



MetaGrow™ BiomeSTARTER Transplant Dip Microbe Inoculant

MetaGrow™ BiomeSTARTER contains large populations of 4 species of Endo-Mycorrhizae, 4 selected Bacillus species, 2 selected Pseudomonas species, and 1 Trichoderma species in a dry wettable powder. The powder microbe carrier is comprised of microbe food, vitamins and enzymes and other selected compounds to enhance root system colonization of these beneficial microbes, reduce transplant shock and to promote plant health and vigor.

Endo-Mycorrhizae colonize the roots and act as extensions to the root system of the plant, picking up nutrients and water. Mycorrhizae are 200 times smaller than root hairs so the myco filaments can pick up water and nutrients from soil interstitial spaces that root hairs cannot reach. A root system colonized with Myco can have 100 times the surface area of an uncolonized plant and is therefore more efficient at intercepting and utilizing soil water.

Bacillus and Pseudomonas species are early colonizers in disturbed or low population microbial communities and they pave the way for colonization other species (e.g. Mycorrhizae), build food web robustness, and begin restoring bacterial population diversity.

Trichoderma augment and rebuild the fungal component of the microbial community and they naturally break down toxins produced by some pathogens and actively collect nutrients to supply to the plant. A healthy and balanced fungal population in the soil naturally reduces plant stress. Reduced plant stress and increased plant vigor makes plants more resilient to moisture stress.

Other selected compounds in **MetaGrow™ BiomeSTARTER** promote buildup of plant secretions around the roots to further protect the roots from drought, heat, cold and salt stress.

Plant Stress Reduction and Water Use Efficiency Benefits include:

- Reduced transplant shock,
- Increased water and nutrient uptake efficiency from expanded root system, and
- Increased stress tolerance from increased plant vigor.

Use **MetaGrow™ BiomeSTARTER** with **MetaGrow™ ST** and water at soil preparation or transplant. The rate ratio is 1 ounce **BiomeSTARTER**, 1 quart **MetaGrow ST**, and 1 gallon water. **BiomeSTARTER** clears a 100 mesh (149 micron) filter so it is compatible with most irrigation systems.