

Organic Grapes | Trial Sheet

A single application of Karbyon reduces the incidence of Powdery Mildew



Overview

A single application of **Karbyon** was used on Sauvignon Blanc grapes at budbreak during the 2017/2018 season in Marlborough, this reduced the incidence of Powdery Mildew infection by 62% in late January.

How Karbyon works

BioStart Karbyon is an ACVM-registered (P8557) fungicide for use in the control of Powdery Mildew in a wide range of crops including grapes. **Karbyon** is BioGro Registered No.4436.

Trial aim

Grower observations over several seasons in Marlborough have shown that an early application of **Karbyon**, in addition to the normal Powdery Mildew control programme, gave a better control of Powdery Mildew than using a standard programme alone. The trial aim was to quantify this effect.

Trial protocol and design

- The trial was conducted on an organic Sauvignon blanc block (rootstock 101-14) in Marlborough with a history of high Powdery Mildew incidence. Growing conditions were the same for the 1.3 ha treated and 1 ha untreated blocks.
- Karbyon** was applied at 2.5 kg/ha in 250 L of water (1% dilution) at bud break; just as the buds were beginning to crack open. The standard organic Powdery Mildew prevention and control programme was used for the rest of the season.
- On 30 January 2018, Crop Monitoring Services, PGG Wrightson, measured the Powdery Mildew incidence and severity in **Karbyon**-treated and untreated rows (400 bunches/treatment).

Results

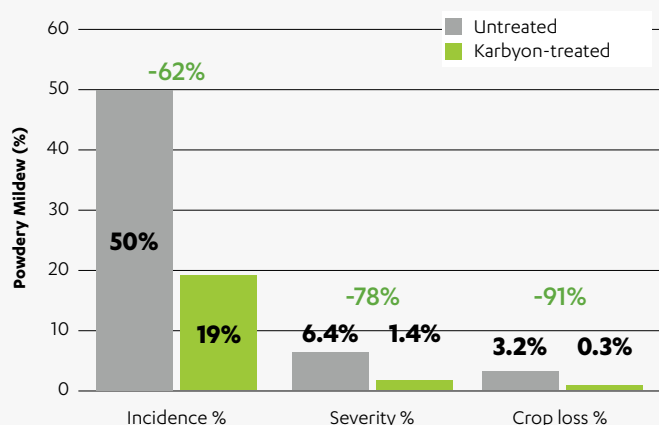
Figure 1 and Table 1 show that the single application of **Karbyon**, at bud break, in addition to the standard organic Powdery Mildew control programme:

- Reduced Powdery Mildew incidence by 62% from 50 to 19%
- Statistically significantly reduced Powdery Mildew severity by 78% from 6.4 to 1.4%
- Reduced crop loss by 91% from 3.2 down to 0.3%.

Table 1. Effect of Karbyon on Powdery Mildew incidence, severity and crop loss

Treatment	Incidence	Severity	Crop loss
Untreated	50%	6.4%	3.2%
Karbyon-treated	19%	1.4%	0.3%
Reduction	62%	78%	91%
Statistics		***	

Figure 1. Impact of Karbyon applied at bud break on Powdery Mildew Sauvignon Blanc, Marlborough, January 2018



Conclusion

A single application of **Karbyon** at bud break, in addition to a normal Powdery Mildew control programme, further reduced Powdery Mildew incidence and severity, and as a result reduced the crop loss due to Powdery Mildew.