

# Foliacin Grape Trial

Foliacin primes the plant defence system and when used as a foliar spray additive with your normal fungicide applications further reduces the incidence of Botrytis and Slip Skin

Hawkes Bay 2016



**BioStart Foliacin is an elicitor of plant defence mechanisms which promotes plant health and growth during periods of environmental, disease and chemical spray stress.**

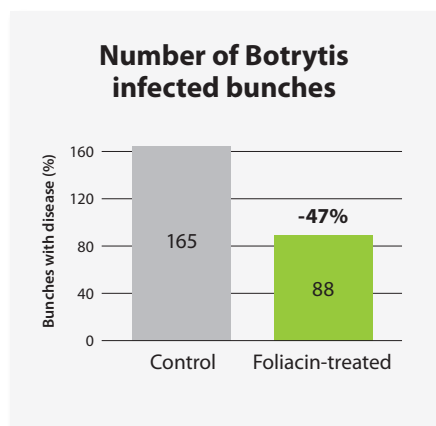
Foliacin is used in conjunction with a fungicide programme to reduce fungicide stress and to prime the plant to resist pathogens. This trial conducted on a Syrah block on the Gimblett Gravels in a commercial Hawkes Bay vineyard showed that the addition of Foliacin to a normal vineyard fungicide programme reduced the disease incidence of Botrytis and Slip Skin.

## Trial design

Foliacin was co-applied at 0.5 L/ha with five foliar fungicide applications in the 2015/16 season. Prior to harvest Fruitfed Crop Monitoring independently measured the incidence and severity of Botrytis and Slip Skin in 400 Foliacin-treated and 400 control bunches.

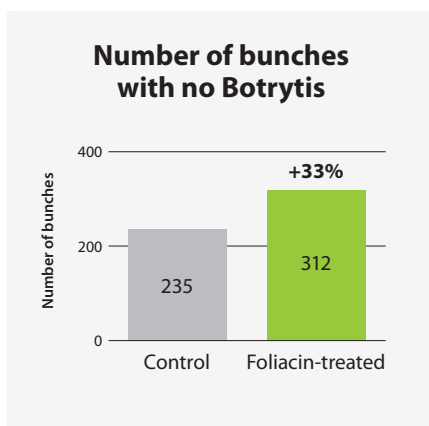
## Trial results

The sampling results showed that vines treated with Foliacin had a lower number of bunches infected with Botrytis or affected by Slip Skin.



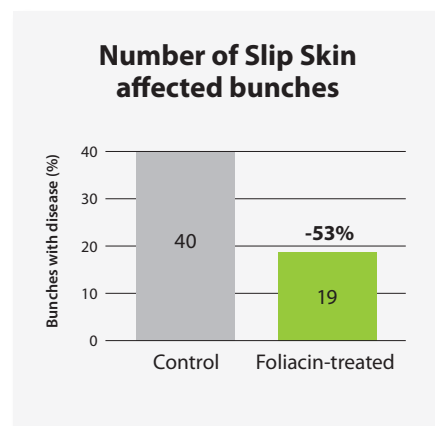
### Botrytis infection

The addition of Foliacin reduced by 47 % the number of bunches infected with Botrytis from 165 bunches (41 %) in control to 88 (22 %) in the Foliacin-treated bunches.



### Bunches not infected with Botrytis

The addition of Foliacin resulted in 33% more bunches (312 bunches) with no Botrytis in comparison to the control (235 bunches).

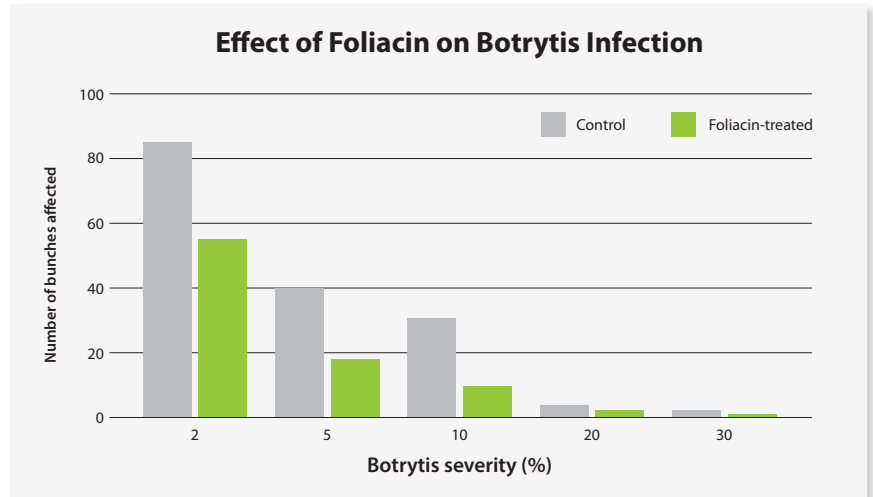


### Slip Skin

The addition of Foliacin halved the number of bunches affected by Slip Skin from 41 bunches (10 %) in the control to 19 bunches (5 %) in the Foliacin-treated bunches.

### The severity of Botrytis infection

The sampling results showed that vines treated with Foliacin had a lower severity of infection in comparison to the control. The mean Botrytis infection severity was reduced from 2.7 to 0.9 %, and from 0.2 to 0.1 % for Slip Skin.



### About Foliacin

BioStart Foliacin activates two different plant defence mechanisms that prepare the plant to resist attacks from plant pathogens. Foliacin consists of a combination of enzymes, signal molecules, bacteriocins and secondary metabolites from the fermentation of beneficial bacteria. These components mimic the presence of pathogens which prime the plant's defence system, and activate the beneficial microbes that live on the leaf's surface. Foliacin promotes plant health and growth during periods of environmental, disease and chemical spray stress.

### Foliacin Grape Programme

Timing	Early growth/first cover spray up to flowering.	Mid to late season with fungicide and/or nutritional spray applications.	After periods of environmental stress e.g. wind, extreme wet and cold, drought, hot or dry.
Application	0.5 L/ha in 250-600 L of water. Apply every 14 days with fungicides and/or nutritional sprays.	Add 0.5 L/ha in with every conventional fungicide and/or nutritional spray.	1 L/ha in 250-600 L of water. Then 0.5 L/ha every 14 days with fungicides and/or nutritional sprays in 250-600 L of water.

**Application note:** For best results spray early morning, early evening or in overcast conditions. The spray rates above are for medium volume spraying (250-600 L/ha) to just before run off. Use closer spray intervals during periods of high disease risk.

**Compatibility:** Foliacin is compatible with most commonly used fungicides and nutritional sprays. Call 0800 116 229 for a compatibility list.

**Nil withholding period.**

Disclaimer. Foliacin is a plant elicitor. It is not a registered fungicide or foliar fertiliser.

Available from leading rural retailers.

Call New Zealand: **0800 116 229** or Australia: **1800 359 559** to order. [www.biostart.co.nz](http://www.biostart.co.nz)