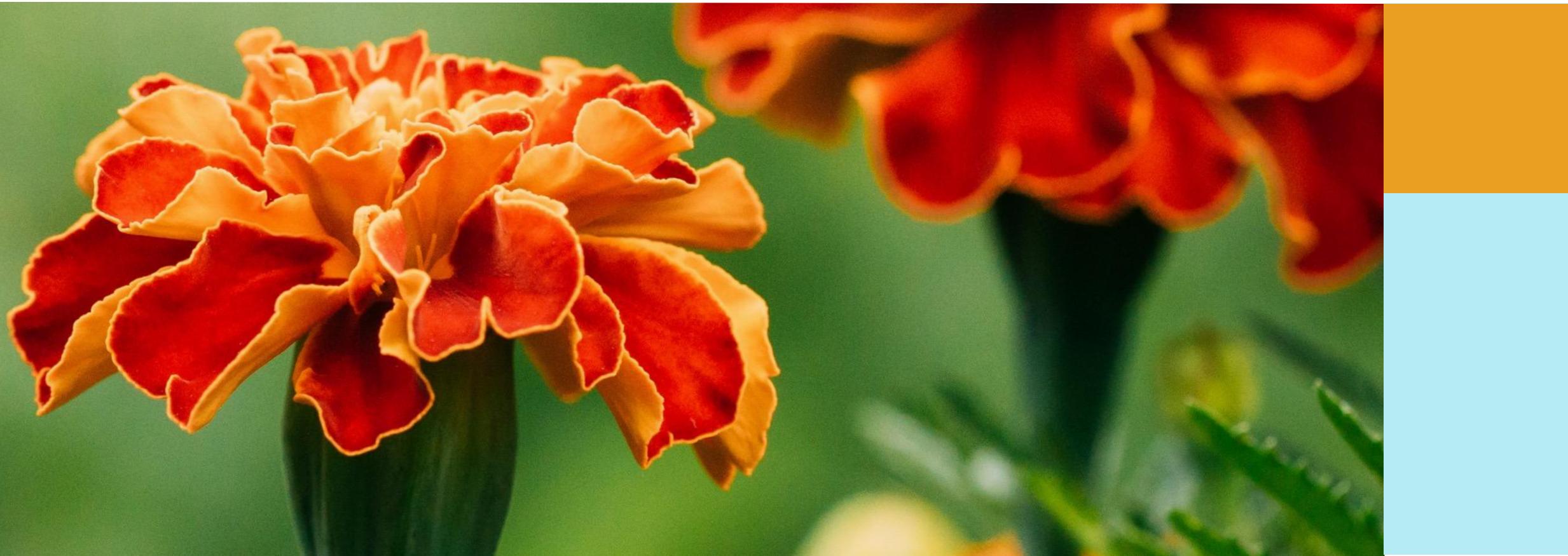




BTOPHYTER

Microbes with a Mission



 BioSafe
Systems



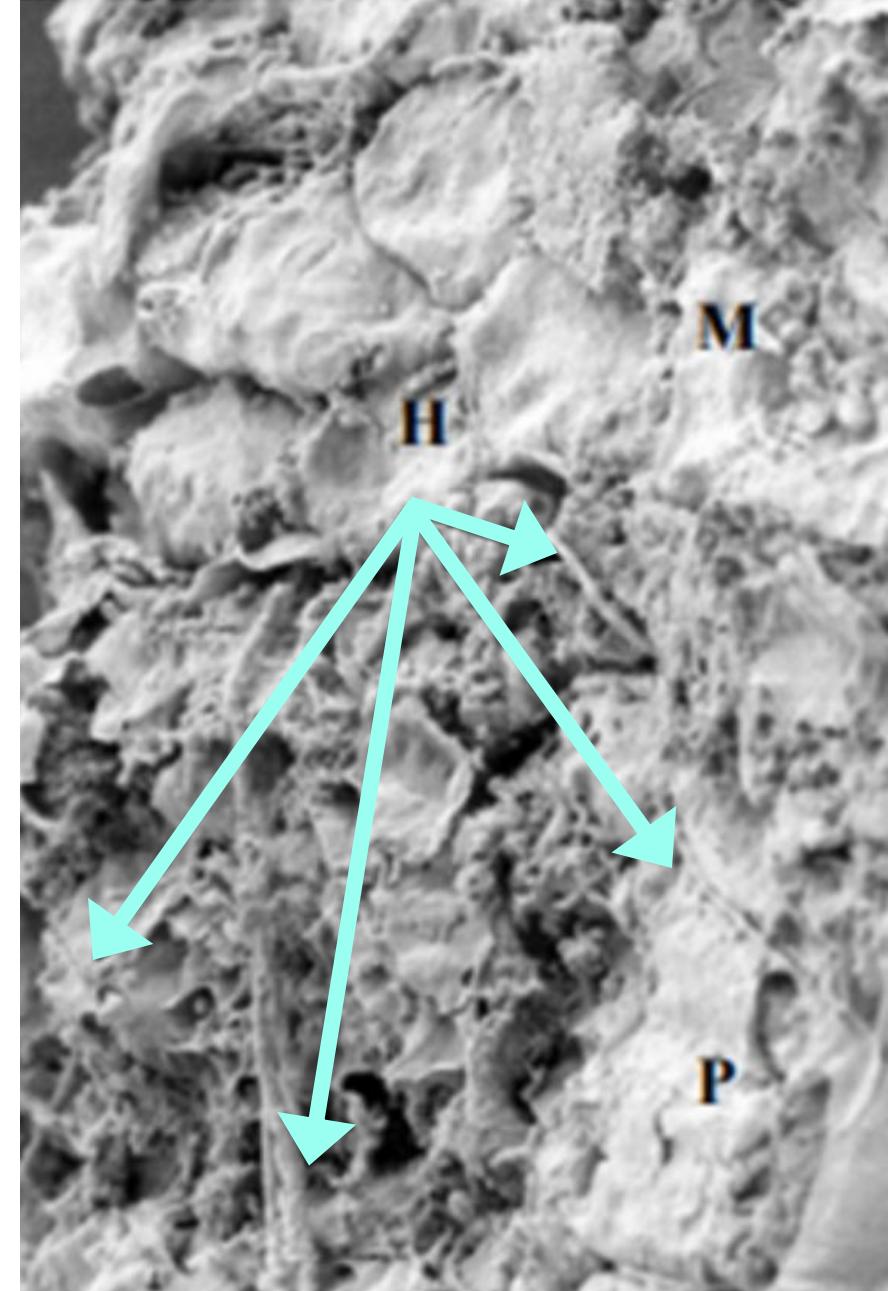
BIOPHYTER

MODE OF ACTION

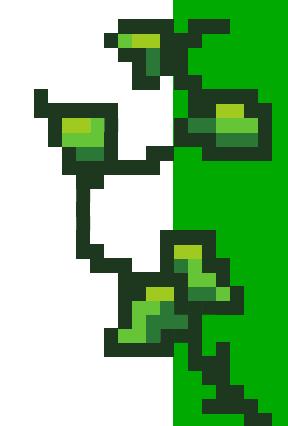
Beauveria bassiana (*Bb*) is an **endophyte** that is absorbed through the rhizosphere and internally colonizes within vascular tissue and intercellular spaces. Once established, *Bb* mimics plant hormone function by releasing metabolites.

WHAT IS AN EDOPHYTE?

An internal non-pathogenic microbe that colonizes within plants to support plant functions.



Griffin, MR 2007.
Beauveria bassiana,
A Cotton Endophyte With Biocontrol
Activity Against Seedling Disease



 BioSafe
Systems



BIOPHYTER

MICROBES WITH A MISSION

Faster Germination

Optimizes Plant Vigor

**Improves Nutrient
Distribution**

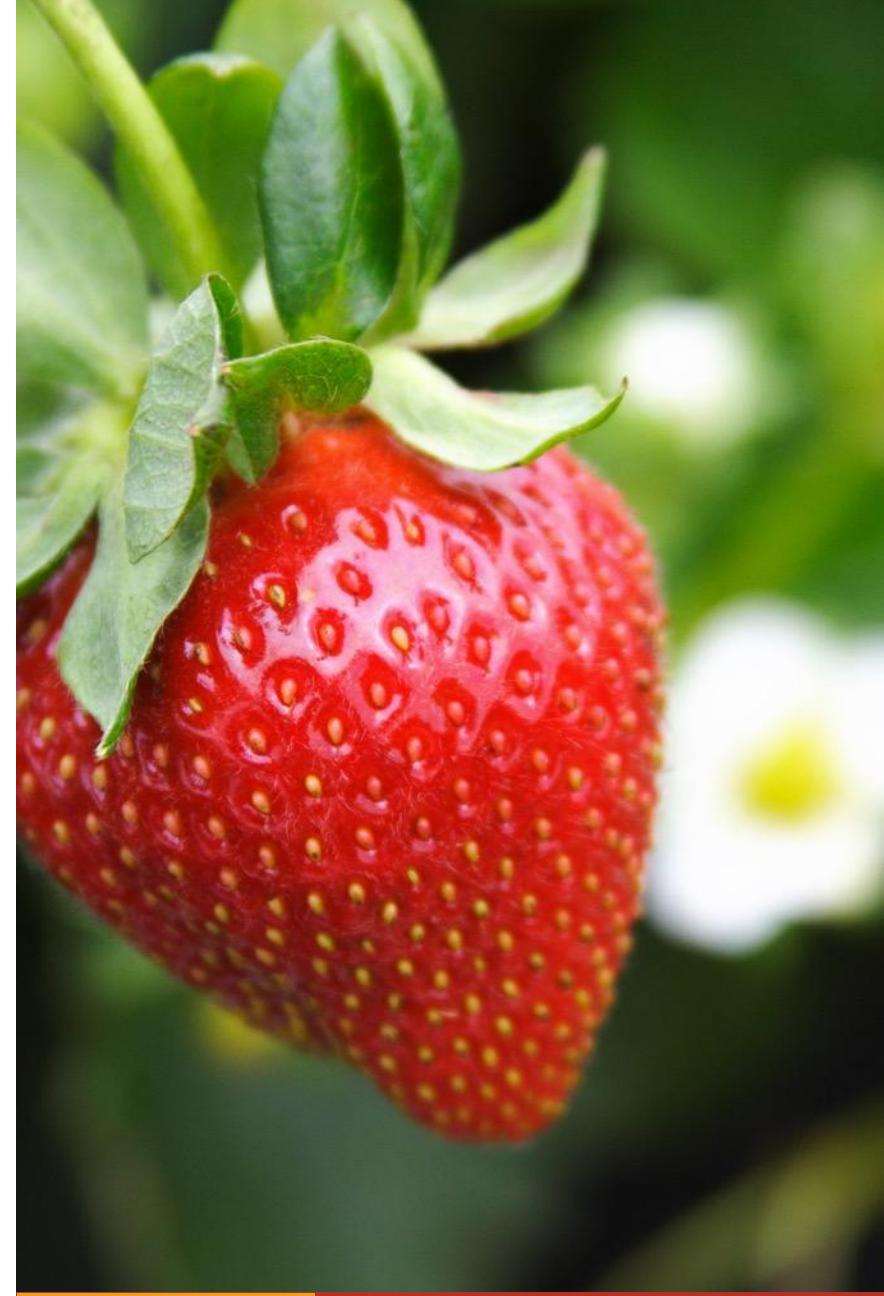
2-Year Shelf Life

For use in drip
irrigation, plant dips,
soil drench,
hydroponics, and foliar
applications.

1 fl. oz. per acre



 **BioSafe**
Systems





BioPhyter supports plant performance and vitality, minimizes abiotic and biotic stressors, and complements pest control solutions.

ROOT TO APEX ACTIVITY

Improves Resource Allocation

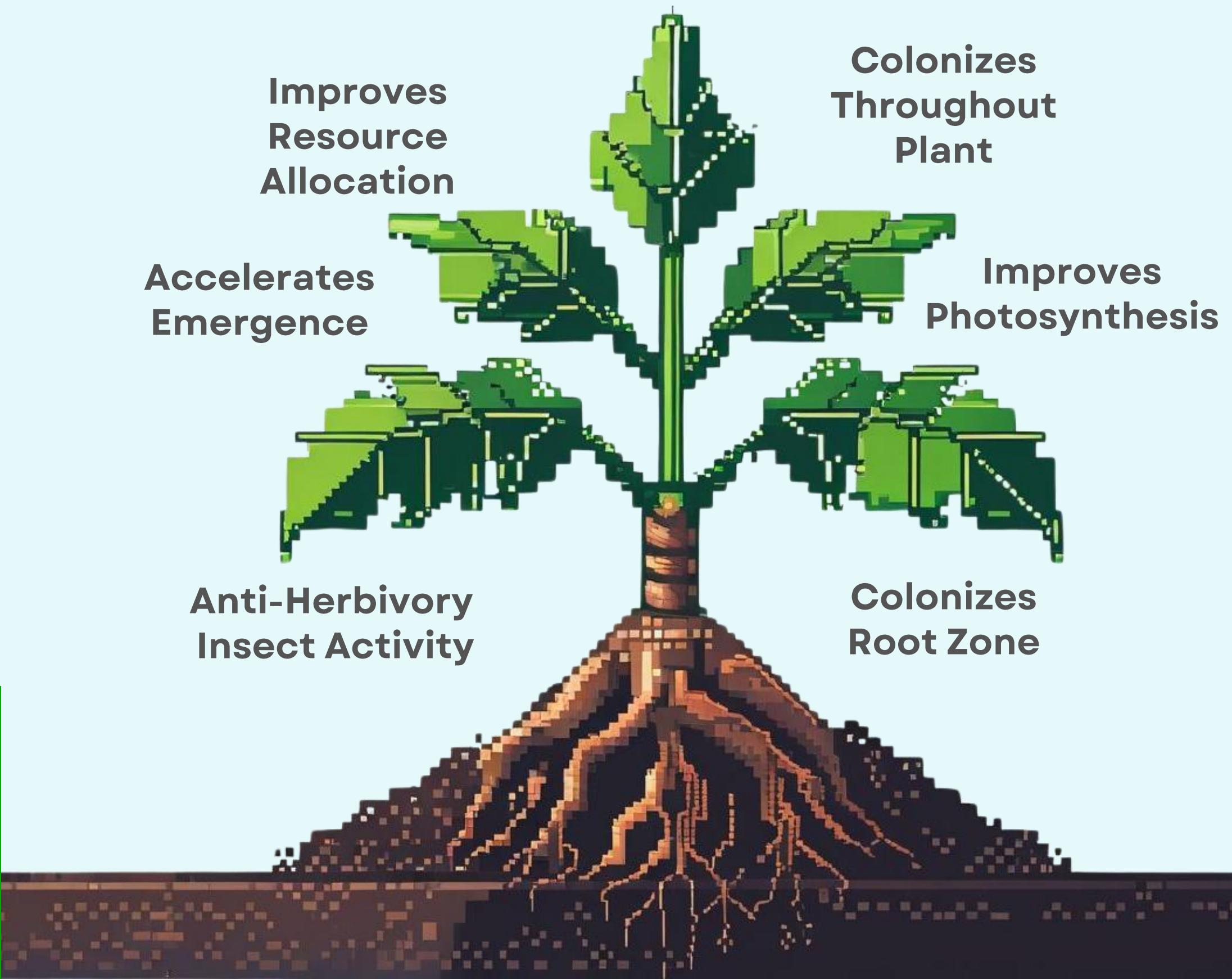
Accelerates Emergence

Anti-Herbivory Insect Activity

Colonizes Throughout Plant

Improves Photosynthesis

Colonizes Root Zone





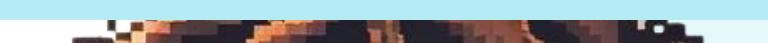
SUPPORTING IPM



Improves Resource Allocation

By internally colonizing plant tissues, Beauveria bassiana reduces the energy plants expend on defense production, freeing up resources for growth and yield.

Accelerates Emergence

 *Seed and root colonization enhances early root development, leading to faster and more uniform seedling emergence.*

Anti-Herbivory Insect Activity

Through endophytic colonization and production of metabolites, this strain of Beauveria bassiana deters feeding and reduces survival of root and foliar pests.

Colonizes Through Plant

This endophytic Beauveria bassiana strain colonizes from root to apex, creating an internal distribution that supports plant functions.

Improves Photosynthesis

By reducing pest and stress-related damage and enhancing antioxidant activity, plants maintain fuller canopies and more efficient photosynthesis.

Colonizes Root Zone

Rapid establishment in the root creates a prolific microbial environment that enhances root growth.



COMPARING B. BASSIANA

Feature	BIOPHYTER	Standard <i>B. bassiana</i>
On-contact activity ONLY	—	+
Endophytic colonization	+	—
Long-lasting internal presence	+	—
Integrates with soil health programs	+	—
Extended application window	+	—



APPLICATION METHODS



**Drip
Irrigation**



**Plant
Dips**



**Soil
Drench**



Hydroponics



**Foliar
Applications**



**Seed
Treatment**



BIOPHYTER

PROPAGATOR TRIAL



*Noticeable plant
growth after only
two applications!*

Crop
Magnolia
'D.D. Blanchard'

Trial Location
Apopka, FL

Rate
1 fl. oz./acre

Application
Timing
1x Weekly



BioSafe
Systems



BIOPHYTER

PROPAGATOR TRIAL



*Noticeable plant
growth after only
two applications!*

Crop
Banana
'Dwarf Cavendish'

Trial Location
Apopka, FL

Rate
1 fl. oz./acre

Application
Timing
1x Weekly





BIOPHYTER

PROPAGATOR TRIAL



*Noticeable plant
growth after only
two applications!*

Crop
Anthurium
'Cobra'

Trial Location
Apopka, FL

Rate
1 fl. oz./acre

Application
Timing
1x Weekly



BioSafe
Systems



CANNABIS TRIAL



Grower reported less insect damage with better growth and color on treated plants



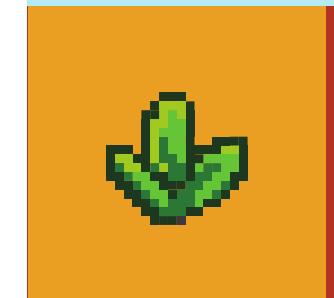
Crop
Cannabis

Trial Location
Denver, CO

Rate

1 fl. oz./
100 gallons of
nutrient solution

Application
Timing
1x Weekly

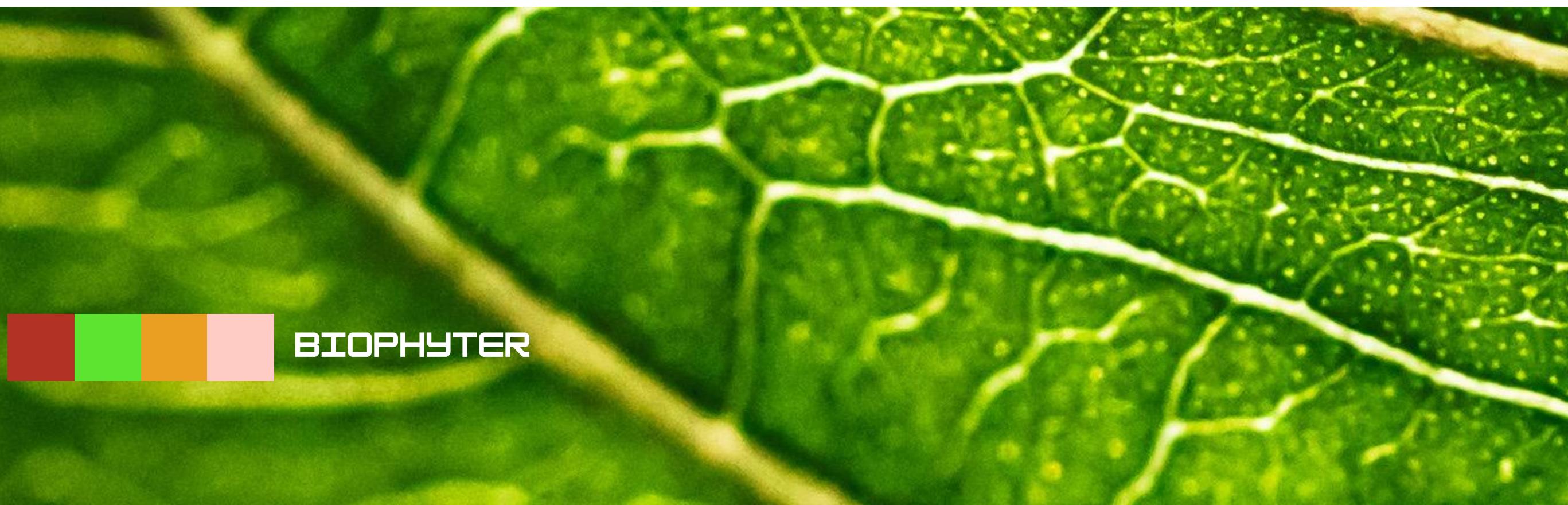


 BioSafe
Systems



LEVEL UP with **BioPhyter + LIVENTIA™**

Level up your IPM program with **BioPhyter** and **LIVENTIA™** microbes to maximize inputs. Together, build a soil-to-apex super-highway, maximizing nutrient movement from the root zone throughout the plant.



BIOPHYTER

 **BioSafe**
Systems



BioPhyter + LIVENTIA™

BioPhyter

A systemic endophytic fungus that colonizes inside plants, improving nutrient use and boosting overall plant functions.



SELECT YOUR COMPANION

1

LIVENTIA SOS

Hydroponics and Leafy Greens

Enhances nutrient availability + root health

At transplant

2

LIVENTIA SOIL PRO

Tree and Nursery Crops

Improves plant stress tolerance and the soil microbiome

At planting through finish

3

LIVENTIA SSB

Indoor-Grown Crops

Cycles nutrients and boosts absorption

All stages of plant development