

# Mag Vantage™

## Magnesium Complex

EARTHWORKS NATURAL ORGANIC PRODUCTS, INC.

**Mag Vantage** is a carbon based magnesium complex designed to help build chlorophyll development in the plant to improve color and vigor. It is formulated using multiple forms of magnesium to maximize uptake in all kinds of soil and environmental conditions. Carbon ingredients improve nutrient uptake and soil conditions. **Mag Vantage** can help any plant in any environment be stronger and recover more quickly while improving color and vigor.

Magnesium is the "Photosynthesis Element" and is essential in providing long lasting color and carbohydrate synthesis in the plant. When magnesium is not readily mobile in the soil the plant's ability to produce needed energy, essential in enhancing nutrient uptake in the plant and the basic green color in turf, is significantly reduced. This leads to plant stress, potential disease attack, and over all discoloration of quality turf and landscape material. In heavier soils magnesium can be high but mobility can be very restricted, in sand based soils magnesium mobility is always a concern. By building a product with multiple forms of magnesium we improve mobility in all soil and environment conditions; and by combining them with multiple forms of carbon, and other co-factors needed for uptake, we insure significantly higher mobility.

### The EarthWorks Process

Manufacturing of the EarthWorks liquid products starts first with excellent water. We use only reverse osmosis water so that no minerals can chemically react with the ingredients in our formulas. The result is water that is absent of total dissolved solids, alkalinity, carbonates and conductivity. The water is then further treated so that the water molecule can be expanded as far as possible to allow it to become fully saturated with the diversity of ingredients that go into the **Mag Vantage** formula. The recipe is then loaded through a process called "stacking", a proper sequence of mixing that creates maximum saturation of the water by the nutrients, to allow for ingredient compatibility. Finally, the products are micro-screened in order to create a non-plugging filtrate for trouble free applications.

The EarthWorks Liquid Organics are the most complex formulas available. They are developed to work synergistically with each other and with other nutrient based products. Applied on a "small but frequent" basis, **Mag Vantage** will become a staple in any turf management program.

**EarthWorks**   
NATURAL ORGANIC PRODUCTS

800-732-8873

[soilfirst.com](http://soilfirst.com)

LIQUID  
ORGANICS

*Supports*

*Photosynthesis*

*Carbon Based*

*Improves Color*

*Trace Elements*

*Reduces*

*Plant Stress*

*3 Forms of*

*Magnesium*



# Mag Vantage™ Magnesium Complex

Magnesium is the photosynthesis element and when deficient in the plant, turf color and vigor is weakened. It is very common to see magnesium deficiencies in sand based soils or in soils that have been heavily top dressed with sand. It is also common to see solubility issues with magnesium even when there are high levels of magnesium in the soil profile. Mag Vantage is a carbon based magnesium supplement using multiple forms of magnesium to maximize uptake in the plant, and carbon that feeds microbes to further assure that plant uptake is prioritized. Mag Vantage is one of the most dynamic magnesium products available. Its complex formula of co-factors assure that the magnesium gets to where it will provide the most help. Color and vigor will improve with Mag Vantage and with the increased photosynthetic activity the plant can provide more available carbohydrates to the root zone to feed microbes and stimulate roots and the whole plant system.

**3 Forms of Magnesium** – Magnesium hydroxide, Epsom Salts, Magnesium chloride, multiple forms assures maximum uptake in all soil and environmental conditions.

**Black Strap Molasses** – An excellent source of invert sugars, trace elements such as iron, copper, zinc and sulfur. A powerful carbon source for soil microbes to help increase nutrient mobility.

**Humic Acid** – A long chained carbon of alkaline extracted geologically concentrated humus, rich in organic acids that stimulate beneficial soil fungi. Acts as a chelating agent for micro-nutrients and a sequestering agent to help fracture chemical bonds held tight improving mobility of phosphorous, calcium and iron.

**Fulvic Acid** - A long chained carbon of an acid extracted geologically concentrated humus that becomes available over a wide range of pH in the soil. Works electrostatically as a chelating agent helping to stabilize and hold nutrients in the root zone. A sustainable food source for beneficial microbes.

**Sea Water Extracts** - This product uses a proprietary process to remove sodium from ocean water, which has shown to provide all 90 trace elements common in the ocean as well as all the biological residues that are affecting both plant health and microbial stimulation.

**Worm Tea Solution** - Red worm tea compost is extracted and use as a water substitute to provide a powerful food source to jump start biological activity in the root zone. It provides a significant amount of both macro and micro nutrients in a solution that increases their mobility factors.

**Kelp** – A powerful heat stress reducing agent loaded with as many as 60 trace elements. It is a great source of short chained carbon to help jump start microbial activity in the root zone.

**Fish Meal** – A medium chained carbon source rich in both macro and micro nutrients providing a sustainable food source that can grow strong microbial populations in the root zone.

**EW Mineral Complex** – Potassium and trace elements like manganese, zinc and copper are added in larger percentages to assure that all the co-factors needed for efficient photosynthesis allowing for better color and more carbohydrate production needed for both the plant and the root zone.

**Surfactants** – Multiple forms of surfactants are used to help the product break through the soil surface and works as a spreader sticker to help increase foliar uptake.

## APPLICATION RATES & PROGRAMS:

**Greens & Tees** – 5 oz. per 1000 sq. ft. every two weeks. Split applications to every week on light sandy soils. Increase rates to 8-10 oz. per 1000 sq. ft. on sites with poor vigor and color or under times of limited sunlight.

**Fairways** – 1 gallon per acre once per month or as needed.

**Sports Fields** – 1.5 gallons per acre once per month or as needed.

**Ornamentals** – 4 oz. per 2 gallons of water drenched into the soil.

**Mag Vantage** can be tank mixed with most turf products.  
A bench test is always recommended

*The EarthWorks Liquid Organic  
Carbon Based Products are the  
key to success when building a  
healthy environment.*

