

An unmatched combination of consistency and control

DuPont™ Zorvec® Enicade® fungicide

DuPont™ Zorvec® Enicade® fungicide is the first member of a novel class of fungicides to control diseases caused by oomycete pathogens.

Zorvec® Enicade® fungicide affects a novel target site with a completely new biochemical mode of action and has no cross-resistance with existing fungicides. It produces multiple effects on the pathogen's life cycle for better efficacy, efficiency and length of control. Zorvec® Enicade® protects treated leaves as they grow and expand, including leaves that are less than 20% final size at the time of application. Studies in certain vegetable crops have also demonstrated that Zorvec® Enicade® protects new leaves as they emerge and grow*.

Zorvec® Enicade® features a favorable environmental profile, being effective on target organisms at very low use rates and having very low toxicity to non-target organisms. Mammalian oral, neurological, developmental and dermal toxicity is low, as is avian and bee toxicity.

General Information

Trade name	DuPont™ Zorvec® Enicade® fungicide
Chemical class	Piperidinyl thiazole isoxazoline
Common chemical name	Oxathiapiprolin
Rate	350 ml/ha in Bulb onions
Fungicide group	U15

Zorvec® Enicade® Label

Crop	Disease caused by	Common name
Bulb onions	<i>Peronospora destructor</i>	Downy mildew

Key features

Highly effective

Zorvec® Enicade® fungicide produces multiple effects on the pathogen's life cycle, providing unmatched consistency and control for a healthier crop.

Consistently robust disease control at low use rates

When plants treated with Zorvec® Enicade® fungicide at various rates are compared with untreated plants and with the performance of competitive products, Zorvec® Enicade® exhibits a consistently higher level of disease control.

Protects new plant growth

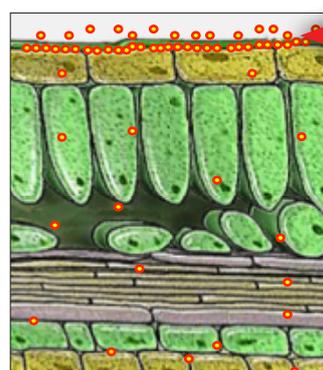
Studies on various vegetable crops have shown that Zorvec® Enicade® fungicide protects plants in three distinct ways:

- protects new plant growth for better crop establishment
- protects treated leaves as they grow and expand with no spread of disease
- protects new leaves as they emerge and grow

Rainfastness

Zorvec® Enicade® fungicide moves quickly into the waxy epicuticular layer of plant tissue, making it extremely resistant to wash-off. In fact, controlled wash-off studies have demonstrated that Zorvec® Enicade® is protected from wash-off just 20 minutes after the spray residue has dried.

Leaf cross section



Location of Zorvec® Enicade® 1 hour after application

12-15% on the leaf surface

Up to 80% associated with the waxy cuticle

3-5% associated with the intercellular layers

Selectivity to Beneficial Arthropods

Bioassays in Australia showed that Zorvec® Enicade® is safe to the parasitoid *Trichogramma cryptophlebia*, the predators *Micromus tasmaniae* and *Nabis kingbergii*, and Ladybird (*Hippodamia*). There was no significant mortality in populations of these insects treated with Zorvec® Enicade® compared to non-treated controls.

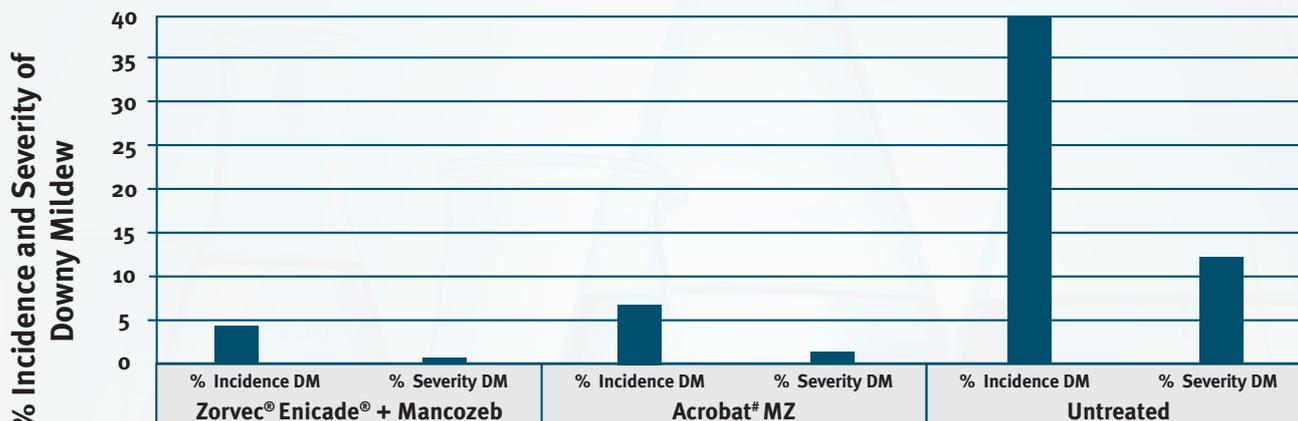
Favourable toxicological profile

Very low toxicity to non-target organisms.

Trial results

Zorvec® Enicade® efficacy in Bulb onions – Pukekohe Development Trial

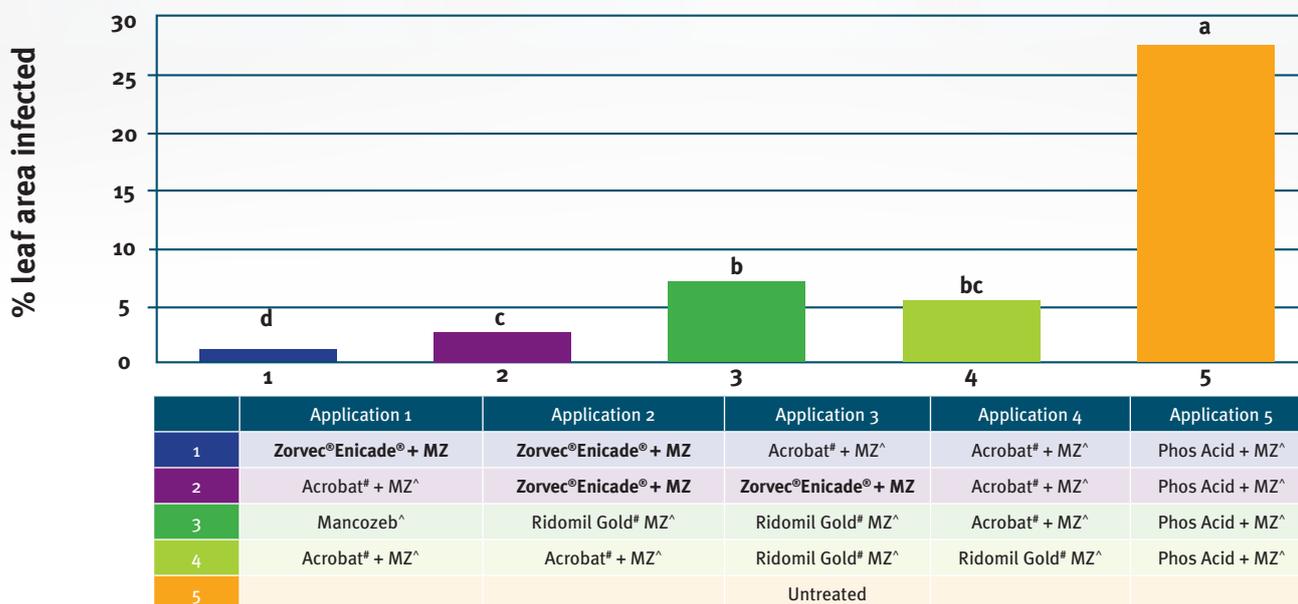
DM Incidence and Severity 8 Days after application 2



Source – AUE-12-607. Assessments for % incidence and severity made 8 days after 2 sequential treatment applications 7 days apart.

Zorvec® Enicade® efficacy in Bulb onions – Tasmanian Positioning Trial

DM Severity 15 Days after application 4



Source - AUL-14-613. ^ The addition of non-ionic surfactant at 0.01% v/v. MZ stands for Mancozeb.
NB: Some treatments in original trial not shown due to not being registered in New Zealand.

Summary

Zorvec® Enicade® fungicide delivers an unmatched combination of consistency and control of Downy mildew.

Zorvec® Enicade® affects multiple stages of the disease life cycle, and it's acropetal movement in the plant means that the product helps protect new growth. Zorvec® Enicade® is resistant to wash off by rain as little as 20 minutes after the spray residue has dried on the leaves.

Zorvec® Enicade® will help farmers reduce waste from Downy mildew and improve their productivity, and grow better crops. It's better for business.

For any further information please contact:

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