

## Green Merge Seed Inoculant Merge

GreenMerge is a seed-applied inoculant derived from natural products designed to stimulate seed germination, increase root and biological biomass in the soil, and improve soil structure.

OMRI status has been applied for and is pending.

## **GreenMerge Ingredients**

**Elevated Fungi** is an extract from arthropod castings which makes this a uniquely fungally dominated compost. This product contains more than 90 different beneficial fungal and bacterial species in a high fungal to bacteria ratio.

Surge is a concentrated microbial inoculant that provides diverse beneficial microbes for increased seed germination and early root and seedling vigor. Multiple strains of fungal and bacterial species along with compost extracts, fish protein hydrolysate and seaweed make this a product that promotes root and shoot growth and increases plant stress tolerance.

Humic Acid is a natural soil conditioner that acts as an organic chelator and microbial stimulator that enhances the plant's ability to take in nutrients and improve soil structure. The molecules of humic acid attach to mineral ions like claws, helping prevent the minerals from being locked up in the soil.

**Fulvic Acid** stays dissolved in solution and has smaller particles than humic acid that are better able to penetrate through tough cell walls and mitochondria, increasing the absorption of nutrients and trace minerals.

**InGrained Trace Mineral** provides bioavailable forms of nitrogen, calcium, magnesium, boron, copper, iron, manganese and zinc directly to plants and roots.

Chitosan LMW is the extracted derivative of chitin which occurs naturally in crustacean shells and fungal cell walls and is one of nature's most powerful polymer substances. Chitosan has been shown to be effective against seedborne pathogens when applied as seed treatment as it can form physical film barriers around the seed surface, and it can transport other beneficial compounds that can be added to seed treatments. Chitosan behaves as a resistance elicitor triggering both local and systemic plant defense responses even when applied to the seeds through the production of chitinase that fights off attacks from both insects and fungi.

**Exceed SAR Plant Defense Booster**® is nanoparticle sized chitosan that triggers a defense response in the plant that leads to the formation of bio-chemical barriers against pathogens and disease.

**SEA-CROP®** is composed of organic matter and minerals derived from pristine seawater. Unlike other sea minerals, **SEA-CROP®** has never been dried or subjected to heat as this can destroy organic compounds.

**Soluble Seaweed Solution** contains 70 trace minerals and the plant sugar mannitol, which stimulates microbial growth to reduce symptoms of nematode stress.