

# Biostart Vineyard Support Products

Better biology. Better wine.

## Mycorrcin and Organic Mycorrcin



Mycorrcin is a soil biostimulant that improves soil biology by stimulating the activity of beneficial soil microbes, both bacteria and fungi. These soil microbes make nutrients available to the vine, enhance the vine's ability to withstand drought and flooding, optimise yield, increase cane diameter, improve wine flavour, and increase root growth and branching leading to faster vineyard establishment.

## Digester and Organic Digester



Digester is a soil biostimulant that activates the decomposition microbes already present in the soil. It returns organic matter to the soil by promoting the rapid breakdown of leaf litter, old roots and prunings. By efficiently decomposing the crop residue that many fungal and bacterial pathogens survive on over winter, Digester also reduces disease pressure on consequent crops.

## Foliacin and Organic Foliacin



Foliacin is a biological foliar spray which boosts beneficial microbe populations and supports the protective biofilm on plant foliage as well as stimulating the plant's defence system. It supports green-leaf retention and overall plant resilience in times of disease pressure, drought, cold, phytotoxic exposure (chemical damage from other sprays) and other stress.



## BioStart Premium Grape Soil and Foliar Programme

For growers producing premium wines

Product	Bud Break	Inflorescence	Flowering	Cap Fall	Bunch Closure	Veraison	Harvest	Leaf Fall Dormancy
Mycorrcin	Apply 10 L/ha to weed spray strip.							
Digester								At leaf fall apply 4 L/ha on to the soil
Foliacin	Apply 0.5 L/ha to foliage with first fungicide or nutritional sprays.	→	DO NOT apply Foliacin over flowering	Apply 0.5 L/ha to foliage with fungicide or nutritional sprays.	→			

**Mycorrcin and Digester:** For best results apply Mycorrcin and Digester to moist soil and/or water in. Digester and Mycorrcin can be mixed and applied with commonly used herbicides and liquid fertilisers. Alternatively apply 6 L/ha Mycorrcin at budbreak, and add 2 L/ha Mycorrcin to all weed sprays.

**Foliacin:** apply 3 L Foliacin/ha over the season (three pre-flowering and three post-flowering) at 10–14 day intervals. Foliacin can be mixed and applied with commonly used fungicides and liquid fertilisers.



### Biostart N (certified organic)



Biostart N is a soil applied biofertiliser that contains the active ingredient *Azotobacter chroococcum*, a naturally occurring nitrogen fixing bacteria. It converts atmospheric nitrogen to a steady supply of plant-available ammonium nitrogen in the soil for sustained plant growth.

By applying Biostart N you increase the number of nitrogen fixing bacteria in your soil. Biostart N is a biological product which works with the plants growth periods and can be used to compliment conventional nitrogen fertiliser programs. Used in a programme with Mycorrcin, Biostart N's nitrogen fixing bacteria establish faster.

### BioShield Grass Grub Liquid (certified organic)



BioShield Grass Grub Liquid is soil applied long-term grass grub control solution. The bacteria BioShield causes amber disease only in grass grub larvae. The bacteria are passed from the dead larvae to other larvae living in the soils and thereby reduce grass grub populations and thereby reduce the damage done to vines.

### Terracin



Terracin is a biological soil additive that contains a bacteria that produces antimicrobial compounds which, when introduced to the soil, changes the existing soil biology. Inoculating the soil with beneficial and protective microbes early in the season enables the plant to resist fungal diseases. After applying Terracin, Mycorrcin is used to stimulate the beneficial bacteria in the soil to recreate the balance found in healthy soil.

### Karbyon (certified organic)



Karbyon is an organic treatment for powdery mildew and sooty mould. The key ingredient in Karbyon is potassium bicarbonate that is coated through a unique encapsulation technology. Application of Karbyon changes the pH level of the leaf surface, disabling the growth of the disease fungal mycelia.

### TripleX (certified organic)



TripleX is a biocontrol agent that controls and reduces the incidence of botrytis (*Botrytis cinerea*). As TripleX is a biological control it is most effective when used as a preventative that is applied regularly as part of an integrated programme. Use of a wetter/sticker such as Du-Wett or Hywet is recommended, whereas certified organic growers should use Ecospread or Biospread.

#### TripleX contains two methods of control:

- The microbe *Bacillus amyloliquefaciens BS 1b* populates the leaf and controls Botrytis – it produces a wide range of antimicrobial compounds that destroy the disease and reduces re-infection
- Fermentation extracts and other bioactive nutrients help to prime the plants leaf biofilm – creating an ideal environment for the establishment of the *B. amyloliquefaciens*.