



## Greenhouse & Nursery



## INCREASE ROOT GROWTH FOR SUPERIOR QUALITY OF YOUNG PLANTS

LALRISE® VITA is a plant growth promoting microorganism (PGPM) that is uniquely formulated with the microbe, *Bacillus velezensis*. This bacterium actively enhances root growth and exploration, solubilizes phosphorus, and promotes healthy plant vigor.

### MODES OF ACTION

- Rapidly colonizes plant roots for quick establishment and growth. This enhances nutrient availability to the plant.
- Improves root structure and biomass for great water and nutrient uptake.
- Actively release fixed phosphorus in plant-available forms, making it up to 28% more available to the plant.\*

### ADVANTAGES

- Promotes plant establishment through improved root vigor and nutrient availability.
- Improves growth and quality in young plants.
- Increases crop homogeneity, height, caliper, root mass, winter vigor, flowering, and yields.

### CHARACTERISTICS

#### Active Ingredient

*Bacillus velezensis*

#### Guarantee

> 2 x 10<sup>9</sup> CFU/g

#### Package Size

1 kg (2 lb) bags

#### Storage information

Store in the original packaging in a cool, dry place (< 25°C) for up to 24 months.

**Always read and follow label instructions.**

### RECOMMENDED CROPS



Nursery and Greenhouse  
Seedlings and Transplants

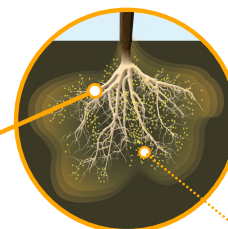
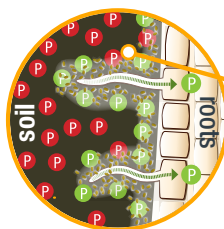
\*Results obtained from various trials carried out over 10 years.

#### ✓ SOLUBILIZES PHOSPHORUS:

**Up to 28% increase**  
of Phosphorus available  
in the rhizosphere\*

**P** Phosphorus available

**P** Phosphorus unavailable



#### ✓ NUTRIENT AVAILABILITY IMPROVES ROOT MASS GROWTH:

**Up to +20%**  
of root biomass\*

Increase in root surface area for  
improved nutrient access

## TRIAL RESULTS: GREENHOUSE

LALRISE VITA promotes root mass growth as seen here with silver maple specimens from a research trial. After 3 months of growth under greenhouse conditions, root balls were washed and measured. The results show a larger, denser root system on the treated trees (left) compared to the untreated control (right).



LALRISE VITA

Control



LALRISE VITA

Control

LALRISE VITA increases tree caliper and height when grown in heavy clay soil conditions as seen here by three silver maple seedlings.

*\*Greenhouse research was done by the University of Toronto*

## TRIAL RESULTS: NURSERY

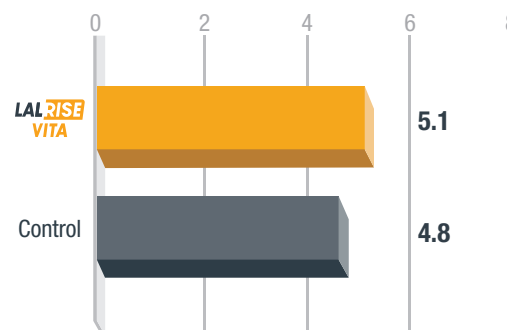
LALRISE VITA promotes plant establishment through improved root vigor and nutrient availability. Black cherry trees grown from seed in seedling trays had their roots washed and dried in order to compare treatments. Those treated with LALRISE VITA (left) had statistically greater dry root mass compared to untreated controls (right) ( $p < 0.05$ ).



LALRISE VITA

Control

## CALIPER AT THE END OF THE GROWING SEASON FOR BLACK CHERRY (mm)



Data showing significantly larger caliper ( $p < 0.05$ ) in black cherry seedlings treated with LALRISE VITA compared to control after 6 months of growth from seed in nursery.

## APPLICATIONS

- Application frequency is generally once per month, repeated for a total of 3 applications, beginning post germination or root flush when white roots are present (see label for more detail).
- Optimal application temperature between 10° - 30°C.
- Apply to moist soil (after rain or irrigation).
- Avoid applications during high temperature conditions and on dry soils.

### About Lallemand Plant Care

For over 100 years, Lallemand has been an expert in yeast and bacteria manufacturing. It is now a global leader in the development, production, and marketing of microorganisms for various industries. Using sound science and know-how, Lallemand Plant Care provides effective microbial-based solutions that deliver agronomic, economic, and sustainable value to growers.