



# BioGain® WSP®

## Biostimulant in Water Soluble Packets

### GENERAL DESCRIPTION

BioGain® WSP® is a unique, dry, water-soluble combination of natural humic substances, seaweed extract and a proprietary blend of natural sugars, vitamins, amino acids and beneficial bacteria. Designed for use in spray application programs to reduce stress and stimulate root growth through enhanced water and nutrient uptake in grasses and landscaping plants, BioGain WSP can be used on established or overseeded turf, sod, transplanted flowers, trees and shrubs.

### PACKAGING

40x ¼ pound WSP (Water Soluble Packets) per case.

### GUARANTEED ANALYSIS AND NON-PLANT FOOD INGREDIENTS

<b>0-0-12</b>	<b>NON PLANT FOOD INGREDIENTS</b>
Soluble Potash (K20).....12.0%	Humates and Humic Acids.....42.5%
Derived from: Potassium Hydroxide, Seaweed Extract.	Seaweed Extract (Ascophylum nodosum).....32.5%
	Natural Sugars (sucrose), Vitamins (B-Complex, K), Amino Acids and Beneficial Bacteria.....20.0%
	Buffering Agents.....5.0%
	Beneficial Bacteria.....Approx. 180 billion CFU/lb.

### DIRECTIONS FOR USE

BioGain WSP has a pH near neutral. As a result, BioGain WSP can be tank mixed with most pesticides, fertilizers and micronutrients. Strong, acidic or basic tank mixes should be checked for compatibility.

### RECOMMENDED RATES

Application	Rate/Acre	WSPs/Acre	Timing
Established greens and tees of cool-season turf <i>(Late Spring through early Fall)</i>	¼ lb.	1	Weekly or
	½ lb.	2	every 2 weeks
Established greens and tees of warm-season turf	½ lb.	2	Every 2 weeks through growing season.
Newly seeded areas, grow-ins, renovations, overseed	½ lb.	2	2-3 times after first mowing at 2 week intervals through growing season
Overseeded warm-season turf	½ lb.	2	Every 2 weeks throughout winter months
Fairways	½ lb.	2	1-2 times at 2 week intervals to aid in recovery from tournament or pest damage
Hydroseeding/hydromulching	¼ lb./ 10,000 ft <sup>2</sup>	1 WSP/ 10,000 ft <sup>2</sup>	Add to equipment mix tank
Sports fields & lawns - commercial, residential	½ lb.	2	1-2 times per month during growing season
Sod producers and new sod installations	1 lb.	4	30-45 days prior to harvest (lift) and immediately after installation
Trees and Shrubs (soil drench or deep root feeding)	1 lb.	4 WSPs/100 gal. (378L) mix solution	Soil-inject or apply 5 gal. (18.9 L) of tank mix solution to root ball when transplanting
Annual Bedding Plants	½ lb.	2 WSPs/100 gal. (378L) mix solution	Use as a soil drench at first watering

\*Note: Minimum dilution is 40 gallons (151 liters) of water per acre.



## **INGREDIENTS**

### **Humic Acids**

- Rich in auxin type substances which enhance antioxidant synthesis - important to increase plant metabolism under stress conditions.
- An important high carbon food source for soil microorganisms.
- Improves the permeability of cell wall membranes in roots allowing more rapid absorption of nutrients essential to plant health.
- Especially helpful on high sand content soils.

### **Seaweed Extract**

- Contains high levels of cytokinins, which are normally synthesized in plant roots (cytokinins are known to promote cell division, lateral bud growth, and delay the aging process of plant tissue).
- Improves plant metabolism by increasing antioxidant synthesis under stress conditions.
- Stimulates root growth after root systems are cut, damaged by disease or root feeding insects, or are not fully viable due to temperature, moisture or salt stress conditions.

### **Sucrose**

- Serves as high energy food source for plants and soil microorganisms.

### **B-Complex and K Vitamins**

- Vitamins are important catalysts to enhance and drive plant growth metabolism. A plant is capable of synthesizing vitamins, but root or leaf tissue loss decreases a plant's ability to manufacture them. For example, vitamin B1 is widely used in nursery plant cuttings to aid in rooting.

### **Amino Acids**

- Amino acids are the building blocks of protein which are essential for plant metabolism.

### **Beneficial Bacteria**

- Bacilli included in BioGain are diverse root colonizing bacteria that have been demonstrated to be beneficial to plant growth and development. These strains were selected based on their ability to benefit plant growth and development over a wide range of species. Mechanisms by which plant growth is enhanced include increased nutrient cycling and competitive exclusion from root surfaces other soil microorganisms that are neutral or detrimental to plant growth.