

# Profectus

## Foliar Growth Stimulant



Profectus is a 5 bacillus strain foliar growth stimulant that has been designed to meet the needs of modern agriculture. This powerful product is formulated with a synergistic blend of beneficial microbes, minerals, essential nutrients, and humate to provide maximum benefits to plants. It is an organic biological that alleviates the effects of compaction, increases nutrient uptake, and promotes healthier plant growth.

### **Features and Benefits**

- **Powerful Bacillus Strains:** Profectus contains a carefully selected blend of five powerful bacillus strains, including *Bacillus licheniformis*, *Bacillus subtilis*, *Bacillus pumilus*, *Bacillus megaterium*, and *Bacillus amyloliquefaciens*. These strains work synergistically to solubilize minerals, enhance nutrient uptake, break down organic matter, promote plant growth, and improve soil health.
- **Bacterial soil inoculants** provide a unique function of conditioning the soil by making nutrients in the soil more bioavailable. Bacillus bacteria produce a wide array of extracellular enzymes which can help break down plant waste and nutrients in the soil to more bioavailable forms. Bacillus ability to solubilize many forms of insoluble nutrients and can enhance the uptake of necessary nutrients by increasing the overall level of plant available nutrients in soil.
- **Foliar Growth Stimulant:** Profectus acts as an advanced foliar growth stimulant, accelerating plant growth and increasing productivity. It helps plants grow faster and produce more, maximizing the potential of your crops.
- **Alleviates Compaction and Increases Nutrient Uptake:** By alleviating the effects of compaction, Profectus improves soil structure, allowing roots to penetrate deeper and access nutrients more effectively. This leads to increased nutrient uptake by plants, promoting healthier growth and better yields.
- **Enhances Soil Health:** The beneficial microbes present in Profectus, along with essential nutrients and humic acids, contribute to improved soil health. They stimulate plant growth, enrich soil structure, and promote a favorable environment for beneficial microbial activity.
- **Boosts Energy and Plant Strength:** Profectus provides an extra energy boost to plants through its liquid composition, ensuring they have the fuel they need to grow strong and healthy. This leads to stronger plant structures, enhanced resilience against environmental stressors, and overall improved plant strength.
- **Note:** Please remember to refer to the specific product instructions and recommendations for the accurate and appropriate usage of Profectus in your farming practices.

- *Bacillus amyloliquefaciens* is a bacterium active in the soil root zone. They are considered a growth-promoting rhizobacteria and have the ability to quickly colonize roots.
- Promote growth of roots expands and multiplies.
- Improve soil conditions and nutrient availability.
- *Bacillus licheniformis* can also improve seed germination rate and seedling protection rate, to prevent the genetic disease of the seed itself, improve crop survival rate and promote root growth. And it can also help improve soil aggregate structure, improve soil, improve soil water storage, storage and ground temperature, ease the obstacle of stubble. And promote the decomposition of organic matter in the soil into humus, greatly improve soil fertility.
- Improve fertilizer efficiency.
- Ability to solubilize phosphate and increase iron availability in the soil.
- *Bacillus subtilis* can stimulate plant growth and easily adaptation in various environmental conditions, it's widely used in agriculture. *B. subtilis* can produce and release beneficial natural substances such as auxins, cytokinins, and gibberellins to promote plant growth. *B. subtilis* also can be used bio fertilizer, increase crop growth & yields.
- *Bacillus megaterium* for their enhanced ability to solubilize phosphate and potassium.

## Application Guidelines

- Shake well before use, as settling may occur.
- Profectus can be applied using foliar spraying, drip irrigation, overhead irrigation, or other hydroponic systems.
- Apply Profectus at all stages of the plant's life cycle, including sowing and pre-harvest (flushing) stages, throughout the growing season.
- Rinse drip irrigation lines with fresh water after injecting Profectus.
- For optimal results, use Profectus within 2-4 hours of tank mixing with fertilizers or nutritional solutions.
- Apply Profectus as a foliar growth stimulant to promote healthier plant growth.
- Profectus contains minerals, essential nutrients, humate, and beneficial microbes to enhance nutrient uptake and alleviate the effects of compaction.
- The liquid composition of Profectus includes carbohydrates to provide an extra energy boost to plants and fuel microbes.
- Profectus is an organic biological product suitable for use in organic farming systems.
- Use Profectus as a liquid biological solution containing a synergistic blend of five bacillus strains of bacteria.
- Follow the recommended application rates and frequency mentioned in the product's instructions for the best results.
- Store Profectus in a cool, dry place, away from direct sunlight and extreme temperatures

### 0.5-1.0 mL/Gallon Irrigation Solution

can rise to 2mL/Gallon during the flowering stage and under vigorous growth circumstances (such as CO<sub>2</sub> injection, the middle of the flowering cycle, and strong light levels).

## Microbial Concentration

• <i>Bacillus subtilis</i>	> 2.6 x 10 <sup>7</sup> cfu/mL
• <i>Bacillus amyloliquefaciens</i>	> 2.6 x 10 <sup>7</sup> cfu/mL
• <i>Bacillus megaterium</i>	> 2.6 x 10 <sup>7</sup> cfu/mL
• <i>Bacillus licheniformis</i>	> 2.6 x 10 <sup>7</sup> cfu/mL
• <i>Bacillus pumilis</i>	> 2.6 x 10 <sup>7</sup> cfu/mL
Total bacterial concentration: Greater than	> 1.1 x 10 <sup>8</sup> cfu/mL 500 Billion Per Gallon

## Storage & Handling

- Store Profectus in a cool, dry environment to maintain its quality and effectiveness.
- Keep the product away from sources of heat and fire to prevent any potential hazards.
- Store Profectus in its original packaging or transfer it to an airtight container to preserve its potency.
- RhizaMax B concentrate can be kept for at least 18 months if stored properly in a closed container and under appropriate conditions. Avoid exposing it to high temperatures.