

# MICROBE REMEDY

## FEATURES & BENEFITS

**MICROBE REMEDY – contains 64 strains with over 1.5 billion CFU's per gram**

- **Increases nutrition entering the roots**  
Grows larger healthier roots with more fine root hairs
- **Contains Phosphorous solubilizing & Mineralizing Bacteria-Fungi**  
Breaks apart locked up Phosphorous, Calcium, Magnesium, Sulfur, Manganese, Iron, zinc, boron and molybdenum making them all plant available
- **Contains Plant Growth promoting Rhizo-Bacteria**  
Decomposes organic matter and Pesticide residues – Increases Stress tolerance  
Produces natural plant growth hormones like;  
Auxins – stimulates root formation and root architecture  
Cytokinins – controls cell division in roots and shoots, increases resistance to drought – enhances Chlorophyll synthesis  
Giberillans – control cell elongation, cell division, cell differentiation & stress reduction
- **Improve soil structure**  
Rhizosphere bacteria produce a glue-like substance, (polysaccharides).  
This biologically induced process improve the soil structure over time, increasing porosity and water infiltration as well as the water holding capacity of the soil matrix
- **Increases stress tolerance to environmental extremes like heat, cold, drought and foot traffic**
- **During Abiotic Stress, (like heat stress) plants produce too much Ethylene which causes the plant to age quickly – some of the microbes in Microbe Remedy produce enzymes which block the excess Ethylene production bringing the plant out of Abiotic Stress**
- **Helps prevent Nitrogen leaching**  
Rhizosphere bacteria will incorporate this free nitrogen into their bodies utilizing it as a food source. When they are consumed the Nitrogen becomes plant available

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- Contains Nitrogen Fixing Microbes
  - Pulls Nitrogen right out of the atmosphere and converts it to ammonia for plant consumption – can reduce Nitrogen Fertilizer applications
- Aerate the soil by adding bacteria and fungi.
  - The bacteria produce polysaccharides that promote microaggregates of soil. The fungi then wrap their hyphae around the microaggregates to create macroaggregates. Soils that are rich in these macroaggregates (soil complex formed by bacteria-fungi interaction) are porous and don't require aeration.
- Drought and Salinity Tolerance
  - Select beneficial microbes enhance a plants ability to maintain stability when exposed to drought conditions and high salt levels. This process helps to prevent abiotic stress.
- Produce Enzymes Decompose Organic Matter
  - Material like Chitin and Lignin (Chitin is rich in nitrogen, calcium, magnesium and other vital minerals – it is what makes up the hard shell of insects, crabs and lobsters – plants use it to form Chlorophyll) (Lignin is one of the main components of the plant cell wall. Trees would topple over without Lignin)
- Improves efficiencies of applied fertilizers
- Contains Extracellular Enzyme producing Bacteria-Fungi
  - Extracellular Enzymes promote the decomposition, transformation and cycling of nutrients in the soil profile

