

# Protein Plus™

## 14-2-5 with Traces

EARTHWORKS NATURAL ORGANIC PRODUCTS, INC.

### **A NEW CONCEPT IN PLANT NUTRITION LASTING COLOR WITHOUT THE PLANT STRESS**

**Protein Plus** is a new concept in plant nutrition. In order to provide color, vigor, recovery and plant health, the plant needs ALL the elements required to build a protein such as chlorophyll. Plants build amino acids by combining all the essential nutrients not just nitrogen. These amino acids combine to create proteins which are the life force of the plant. Most liquid fertilizer products are often very limited by providing mostly nitrogen and iron which can create a quick color response, but at what price. **Protein Plus** combines 5 forms of nitrogen for maximum efficiency along with an entire spectrum of essential macro and micro nutrients and other important co-factors that are essential in the construction of a complete protein within the plant. **Protein Plus** uses over 60 trace elements, vitamins, minerals, carbon sources and other cofactors to help the plant quickly and efficiently build chlorophyll before pathogens have the opportunity to consume the free nitrogen and proliferate.

#### **THE EARTHWORKS PROCESS**

Manufacturing of the liquids involves first the availability of excellent water. We begin by using a proprietary catalyst that changes the charge of the water to allow for a completely stabilized product. This process allows for an aqueous medium that can be fully saturated with the large amount of ingredients that go into the **Protein Plus** formula. The recipe is then loaded through a process called "stacking", which simply means using a formula that allows for ingredient compatibility by following a proper sequence of mixing, creating maximum saturation of the water by these nutrients. 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 and are developed to work synergistically with each other and with other nutrient based products. Used on a "small but frequent" basis **Protein Plus** will become a staple in any turf management program.

**EarthWorks™**  
Natural Organic Products

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Available only in 2 x 2.5 cases.

LIQUID  
ORGANICS

Complete  
Nutrition

5 Nitrogen  
Sources

Trace Nutrients

Microbial  
Stimulants

Humic Acids

Proprietary  
Chelates

# Protein Plus™ 14-2-5 with Traces

**Protein Plus** helps produce rich color and vigor without all the salts and plant stress associated with conventional nitrogen based liquid fertilizers. Real plant nutrition includes a host of nutrients including a long list of trace elements and other co-factors that build plant proteins. **Protein Plus** is a liquid organic base blended fertilizer that will help to reduce plant stress while providing all the color and vigor that is critical to the turf manager. Multiple forms of nitrogen allow the plant a more efficient utilization of this important protein builder, but it is much more than a nitrogen product. All of the ingredients included in this formula are specifically designed to build chlorophyll, the protein associated with plant color, quickly and efficiently so that little free nitrogen is left behind in the plant cell. It's this "free nitrogen" that becomes the food source for pathogenic micro-organisms. **Protein Plus** will not only help build color, vigor and plant strength, but will also help to feed beneficial microbes in the soil that will further build the environment necessary for good plant health.

The following ingredients make up **Protein Plus**:

**Five Forms of Nitrogen:** Calcium nitrate, Potassium nitrate, Ammonium sulfate, Urea and Ammonium phosphate. The use of a unique chelation process and the combination of these multiple forms of nitrogen and other elements is what makes this product work. Singular forms of nitrogen fertilizer do not provide the plant with all the basic building blocks needed for complete plant nutrition and can lead to plant stress.

**Potassium Phosphate:** A low salt index source of potassium to help with sugar transfer, stalk strength, and disease resistance.

**Humic and Fulvic Acids:** Alkaline extracts of geologically concentrated humus, rich in organic acids that stimulate root growth and open tight soils. They also act as chelating agents for micro-nutrients and perform as sequestering agents to help fracture bonds between nutrients.

**North Atlantic Kelp Extract:** Rich in over 60 minerals, 21 Amino Acids and 12 Vitamins, *ascophyllum nodosum* as it botanically is called, is also a rich source of plant gibberellins and cytokinins which act as plant growth regulators.

**Complex carbohydrates:** Dextrose and fructose are used as short chained carbons that are extremely available forms of energy for micro-organisms, as well as an excellent source of trace minerals such as iron, copper and zinc, as well as sulfur.

**Trace Elements:** Iron, Zinc, Manganese, Copper, Boron and Molybdenum are all major ingredients in this formula. Other trace elements which are needed in much smaller amounts are drawn from other formula ingredients.

**RL37:** Catalyst altered water is the only water used in this formula, and acts as a clustering agent to make it easier to penetrate the soil, as well as accept the volume of ingredients in a stabilized form insuring a product that is easy to tank mix.

## APPLICATION RATES & PROGRAMS:

**Cool Season Grasses** - Apply a 6 oz. rate per 1000 sq. ft. with two gallons of water every two weeks. Increase frequency or rate to an appropriate level to achieve fertility goals.

**Warm Season Grasses** - 6-8 oz. per 1000 sq. ft. with two gallons of water every week or biweekly as needed to achieve fertility goals.

**Sport Fields** - 6-8 oz. per 1000 sq. ft. with two gallons of water every two weeks or as needed to reach desired plant growth and vigor.

***Protein Plus** can be mixed with all EarthWorks products and many common pesticide and fertilizers, but a compatibility bench test is recommended.*

*8 oz. per 1000 provides 1/10th of a pound of nitrogen*

### SHAKE WELL BEFORE USE

Store in cool dry place and do not allow product to freeze.

*The EarthWorks Liquid Organics  
are the key to success when  
building a healthy environment.*

**EarthWorks™**  
Natural Organic Products