

TECHNICAL MANUAL 2018

Prolectus®

*A new option to control
BOTRYTIS in wine grapes*



Powerful activity

Translaminar activity

Good rainfastness



SUMITOMO CHEMICAL
AgroSolutions Division

Prolectus® is a fenpyrazamine based fungicide, discovered and developed by Sumitomo Chemical Ltd and is now registered in Australia for botrytis control in wine grapes.

Prolectus contains 400 g/L fenpyrazamine and is active on fungi of the genus botrytis, and is a Group 17 fungicide.

Prolectus is a translaminar product able to block botrytis in various stages of its biological cycle and is a powerful addition to growers botrytis programmes, offering:

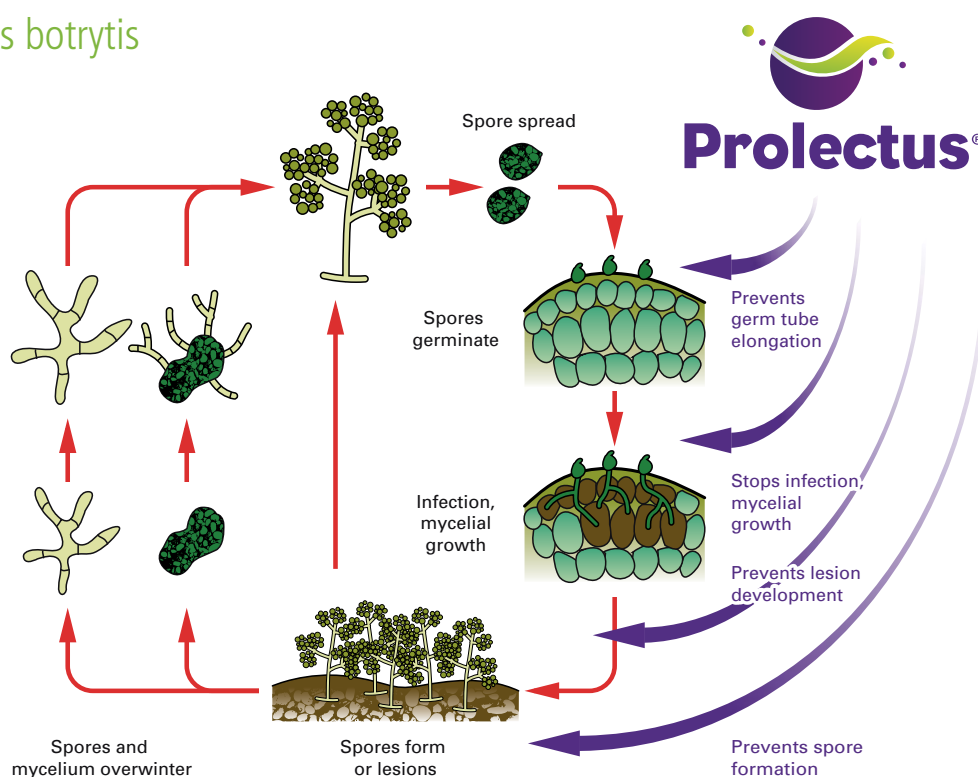
Powerful curative activity (kickback)

Translaminar activity

Good rainfastness



How Prolectus controls botrytis



Directions for use

CROP	PEST	RATE	CRITICAL COMMENTS
Wine grapes	Grey mould (<i>Botrytis cinerea</i>)	<p>100 mL/100 L</p> <p>Dilute spraying: Water rate should be adjusted to growth stage and size of foliage to give good coverage. Generally between 500 and 1000 L/ha.</p> <p>Concentrate spraying: Refer to the Application section in the label.</p>	<p>Apply as part of a botrytis control spray programme between 10% flowering (E-L 20) and berries pea size – just prior to bunch closure (E-L 31). DO NOT apply after E-L 31.</p> <p>DO NOT apply more than 2 sprays of PROLECTUS in any one season, with a minimum 14 day interval.</p> <p>Apply by dilute or concentrate spraying equipment but ensure that sufficient water is used and the sprayers are directed to get good penetration of the canopy and coverage of flowers or bunches.</p> <p>Maxx organosilicone surfactant is recommended at 30 mL/100 L as this provides increased penetration of flowers and bunches and so improves the result.</p>

The AWRI has updated their recommendation for the use the use of Prolectus to no later than E-L 29, berries pepper-corn size (4 mm diameter) for a single application (previously no later than 80% capfall).

RESTRAINTS

DO NOT apply if heavy rain has been forecast over the next 72 hours.

DO NOT apply more than two sprays per season with a minimum interval of 14 days as over-use may lead to development of resistance.

DO NOT apply with aircraft.

SPRAY DRIFT RESTRAINTS

DO NOT apply when wind speed is less than 3 or more than 20 kilometres per hour.

DO NOT apply during surface temperature inversion conditions at the application site.

DO NOT direct the spray above vines during airblast applications. TURN OFF outward pointing nozzles at row ends and outer rows during airblast applications.

DO NOT apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers within 15 metres downwind from the application area.

NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIODS:

WINE GRAPES: NOT REQUIRED WHEN USED AS DIRECTED.

GRAZING: DO NOT ALLOW LIVESTOCK TO GRAZE TREATED VINEYARDS FOR 2 DAYS AFTER APPLICATION. LIVESTOCK USED FOR GRAZING INTERROWS OR LEAF PLUCKING MUST NOT BE SENT FOR SLAUGHTER UNTIL 2 MONTHS AFTER REMOVAL FROM THE VINEYARD.

Fenpyrazamine Maximum Residue Levels (MRLs) in export wine grapes by country

COUNTRY	COMMODITY	MRL (ppm)
New Zealand	Grapes – wine	0.1
Australia	Grapes – wine	0.05
EU	Grapes – wine	3
Norway	Grapes – wine	3
Switzerland	Grapes – wine	3
USA	Grapes – juice	4
Canada	Grapes – juice	4
South Korea	Grapes- wine	5
Japan	Grapes- wine	10
Turkey	Grapes- wine	3



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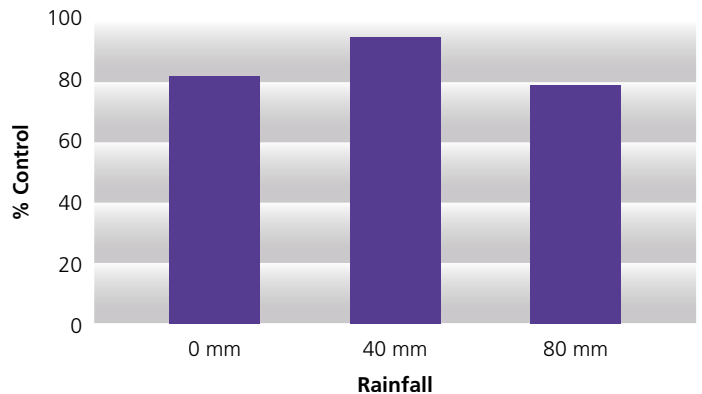
Rainfastness

Rain following fungicide applications is likely to reduce the ability of the fungicide to provide disease protection. However, the ability to continue to provide a level of protection varies widely with different fungicides and their mode of action. The translaminar activity of Prolectus means that more product has entered the plant and is less likely to be washed off.

RAINFASTNESS GRAPE / *B. CINEREA*

Day 1: Prolectus spray
Day 2: 40 or 80 mm of artificial rain
Day 3: Botrytis infection

■ Prolectus 600 g ai/ha



Performance in the field

Trials in Australia and the major grape growing regions of the world have shown that Prolectus is a powerful tool for growers to add to their botrytis strategies.

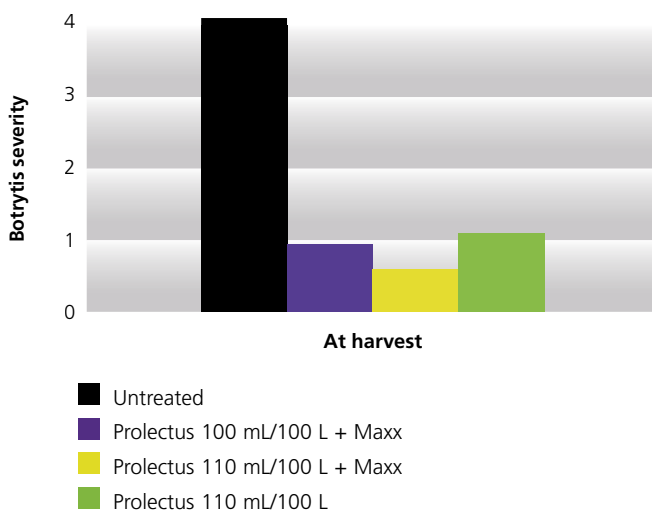
PROLECTUS FOR BOTRYTIS CONTROL ON GRAPES

Prolectus in Chardonnay grapes: Dixon Creek

4 sprays at 500 - 800 L/ha:

1. 80% capfall; 2. Prior to bunch closure;
 3. 50% veraison; 4. 2 weeks pre-harvest
- F10-005. VIC

Maxx™ improved penetration and control.



PROLECTUS IN PROGRAMMES FOR BOTRYTIS CONTROL ON WINE GRAPES

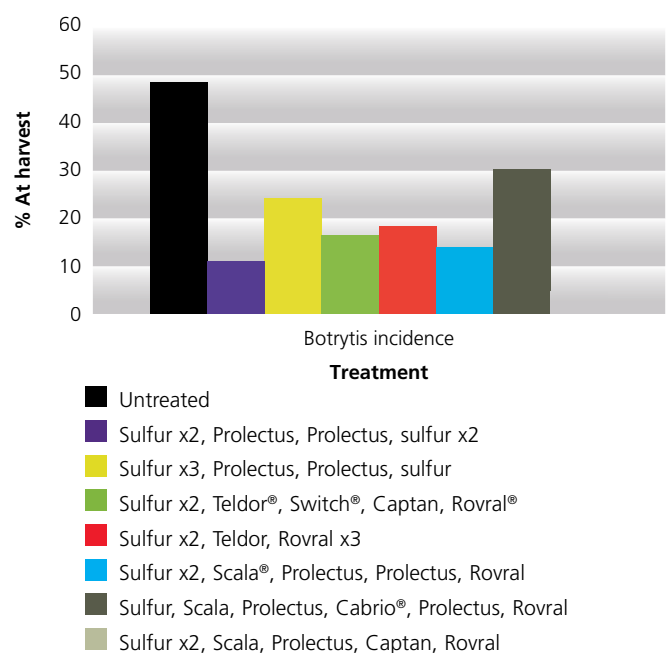
Yarra Valley

Timing: 30 cm shoots, 5% flowering, 80% flowering, pea size, veraison, pre-harvest

F10-007. VIC

Maxx added to Prolectus treatments and Agral® to others.

Applying Prolectus at flowering and soon after gave the best results.



Powerful curative activity (kickback)

While no fungicide application should be timed to control disease that is already established, the ability of a fungicide to provide 'kickback' can still be valuable. Kickback describes how many days after an infection occurs that a fungicide can be applied and still give adequate control. With a disease like botrytis in grapes this can be important as ongoing infections, rain, and the inability to spray the vineyard quickly can allow the disease to take hold.

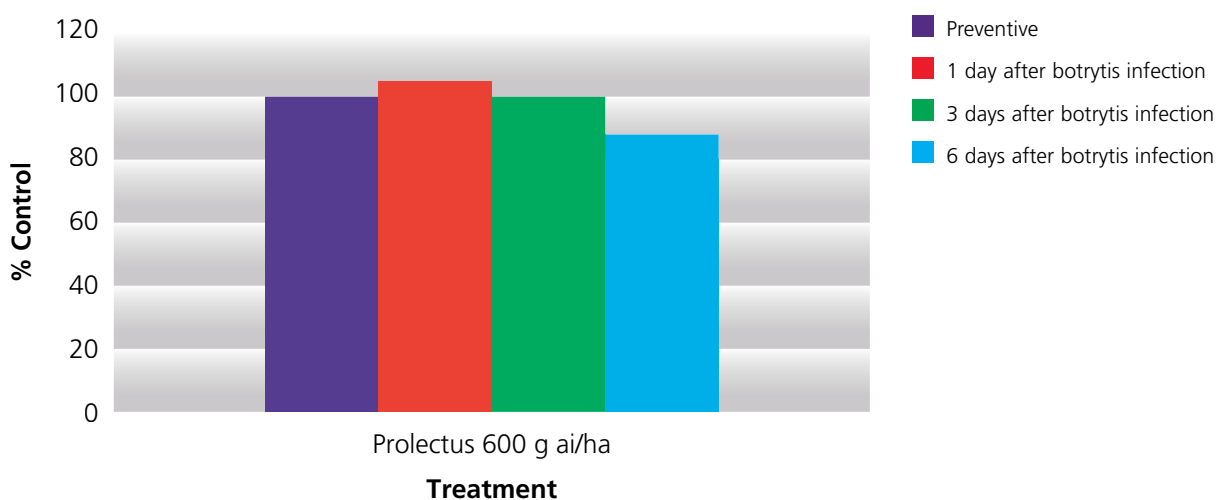
Prolectus will always be more effective when applied preventatively, but research shows it can give useful kickback.

In a trial in 2012, a preventative Prolectus spray was applied 1 day before inoculation with botrytis. In separate treatments curative sprays were applied at 1, 3 and 6 days after inoculation. All treatments were assessed 20 days after inoculation.

CURATIVE AND PREVENTIVE EFFICACY ON GRAPE

Untreated 19.3% area infested

Preventive = base 100

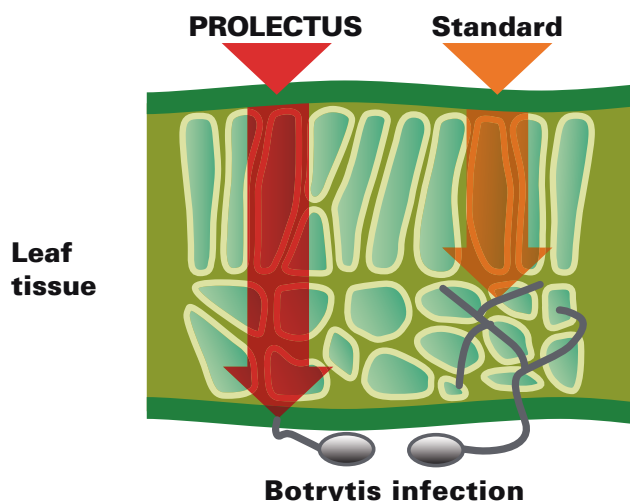


Translaminar activity

Prolectus moves from one surface of the grape leaf to the other through translaminar activity.

This not only helps control disease spores that may have been missed on the underside of leaves by the 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, combined with the translaminar activity would be factors in the good rainfastness exhibited by Prolectus.





Prolectus®



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**Scan here to see more
information about
Prolectus Fungicide**



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