

Prolectus[®], the newest fungicide for botrytis control in grapes.



Grow a better tomorrow.

Prolectus® is a highly effective botrytis fungicide for grapes that has both protective and curative activity.

KEY BENEFITS

- Contact and translaminar activity
- Powerful protective and curative (kickback) activity
- Excellent rainfastness
- Safe on beneficial insects
- Ideal rotation partner with products from other fungicide groups.

The active ingredient, fenpyrazamine, is a unique chemistry in the Group 17 fungicides MOA with many distinctive properties leading to highly effective control.

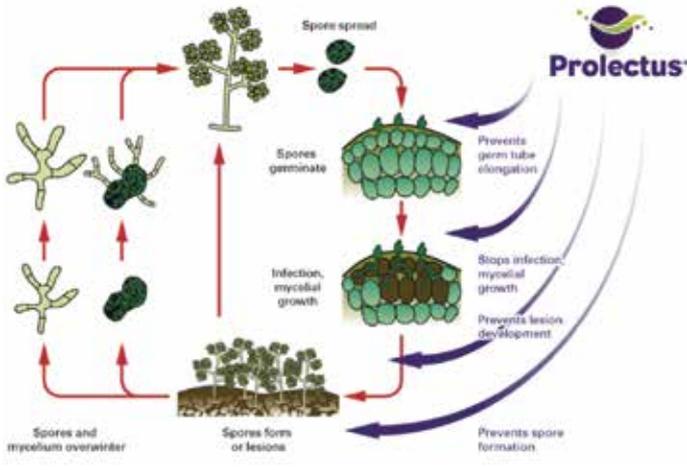
Prolectus contains 400g/L fenpyrazamine as an soluble concentrate.



HOW DOES PROLECTUS WORK?

Prolectus acts at four multiple points in the botrytis disease lifecycle as illustrated in Figure 1.0.

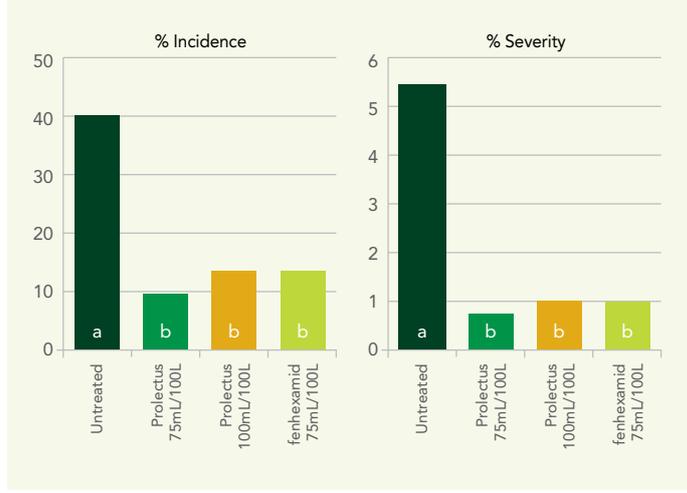
Fig 1. How Prolectus controls botrytis



EXCELLENT BOTRYTIS CONTROL IN GRAPES

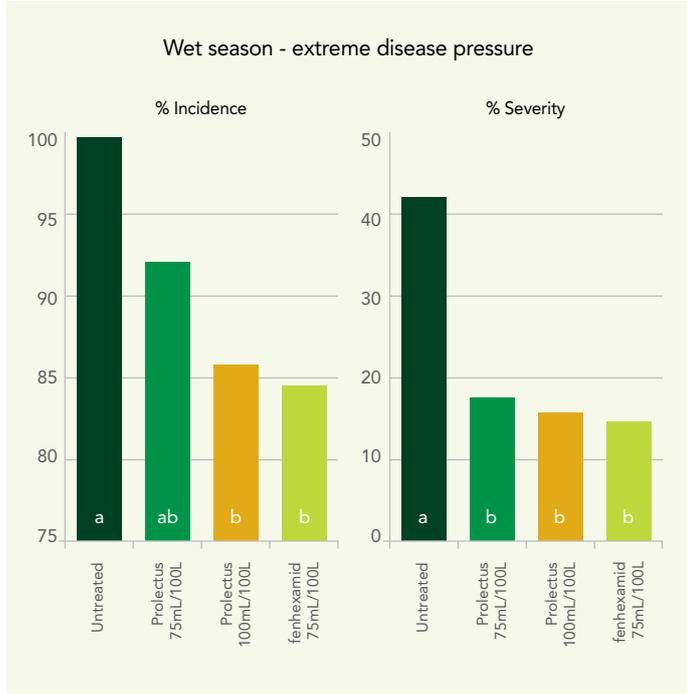
In both New Zealand and international trials Prolectus has proven to provide effective botrytis control under varying growing conditions. In all local trials, Prolectus provided equivalent levels of control to that of the reference fungicide.

NUNZ1122: Pinot gris, Auckland



4 applications: 80% capfall, pre-bunch closure, veraison & pre-harvest 700L/ha to the bunch zone

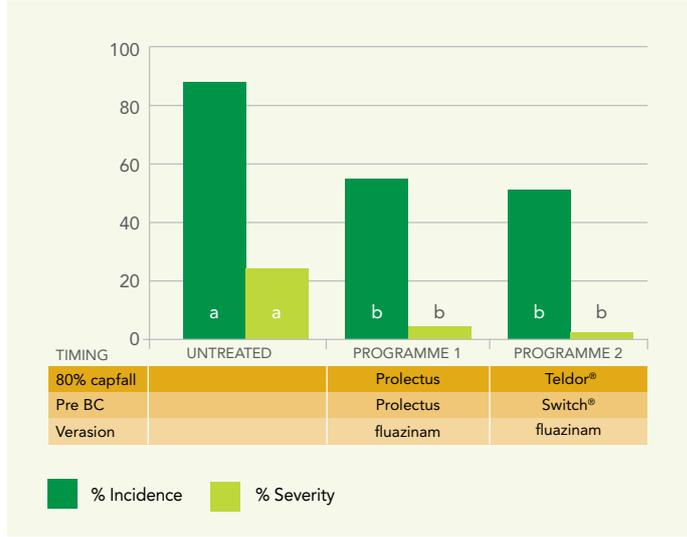
Trial NUNZ1109: Sauvignon blanc, Hawkes Bay



2 applications: 80% capfall, pre-bunch closure 1000L water/ha

In Trial NUNZ1453 results showed that when Prolectus was incorporated into a vineyard botrytis spray programme, it provided equivalent control to that of a common industry standard programme.

Trial NUNZ1453: Sauvignon blanc, Marlborough



Details: Prolectus 1L/ha, Teldor 750mL/ha, Switch 800g/ha, fluazinam 1L/ha. 500L water/ha. At harvest 50 bunches assessed for Botrytis incidence and severity



TRANSLAMINAR ACTIVITY

Formulations with strong translaminar activity, such as Prolectus, move from one surface of the grape leaf to the other.

This not only helps control disease spores or lesions that may have been missed on the underside of leaves during application, it also improves control of mycelial growth within the plant tissue.

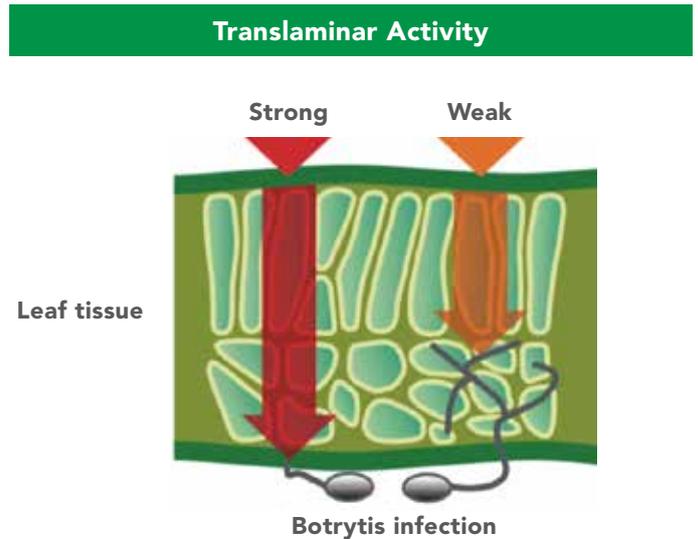
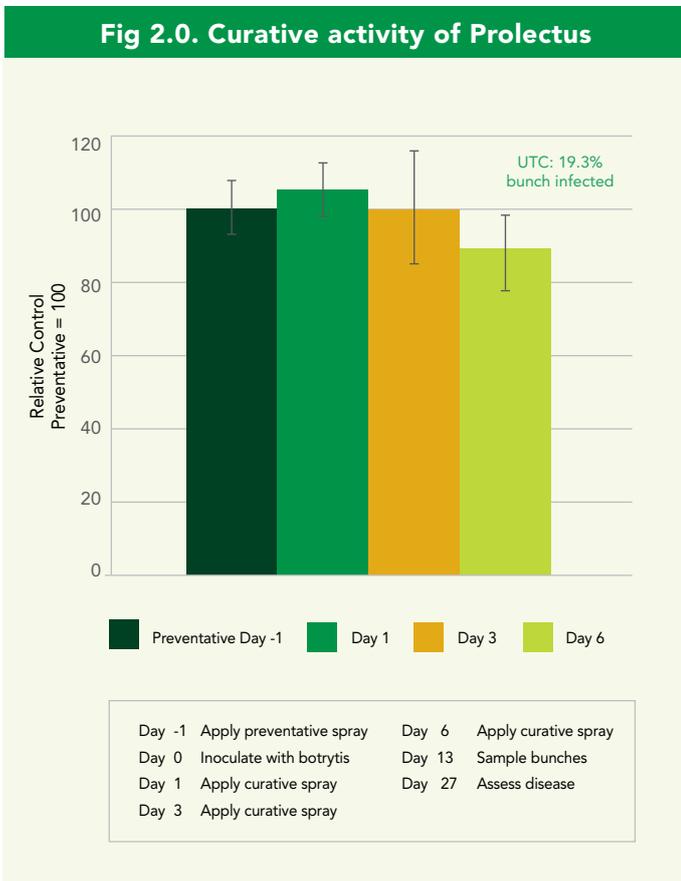
Experiments have also shown Prolectus moving through the grape surface within 24 hours of application. This translaminar activity contributes to the good rainfastness activity exhibited by Prolectus.

PREVENTATIVE AND CURATIVE ACTIVITY

While Prolectus is best used as a preventative spray it also has powerful curative activity that enables some flexibility under practical field situations. This is useful when it may not be possible to get botryticides applied prior to an infection period.

Both laboratory and field tests were undertaken to determine the preventative and curative properties of Prolectus.

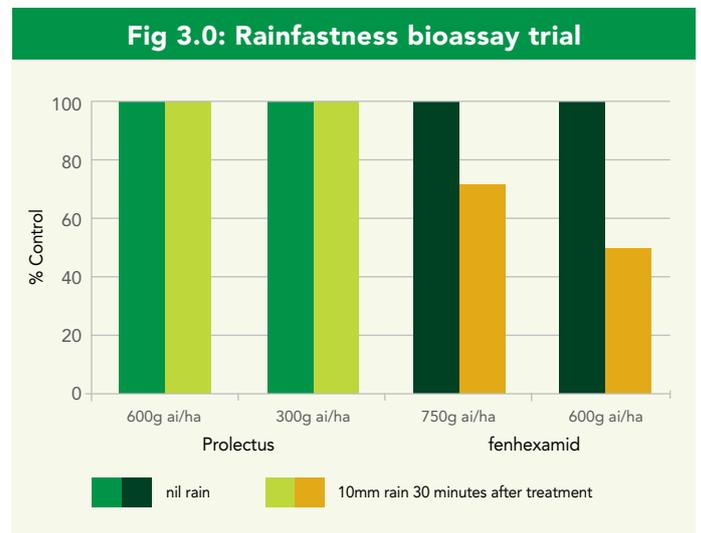
In the following trial (Fig. 2.0) curative activity remained very strong compared to the level of preventative activity even when Prolectus was applied six days after infection.



RAINFASTNESS

Prolectus has demonstrated a high level of rainfastness in both lab bioassay and field trials.

In cucumber leaf bioassays (Figure 3.0) leaves were sprayed with Prolectus and 30 minutes later 10mm of rain was applied over a one hour period. Botrytis was then inoculated and efficacy assessed after a suitable incubation period. The efficacy of Prolectus was unaffected by the rainfall event.



SAFE ON BENEFICIAL INSECTS AND THE ENVIRONMENT

Prolectus is safe on a number of key beneficial insects used for biological pest control including predatory mites and parasitic wasps.

Prolectus is a low risk to birds, bees, earthworms and other non-target organisms. However, a 6m buffer zone must be observed between application area and waterways as it is toxic to aquatic organisms.

RESISTANCE MANAGEMENT

Good resistance management practices should be used at all times to ensure Prolectus remains an effective fungicide choice.

There are no known resistant botrytis strains to Group 17 fungicides in New Zealand.

Growers may apply a maximum of two sprays of Prolectus or any other Group 17 fungicide in any one season.

Best practice is to rotate with effective fungicides from different MOA groups such as Nando® (fluazinam) or cyprodinil + fludioxanil.

GRAZING MANAGEMENT

For grazing management practices sheep introduced into the vineyard for grazing inter-rows or leaf plucking must not be sent for slaughter until 2 months after they are removed from the vineyard.

MRLS

Prolectus is registered for botrytis control and has MRL's set in many of the major wine growing regions around the world.

Up to 2 applications applied no later than 80% capfall will result in nil detectable residues in wine.

Applications made after 80% capfall and up to pre-bunch closure can result in detectable residues. Users should consult the NZ Winegrowers Vineyard Spray Schedule or contract winery for the latest MRL information to plan a use pattern that meets their export destination MRL requirements.

The local market withholding period is seven weeks after the last application.

APPLICATION DETAILS

WINE GRAPES

PEST

Grey mould
(*Botrytis cinerea*)

RATE

Apply 100mL/100L as a dilute spray to run-off.

Apply a minimum of 700mL/ha and a maximum of 1.5L/ha. Consult the "Use Rate Chart" for the rate/ha at a constant rate of 0.21mL/m of row.

Water rate should be adjusted to growth stage and size of foliage to give good coverage. Generally between 700 and 1000 L/ha.

CRITICAL COMMENTS

Apply as part of a botrytis control programme. DO NOT apply more than 2 sprays of Prolectus Fungicide, or another Group 17 fungicide in any one season.

Apply at any two of the following times: at early flowering (5% capfall), late flowering (80% capfall) or pre-bunch closure.

Ensure that sufficient water is used and the spray is directed to get good penetration of the canopy and coverage of flowers or bunches. If bunch line spraying use 60% of the full canopy.

Withholding period: Do not harvest for 7 weeks after the last application. **Grazing restriction:** Sheep used for grazing inter-rows or leaf plucking must not be sent for slaughter until two months after they are removed from a vineyard where Prolectus has been applied.

USE RATE CHART – rate of Prolectus per hectare at a constant rate of 0.21 mL/metre of row

ROW SPACING

Rate per ha at
0.21 mL/m of row

1.5M

1.4L/ha

1.8M

1.17L/ha

2.0M

1.05L/ha

2.4M

875mL/ha

2.5M

840mL/ha

2.7M

780mL/ha

3.0M

700mL/ha



POWERFUL REWARDS FOR LOYALTY TO NUFARM

Every purchase of Prolectus earns you valuable reward points in Priority Partnership, the rewards programme for New Zealand farmers.

To find out more visit www.prioritypartnership.co.nz

Nufarm NZ

6 Manu Street, Otahuhu, Auckland, New Zealand
info@nz.nufarm.com

www.nufarm.co.nz

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