



# **Supplement Products**

**SA-1000** is the next generation in Humic, Fulvic Acid, and Organic Bio-Polymer Technology. **SA-1000** is an all new, scientifically engineered blend of Ionic and Non-Ionic Humic/Fulvic/Organic Bio-Polymers fortified with Bio-available Calcium and Urea. **SA-1000** is specifically designed for the correction of High Sodium, Bicarbonates and Metals in both irrigation water and soil. This dual action product provides a complete management tool for the correction of poor water quality and its effects on your soil. With other available products on the market, you must choose to treat the water with one product and the soil with another while both create potential residual affects to your turf and soil. **SA-1000** is an all natural solution that will neutralize the sodium and bicarbonate issues in both the water and the soil at a fraction of the cost.

#### **Product Benefits:**

- No negative effects of acid or chemical based solutions.
- Immediate solubility and activity compared to gypsum applications.
- Converts bicarbonates into valuable organic matter, not carbon dioxide.
- Cost effective low dose rates for either injection or mechanical applications.
- Can be applied with most nutrient and chemical applications.
- Not just a pH adjustment, it's a complete solution.
- SA-1000 binds sodium and allows it to safely leach away
- SA-1000 reduces / eliminates salts, bicarbonates, pesticides, and chemicals; corrects actual and potential toxicity in the soil.

## **SA-1000**

#### **Guaranteed Analysis**

Total Nitrogen (N) Urea Nitrogen	
Available Phosphorus (P2O5) Available Potash (K2O)	
Non-Ionic Humic Acid  Derived from Urea and Brown Coal	5%

**Huma-MnFe** is a complementary combination of manganese and iron. Manganese and iron provide a synergistic benefit during photosynthesis by providing the essential energy building blocks necessary to produce vibrant, natural color and systemic health in plants. In regions subjected to salt-water breezes, manganese deficiencies are common, especially in the presence of salt based fertilizers and high sodium irrigation water. Agronomy experts recognize that the concentration of symbiotic nutrient, such as manganese and iron, provide a reliable guide to the nutritional health and proper color of plants. Manganese is essential in certain nitrogen conversions, in plants as well as microorganisms. Additionally, manganese functions in many plant enzyme systems as a bridge connecting the enzyme with the substrate, and supports the enzyme process for nitrate conversions.

### **HUMA-MnFe**

#### **Guaranteed Analysis**

Iron (Fe)5%
5% Complexed Iron
Manganese (Mn)5%
5% Complexed Manganese
Derived from Iron Glucoheptonate and Manganese Glucoheptonate

ALSO CONTAINS NONPLANT FOOD INGREDIENTS

1% Humic Acid Derived from Brown Coal

**Cal 86 6-o-o** is bio-available calcium that is essential for the formation, development and strength of the plants cell walls. Additionally, calcium can assist in reducing the harmful effects of salt in soils, and in balancing the stable organic environment, thus increasing nutrient storage and reducing the effects of soil compaction. **Cal 86 6-o-o** not only contains complexed calcium, it also contains calcium nitrate nitrogen. Calcium nitrate provides a valuable nitrogen alternative that contributes to better nutrient conversion and is known for increasing turf cell strength and increased shelf life of harvested fruits and vegetables. This dynamic supplement combination assists in natural soil compaction relief, increased phosphorus availability, increased conversion of lime and resulting pH reduction in soils, and the reduction of sodium levels in soil.

#### Cal 86 6-o-o

#### **Guaranteed Analysis**

Derived from Calcium Glucoheptonate and Calcium Nitrate

#### ALSO CONTAINS NONPLANT FOOD INGREDIENTS

1% Humic Acid Derived from Brown Coal



Huma Boost, with Carboxx<sup>TM</sup>, is a natural, super-saturated, highly soluble, Activated Humic Acid from a unique deposit of broad spectrum humates and is the cornerstone for all 3 Tier Products. 3 Tier's advanced humic technology achieves maximum performance and value through the stringent selection of the highest-grade materials and proprietary processing techniques. Huma Boost consists of complex chemical and physical properties that give it the potential to bind contaminates and make them more insoluble, or unavailable while playing an important role in the transfer of nutrients and minerals through the addition of organic structure. Huma Boost is a unique soil amendment or an additive for all herbicides, insecticides, fungicides and surfactants and is designed to decrease the amount of chemicals required. Huma Boost can increase the rate of penetration and effectiveness of most chemicals while protecting the non-plant target. Huma Boost is also an effective tool for soil regeneration, increased nutrient delivery, and increased organic structure. Huma Boost is OMRI Listed.

# HUMA-BOOST Soil Conditioner

#### Son Conditioner

ALSO CONTAINS NONPLANT FOOD INGREDIENTS	5
Humic Acid	4%
Fulvic Acid	32%

Derived from Brown Coal

**Huma-Boost BC** contains the same natural, super-saturated, highly soluble, Activated Humic Acid from a unique deposit of broad spectrum humates with our new proprietary **Bio-Cat Booster**. **Bio-Cat Booster** is a natural, ultra concentrated, non-bacterial product consisting of L-amino acids, coenzymes, and other proteins. Blended with the enzymes is a natural package of five different surface tension modifiers and is fortified with micro-nutrients to enhance the natural enzyme and microbial activity in soils. This unique combination works in harmony with indigenous micro-organisms in the soil to act as a natural biocatalyst. This biocatalyst reaction helps free up nutrients in the soil enabling them to be more readily bio-available to the plant allowing it to become healthier with improved root growth.

# **HUMA-BOOST BC**

Soil Conditioner

#### ALSO CONTAINS NONPLANT FOOD INGREDIENTS

Humic Acid	4%
Fulvic Acid	32%
Amino Acid Complex	7%

Derived from Brown Coal and Proprietary Non Bacterial Amino Acid Formulation

# **General Application Guidelines:**

<u>Huma-MnFe & Cal 86</u>: Apply 64 ounces to 2 gallon per acre in a minimum of 10 gallons of water. <u>Both</u> can be safely tank mixed with all 3 Tier Products. DO NOT APPLY Cal 86 WITH OTHER MANUFACTURED PHOSPHORUS PRODUCTS. Apply as needed or according to specific turf or plant protocols.

<u>Huma-Boost & Huma-Boost BC:</u> For improved soil structure, apply 64 ounces to 2 gallon per acre in a minimum of 10 gallons of water. <u>Both</u> can be safely tank mixed with all 3 Tier Products. As a Chemical or Conventional Fertilizer Additive add 24 to 32 ounces per acre in a minimum of 20 gallons of solution. <u>Huma-Boost & Huma-Boost BC</u> can be tank mixed with most applications. Apply as needed.

<u>SA-1000:</u> <u>Injection Applications:</u> Apply @ 10 - 32 ounces (295ml – 1 liter) per acre per month. Product can be diluted and/or added to other fertilizer. For best results, inject small quantities every irrigation cycle.

**Soil Applications:** Apply @ 32 oz. to 5 gallons (1 -19 liters) per acre every 2 to 4 weeks for correction of soils in a minimum of 30 to 100 gallons of water. **SA-1000** can be safely applied with all 3 Tier products.

Jar testing compatibility with non-3 Tier products is recommended prior to mixing and applications.

For maximum performance, apply all 3 Tier Specialty Products in combination with 3 Tier Fertility & Microbial Products. Contact your local 3 Tier Technologies representative for specific programs and convenient specialty pre-mixes that will meet your special needs and expectations.

