

Sabel-X

Next generation
Endophytic
Trichoderma

Vegetables, trees, vines, legumes



Activity

Triggers positive plant gene expression
by living within plant cells

Research

Consistently improves root and crop health
- a culmination of 30 years research

Results

Enhanced root growth
More resilient roots & plants
Improved crop architecture

Savings

Apply once- the earlier the better
Rate - 500g/ha
Legumes - 30g/25kg seed

Ease of Use

Can be used with phosphate fertilisers.

Endophytic Trichoderma - only 1% of all Trichoderma

What they do:

Inoculate the roots and live within the cells. They form a symbiotic relationship with the plant, producing a scintillating array of metabolites that impact the physiology of the whole plant.

Switch on gene pathways to enhance multiple biochemical pathways with positive benefits to the plant.

Highly active - established in 16-48 hours;
only used once in most crops.

Outcome:

More resilient roots and plants, improved crop architecture and improved tolerance to stress resulting in higher yields.

The endophytic Trichoderma in Sabel-X will live as long as the plant, resulting in fewer applications.

Needs 16-48 hours to penetrate plant, after that period phosphites and other systemic fungicides can be used.

Harness the power of nature

Sabel-X advantages

Sabel-X Trichoderma live inside the plant and once established are not negatively impacted by other soil biology, soil pH and other adverse soil conditions. Free living Trichoderma are impacted by soil biology.

Not affected by phosphate fertilisers.

Lower number of applications per crop. Free living Trichoderma require more frequent applications and rely on higher numbers to out compete pathogens.

Micro encapsulation allows tank mixing. Used in-furrow or seed treatment, as a drench or dip, via irrigation and spray.

Helps plant express its potential by inoculating roots, forming a beneficial symbiotic relationship inside plant cells, switching on gene pathways to improve plant health.

Effective for hydroponics because Sabel-X Trichoderma lives within the plant.

How to use

Sabel-X Horticulture contains live micro-encapsulated Trichoderma fungi. Encapsulation allows tank mixing with a range of fertilisers and pesticides.

Application rate : 500g/ha

- In-furrow at planting: minimum volume of 100L water /ha
- Via irrigation; 0-7 days after planting
- Spray; wash into root zone with irrigation
- Drench or dip seedling trays; 200g/100Lwater

Method:

Mix/shake contents of pack before use (if not using whole pack).

Ideally apply within 7 days of planting.

Pre-mix 500g Sabel-X into 15L of non-chlorinated water.

Leave the pre-mix to stand for 20-30 minutes to allow microbial food sources to dissolve. Filter if necessary.

Add Sabel-X to tank last after all other inputs have been diluted.

All mixture to be used on day of mixing.

Legumes

Application rate : 30g Sabel-X Horticulture per 25kg seed.

Method:

Apply as a dry seed treatment prior to planting.

Depending on equipment:

Shake contents of pack across seed in plant box and mix, or

Sprinkle Sabel-X Horticulture onto seed in bag. Treat in one bag increments to ensure uniform coating of seed. Shake bag or mix until uniform coverage is obtained.

Plant treated seed directly after Sabel-X seed treatment has been applied.

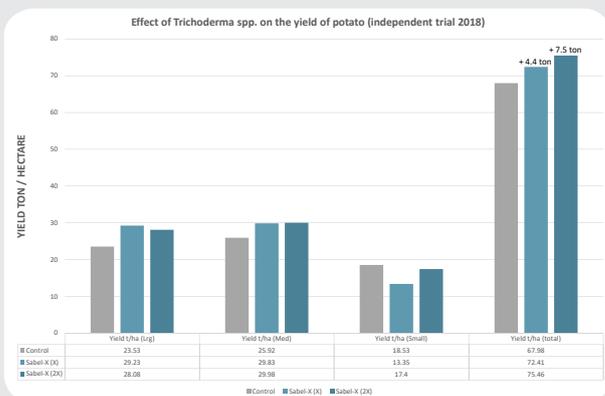
A selection of results



Significant difference in root development drenched in tray as seedling.



Beans - more growth (note less space between plant rows), better establishment. Stem thickness, larger roots.



Potato yields increase with Sabel-X.



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Information & Advice

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Australian Demonstrations



Control **Sabel-X**

Fennel demonstration Victoria 2019



Control



Sabel-X

Trial Site - WA - 2019
Variety - Royal Blue

Treatment	Plant health score	Root health score	Set	Stems	Kg Tops	Kg Spuds	Kg Total Biomass
Control	3	5	46	13	1.7	2.8	4.5
Sabel-X 1 treatment	5	8	52	13	2.5	3.6	6.1



Control **Sabel-X**

Trial Site - WA - June 19 - under severe disease pressure

Control - 64 plants lost

Sabel-X Hort - 29 plants lost

Sabel-X - improved growth



Control



Sabel-X



Control **Sabel-X**



Control **Sabel-X**



Better growth with Sabel-X Hort

Leafy greens - crop under disease and heat pressure - doubled production - Feb 2019 - WA

Program (range of leafy greens)

- Bacillus 1 application - week 1
- Sabel-X Hort - 1 application - second week
- Soil Activator and Soil Enhancer - 5L/ha weekly

Result (spinach)

Prior to Program - achieving yield of 350kg/bed; expectation is 750-800kg/bed

2 weeks after Sabel-X Hort application - 800kg/bed



Result (lettuce)

Prior to Program - Lettuce usually cut once

After program - Regrowth allowed an extra cut.



Spinach - healthy crop - Sabel-X Hort - average 6% increase



Spinach Capel

Spinach

4 trials - Sabel-X Hort only

Yield Increase: 6%