# LiveTurf<sup>TM</sup> Biostimulant





### PRODUCT DESCRIPTION

LiveTurf<sup>TM</sup> enhances root mass, increases water and nutrient uptake, and enhances turf resistance to heat and dry spot.

## **PRODUCT FEATURES**

- Dry spot elimination
- Increased root mass and depth
- Improved water/nutrient uptake
- Improved turfgrass health and vigor
- Improved disease resistance
- Zero REI

# **PROBLEM - Dry Spot and Turf Stress**

LiveTurf<sup>TM</sup> is a microbial biostimulant that contains a proprietary mix of bacterial strains isolated from the roots of healthy turf and selected for their effectiveness in promoting new root initiation. Formulated using patented LiveGrow<sup>TM</sup> Technology, bacteria contained in small beads are both alive and metabolically active. Upon addition to turf, microbes quickly colonize the insides of grass roots and promote root growth, nutrient/water uptake, and systemic disease resistance.

LiveTurf™ biostimulant increases grass root mass and helps roots to grow deeper enhancing water uptake, nutrient acquisition, and heat stress resistance in the summer. This helps eliminate dry spot and other issues causing visual irregularities of turf.

#### **NOTES**

The endophytic bacteria in LiveTurf™ live inside the grass and promote new roots. These additional roots can provide better uptake of water and utilization of fertilizers. The bacteria also improve Fe and P uptake by grass plants. The best time to apply LiveTurf<sup>TM</sup> is early morning when temperatures are cooler, and humidity is higher. Irrigation after application is recommended. This will move the small beads and bacteria further into the thatch and soil where they are protected from heat and desiccation which will improve effectiveness

LiveTurf<sup>TM</sup> has zero REI.

# **Product Details**



### **GENERAL INFORMATION**

- LiveTurf™ treated turf shows improved green color, longer-life (less senescence), increased root development, and increased tissue production.
- LiveTurf™ bacteria interact with the plant's physiology resulting in an increase in root division and elongation. This allows for better water and nutrient utilization.
- LiveTurf<sup>™</sup> bacteria significantly improve Fe and P utilization.
- LiveTurf<sup>™</sup> can be easily mixed with other beneficial products such as kelp, yucca, amino acids, sugars, and humates.
- LiveTurf<sup>™</sup> aids in the recovery of damaged tissue from drought, shade, traffic, or root damage.
- LiveTurf<sup>™</sup> contains no plant fertilizers, only active bacteria. Your fertility program is completely under your control.
- The turf grass can only respond effectively to LiveTurf™ bacteria when the turf is properly fertilized and watered.

## **STORAGE**

Product is to be stored at temperatures below 78° F. It may be refrigerated. Do not freeze. Do not leave in direct sunlight

## LiveTurf<sup>TM</sup> vs Control Results

This is an example of LiveTurf<sup>TM</sup> treated grass on the left growing significantly longer and denser roots allowing it to better withstand the heat of the season through increased water and nutrient uptake.

#### ACTIVE INGREDIENTS

Bacillus sp. strain 3KT.....not less than 10<sup>8</sup> cfu/g Enterobacter sp. strain 4KT .....not less than 10<sup>8</sup> cfu/g

#### **OTHER INGREDIENTS**

Water	700/2
Cellulose	
Other organics	1.9%
Net Weight 4 o lhs (1 82 kg)	

### APPLICATION INFORMATION

To prepare the turf for heat and water stress, apply LiveTurf<sup>TM</sup> biostimulant in the spring when the roots start to grow. Continue monthly applications until mid-fall when turf growth slows.

Apply 4 lb. per acre (two pounds of each bacteria) in adequate water to cover. Standard turf sprayers with screens removed and using coarse drop spray nozzles can be used without difficulty. Mild agitation of the mix while spraying is necessary since the beads tend to settle.

Product can be applied alone or in combination with low salt index nutrients and most fungicides. The use of surfactants can be detrimental to the bacteria. Irrigation should be applied right after application and will improve product effectiveness especially under high temperatures.

