa protectants for post harvest application and dormancy through to the end of flowering.

Omnia is actively developing new Psa protectants for the New Zealand Kiwifruit Industry.

Omnia are leaders in innovative elicitor based plant defence systems.

Information presented here is up to date as of 31/08/2011