FOR KIWIFRUIT

biostart®

PREVENT SOOTY MOULD

BioStart TripleX® is the only ACVM registered, bio-fungicide for the prevention of sooty mould in kiwifruit.

When insects like passionvine hopper (PVH) feed on the sap of the kiwifruit plant they deposit honeydew on to the fruit. Sooty mould appears when dark fungal mycelium grows on the honeydew. When sooty mould staining occurs the fruit is rejected causing grower losses.

The active ingredient in TripleX is the *Bacillus amyloliquefaciens* Bs1b microbe. It works by aggressively colonizing the foliage, flowers and fruit to protect against the development of sooty mould-causing fungi.

TripleX should be used as a preventative agent for sooty mould infections. Apply TripleX prior to PVH or cicadas becoming active in the orchard in order to establish a population of Bs1b microbe on the leaves and fruit of the kiwifruit vines.

Regularly reapply TripleX during peak infection periods, from January to March, to ensure adequate coverage of the developing fruit is maintained.

TripleX

- Prevents sooty mould
- Contains *Bacillus amyloliquefaciens* BS1b 1 x 10^9cfu/L
- Registered pursuant to the ACVM act 1997 No. P8137.
- Is on the Zespri Crop Protection Standard
- 7 day withholding period
- Independently tested free of amino alcohols and quaternary ammonium compounds (DDAC)
- Can be applied with most cover and nutritional sprays. For a compatibility list call 0800 116 229.

Crop	Crop Timing	Application rate
Kiwifruit Prevention of sooty mould	When passionvine hoppers and cicadas are active (early January to late March)	Spray 2-3 weekly intervals on to fruit and foliage. **Apply a minimum of 3 L/ha** diluted in 1,000 L water. A good surfactant should be used to ensure thorough fruit and stem coverage as this is where most sooty mould infections are located.

Application: Ensure good spray coverage for optimum disease control. Sprayers should be calibrated before use. For best results spray early morning, early evening. Use TripleX in conjunction with approved insecticidal sprays to reduce numbers of PVH and cicadas in the orchard and boundary areas.

Mixing instructions: This product contains living microbes. Prior to use the spray tank must be thoroughly cleaned to remove any chemical residues that could be toxic to the BS1b microbe. Sanitise spray tank before application to remove any contaminating microbes. Partially fill the spray tank with clean water and start agitation. Maintain a spray solution pH between 5.0 and 7.5 or efficacy may be effected. Add the required amount of TripleX to the tank. Complete filling. Apply diluted product within 8 hours of mixing.

Storage instruction:
Store below 25°C. Store out of direct sunlight

Pack sizes available: 5 and 20 litre

TripleX™ BIO-FUNGICIDE

ADVANCED MICROBIAL TECHNOLOGY™

MADE IN NEW ZEALAND

AGRECOVERY Rural Recycling Programme

Available from leading horticultural & rural suppliers. Call NZ **0800 116 229**, or visit **www.biostart.co.nz**

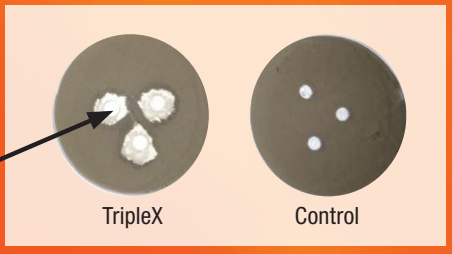
How TripleX Works

TripleX inhibits sooty mould spore germination & mycelium growth

Laboratory tests show :

- **TripleX reduced sooty mould-causing fungi spore germination by 92%**
- **TripleX Bs1b microbe inhibited sooty mould mycelium growth**

Zone of inhibition for diluted TripleX after 5 days. The cleared zone is due to the activity of the bacteria *B. amyloliquifaciens* Bs1b the active ingredient in TripleX



TripleX reduces sooty mould incidence in the orchard

2016 Bay of Plenty Trial Results

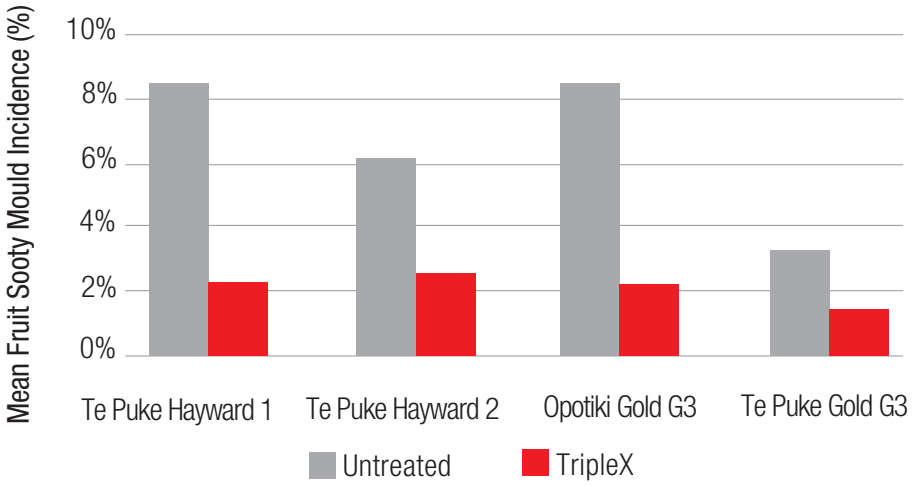
TripleX was applied at 3 L/ha between January and March 2016;
Hayward sites - 6 applications;
Te Puke Gold -4 applications and;
Opotiki Gold - 2 applications.

TripleX reduced the incidence of sooty mould;

- in green (Hayward) and gold (G3) kiwifruit crops
- in Te Puke and Opotiki kiwifruit growing areas.

Effect of TripleX on Sooty Mould Incidence

Four Trial Sites, Bay of Plenty 2016

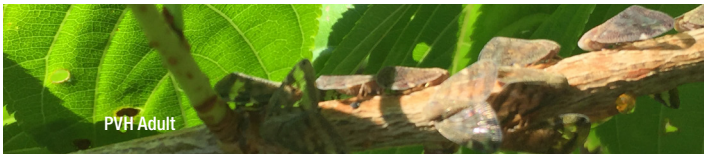


Returns: The reduction in disease presents a significant financial benefit to the grower. To cover the cost of six 3 L/ha TripleX applications from January to March you only need a 4% point reduction of sooty mould incidence on Green or a 2% point reduction on Gold based on 10,000 trays at the forecast 2016/17 OGR of $4.20 for Green and $8.20 for Gold. Ask your sales representative to take you through the returns on using TripleX for your orchard.

Use TripleX as a preventative: Apply at the first sign of adult passionvine hopper

Passionvine hopper is the main cause of sooty mould. TripleX should be applied at the first sign of adult PVH.

Watch for
- PVH nymphs in nearby hedges in December prior to the adults emerging.
- Adult PVH from early January until population numbers decrease due to colder weather conditions at the end of March.



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