

## Dieback control in grapes

### What is Dieback?

Dieback disease caused by *Eutypa lata* and *Botryosphaeria* result in vineyard decline of grapes in New Zealand and is a significant productivity threat.

It is an insidious disease taking up to 10 years from infection until vine death with symptoms not being easily visually identifiable until 3-8 years after significant vine damage and yield loss has occurred.

Keeping your own vineyard clean of the disease may also not be enough as spores can travel up to 50km on the wind.

### How does Dieback affect the vine?

Dieback enters the vine primarily via pruning wounds, or damage. Large pruning wounds are most susceptible and easily and effectively protected with pruning paints such as Garrison Rapid. Thousands of secateur pruning wounds per hectare are not easily protected the same way.

These minor wounds remain susceptible to infections for 1 month for *Eutypa* and 3 months for *Botryosphaeria*.

Young vines are just as susceptible as mature vines, age of wood does not affect susceptibility. Though larger wounds provide a bigger target for spores to land on and take more time to heal.

Symptoms when visible include stunted growth, chlorotic leaves often with cupped and tattered margins, early senescence in the autumn, reduced yield, arm death and vine collapse.

Our major variety Sauvignon Blanc is one of the most highly susceptible white varieties and with reds Shiraz and Cabernet Sauvignon are two of the most susceptible cultivars.

### Management of Dieback requires a whole vineyard approach

1. Remove infected wood from the vineyard floor to eliminate sources of infection as these will still release spores during rainfall.
2. Avoid pruning during wet weather when spore release is high. Spores continue to be released for several days following rain.
3. If possible, delay pruning infected blocks until later in the season. Vines are less susceptible in spring due to faster wound callousing.
4. Treat large pruning wounds with Garrison Rapid to protect them from infection.
5. Spray dormant pruned vineyard area as soon as practical after pruning with MegaStar.

### MegaStar fungicide spray

MegaStar is an effective DeMethylation Inhibitor fungicide which when applied immediately after dormant pruning will protect wounds from Dieback infection. Making protecting minor wounds easy and effective.



### Get the most out of MegaStar to protect pruning wounds

- Coverage is critical – dilute water rates are recommended to the point of run-off
- Sprayer set up needs to reflect the target being different from foliar spraying
- Rate 20g MegaStar per 100l of water
- Apply as soon as practical after each day's pruning, ideally within 24 hours. MegaStar is most effective as a protectant, though it may have some limited curative action
- Additional surfactant is not necessary, but the addition may assist coverage
- The take home message is apply to each block prior to rainfall
- Do not apply after bud swell