

# Potent-Sea/Plus<sup>TM</sup>

## Bio-Stimulant

EARTHWORKS NATURAL ORGANIC PRODUCTS, INC.

**Potent-Sea Plus** has always been one of the most powerful microbial and plant bio-stimulants available. Initially formulated in 1992 using fish meal, kelp extract and a humic acid blend, this product was recently reformulated incorporating higher quality raw materials and additional biologicals to improve its ability to promote microbial activity. The combination of fish and kelp extract is a complete food source for microbes, but can also help reduce heat stress and add needed enzymes and amino acids to the soil plant complex. **Potent-Sea Plus** will help to mobilize soil nutrients, build better roots, and help reduce plant stress, leading to less pest problems.

### The EarthWorks Process

Manufacturing of the liquids involves first the availability of excellent water. We begin by softening the water, followed by deionization and finally reverse osmosis. The result is water that is absent of total dissolved solids, alkalinity, carbonates and conductivity. This allows for an aqueous medium that can be fully saturated with the diversity of ingredients that go into the **Potent-Sea 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. They are developed to work synergistically with each other and with other nutrient based products. Used on a "small but frequent" basis, **Potent-Sea Plus** will become a staple in any turf management program.

**EarthWorks<sup>TM</sup>**  
Natural Organic Products

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Fax: 610-250-7840  
soilfirst.com

Available in a 2 x 2.5 box, 30 and 55 gallon drums.

## LIQUID ORGANICS

*Fish Meal*

*Kelp Extracts*

*Humic Acids*

*Vitamin Premix*

*Lauryl Sulfate*

*Carbohydrates*

*Bio-Net*

# Potent-Sea/Plus™ *Bio-Stimulant*

**Potent-Sea Plus** is a complete "food" source for soil microbes. Soil biology is severely affected by the physical pressures of today's turf industry. **Potent-Sea Plus** provides both the soil and the plant with that extra boost needed to combat these pressures. The rich combination of available and sustainable food sources keeps soil microbes active and healthy. This in turn will help to provide the plant with an available supply of soil nutrients. The raw materials found in **Potent-Sea Plus** can provide the plant with foliar nutrients and also protects the plant from heat stress, water stress and helps to build cell strength that can provide pest protection. **Potent-Sea Plus** is ideal for all turf situations, as well as most ornamental and landscape plantings.

**Ocean Fish:** A specially processed liquid fish, high in specific gravity containing the highest amounts of nitrogen, phosphorous, potassium and micronutrients. Homogenized and standardized, stabilized with sulfuric acid which is a soil source of sulfur.

**North Atlantic Kelp Extract:** Rich in over 60 minerals, 21 amino acids and 12 vitamins, *ascophyllum nodosum* is also a rich source of plant gibberellins and cytokinins which act as plant growth regulators. Kelp extract also provides muco-polysaccharides, which are complex sugars, and along with its vitamins, minerals and amino acids greatly assists in feeding soil micro flora.

**Humic Acid:** An alkaline extract of geologically concentrated humus, rich in organic acids that stimulate beneficial soil fungi, act as chelating agents for micro-nutrients and perform as sequestering agents to help fracture bonds between phosphorous and iron/calcium/aluminum.

**Phosphoric Acid:** Food Grade (85%) used to stabilize pH and provide readily available phosphorous.

**Bio Net:** Fermentation soluble of dairy whey, and corn distillates which contain many bioactive components such as organic acids, B-vitamins, amino acids and peptides, trace minerals and enzymes.

**Vitamin Complex:**

- a) Ascorbic Acid: Vitamin C acts as an antioxidant in plants as it does in animals, preventing plant senescence.
- b) D-Alpha Tocopherol: Vitamin E is also an antioxidant that performs as a plant membrane stabilizer and retards senescence.
- c) Vitamin B-complex: A bacterial and fungal supplement for the soil biomass.
- d) Vitamin B-12: Necessary for the proliferation of certain bacteria and protozoa.

## APPLICATION RATES & PROGRAMS:

**Greens & Tees** - 2 oz. per 1000 sq. ft. per week or 4 oz. per 1000 every two weeks. Increase rates to 4 - 12 oz. per 1000 sq. ft. when plants are under high levels of stress or in poor soils.

**Fairways** - 1.5 gallons per acre per month, increase rates to 2.5 gallons per acre on biologically weak soil.

**Sports Fields** - 1 gallon per acre weekly or 2 gallons per acre twice monthly.

**Ornamentals** - 6 oz. per 2 gallons of water drenched into the soil, diluted at least 50:1.

**Transplants** - 8 oz. per 2 gallons of water drenched around roots at time of planting.

**Potent-Sea Plus** can be tank mixed with most turf products. A bench test is always recommended.