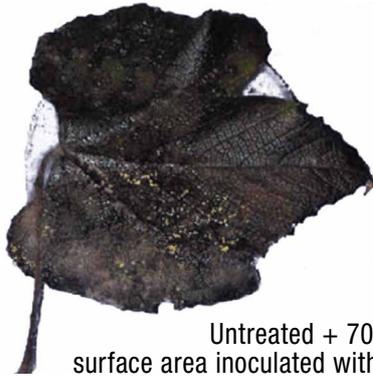
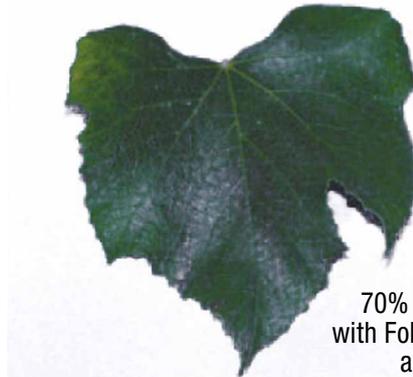


The power of the plant defence system

A plant's defence system is reactive and relies on receiving the right signals in sufficient quantities in order to mobilise and defend itself from pathogenic attack. In this trial grape leaves have been exposed to various coverage rates of Foliacin while still attached to the vine and then inoculated with Botrytis. The trial demonstrated that if less than 70% of the leaf's surface area was covered with Foliacin the plant received insufficient signals to mobilise an immune response. But at 70% surface coverage and above, the plant's immune system is engaged and the plant successfully defended itself against the pathogen.



Untreated + 70% of leaf surface area inoculated with Botrytis



70% of leaf surface area treated with Foliacin + 70% of leaf surface area inoculated with Botrytis

Quicker recovery from spray stress

The application of agrochemicals is a necessary part of crop production. However the application of these chemicals can check the growth of plants, often at critical stages in their development.

Here Foliacin has been added at the rate of 500 mL/ha with an application of post-emergence herbicide and spray oil. The Foliacin treated plants have not been checked and maintained a healthy leaf.



Post emergence herbicide + spray oil



Foliacin 500 mL/ha + post emergence herbicide + spray oil

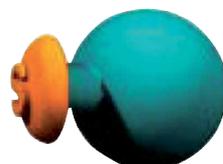
Signal molecule technology

Microbes have the ability to communicate. They can send and receive signals. This ability allows them to sense the presence of other microbes (quorum sensing) and plants and change their metabolic function. It's therefore important that the right microbes receive the right signals at the right time in order to maintain a healthy microbial biomass.

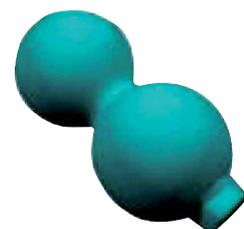
The signal molecules in Foliacin target the pre-cursors for leaf biofilm beneficial microbes, 'signalling' them to wake up and reproduce. This leads to a rapid rise in their populations and activation for a healthy leaf biofilm.



Signal molecule docks with a dormant targeted organism



Once docked the signal is received and metabolic function is changed



The signal molecule is released and the organism begins reproduction

BOOST FOLIAR HEALTH



BioStart Foliacin is an elicitor of plant defence mechanisms. Folicin 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.

- **Primes the defence system prior to periods of disease or stress**
- **Aids in maintaining the leaf biofilm.**
- **Improves recovery from periods of environmental stress**
- **Increases photosynthesis**

For specific crop recommendations contact your local BioStart representative. For best results avoid applying Foliacin in the heat of the day.

Foliacin is compatible with commonly used fungicides and nutritional sprays.

Pack sizes available: 5, 10 and 20 litre

DIRECTIONS FOR USE:

CROP	TIMING	APPLICATION RATE
Grapes	Early growth/first cover spray up to flowering.	0.5 L/ha in a minimum of 200 L of water. Apply every 10 - 14 days with crop protection sprays and/or nutritional sprays.
	Mid to late season crop protection and/or nutritional spray applications.	0.5 L/ha in a minimum of 200 L of water with every crop protection spray and/or nutritional spray.
	After periods of disease, chemical and/or environmental stress e.g. wind, extreme wet and cold, drought, hot or dry.	1 L/ha in a minimum of 200 L of water. Then 0.5 L/ha every 10 - 14 days with crop protection sprays and/or nutritional sprays in a minimum of 200 L of water.
Kiwifruit, Pipfruit, Stonefruit	Early growth/first cover spray up to flowering.	1 L/ha in a minimum of 500 L of water. Then 1 L/ha every 10 - 14 days with crop protection sprays and/or nutritional sprays.
	After periods of disease, chemical and/or environmental stress e.g. wind, extreme wet and cold, drought, hot or dry.	2 L/ha in a minimum of 500 L of water. Then 1 L/ha every 10 - 14 days with crop protection sprays and/or nutritional sprays in a minimum of 500 L of water.
Vegetables, Berries and Other Crops	Early growth/first cover spray up to flowering.	0.5 L/ha in a minimum of 200 L of water. Apply every 10 - 14 days with crop protection sprays and/or nutritional sprays
	After periods of disease, chemical and/or environmental stress e.g. wind, extreme wet and cold, drought, hot or dry.	1 L/ha in a minimum of 200 L of water. Then 0.5 L/ha every 10 - 14 days with crop protection sprays and/or nutritional sprays in a minimum of 200 L of water.

Note: The rates above are based on conventional plant spacings. BioStart recommends a minimum dilution rate of 0.5 L of Foliacin in 500 L of water. Foliacin is an elicitor of plant defence systems. It is not a foliar fertiliser or fungicide.

Foliacin

ELICITOR OF PLANT DEFENCE MECHANISMS

