DATA SHEET #3

FOR ALL FLOWER BED APPLICATIONS

DIEHARD™ FLOWER BED

HORTICULTURAL ALLIANCE

"The Industry's First Complete FLower Bed Inoculant"

DIEHARD™ *FL*ower Bed is formulated as a preparation to inoculate the ground with live beneficial mycorrhizal fungi when planting. It contains highly selected species of endomycorrhizal fungi that will quickly colonize the roots of *FL*owering plants to provide the best possible conditions for the roots to grow and extract from the root zone water and nutrients. The fungi are combined with *Trichoderma*, humic acids, stimulants, beneficial bacteria, soluble sea kelp, and yucca plant extracts to promote rapid root development. The formulation Horta-Sorb® water management gel is added to this inoculant to reduce transplant stress and watering maintenance, and to slow release all soluble components. The results are better *FL*owerbeds with less maintenance. For convenience, consistency, and to reduce waste, the product is packaged in pre-measured labeled bags and is also available in bulk.

Product Benefits

IMPROVES	REDUCES
Survival	Plant Losses
Rooting	Fertilizer Use
FLowering	Need Of Pesticides
Water Absorption	Heat Stress Damage
Nutrient Availability	Irrigation Frequency
Yields and Production	Losses From Drought
Client Satisfaction & Goodwill	Conditions

Compatibility

Species: All plants and shrub species except Rhododendrons, Azaleas, Heather, Blueberries, and Laurels. (These associate with ericoidmycorrhizae.)

Fungicides: Non-systemic fungicides normally have no effect. Foliar applied fungicides normally have no effect. Systemic fungicides may be applied 2 weeks before or after use of product. Fungicide use according to label instructions do not extinguish mycorrhizae, they only inhibit development for a short period of time.

Non Plant Food Ingredient

GUARANTEED ANALYSIS	
Endomycorrhizal Fungi	17 Propagules per cc *Glomus mosseae* (3.4), *Glomus intraradices* (3.4), *Glomus fasciculatum* (3.4), *Glomus dussii* (1.7), *Glomus clarum* (1.7), *Glomus deserticola* (1.7), *Glomus microaggregatum* (1.7).
Horta-Sorb® MD Water Gel	4% Acrylamide copolymer made for agriculture
Humic Acids	15% Derived from *Leonardite*
Trichoderma	1.5 million CFU's per cc to include *Trichoderma* (6 species), *Gliocladium virens* (2 strains), *Trichoderma harzianum* (2 strains), *Trichoderma viride* (2 strains)
Phosphate Solubilizing, Nitrogen Fixing and Growth Promoting Bacteria.	1 million CFU's per cc to include: *Bacillus* (32 species), *Pseudomonas* (2 species), and *Streptomyces* (2 species).
Sea kelp Extract	33% *Ascophyllum nodosum*
Yucca Plant Extract	1% *Yucca schidigera*
OTHER INGREDIENTS	
Root Promoting Vitamin	B, B2, B3, B6, B7, B12, C, K, Biotin, Fulvic Acid
Amino Acids (Protein)	Animal and plant proteins

Directions For Use

Mix the contents of each bag throughly into the first 3" to 6" of soil at the rate of 3 lbs. per 100 sq. ft. of bed.

Pkg. Size	Square Feet
3 lb. bag	100
3 x 10 bag case	1,000
25 lb. bag	833

Storage & Handling

Store in a cool, dry place. Avoid high temperatures and direct sunlight. Product shelf life is up to 18 months.

Health & Safety

Inhalation	If dusty conditions exist wear a dust mask.
Ingestion	Drink large amounts of water, induce vomiting, and seek medical attention.
Eyes	FLush with large amounts of water.
Safety	Product becomes very slippery when wet.

Horticultural Alliance, Inc., 1550 66th Av. Dr. E., Sarasota, FL 34243 Tel: 941-739-9121, Toll-free: 800-628-6373,Fax: 941-752-1890
Web Page: http://www.horticulturalalliance.com, E-Mail: info@horticulturalalliance.com

DATA SHEET #3

FOR ALL FLOWER BED APPLICATIONS

DIEHARD™ FLOWER BED

HORTICULTURAL ALLIANCE

"The Industry's First Complete FLower Bed Inoculant"

What's In The Product

Micro-organisms

Main components in soil health and soil productivity, not only responsible for the degradation of organic matter, but necessary for making nutrients available for plant use. Contains a microbial blend of many species of Bacillus, FLavobacterium, Saccharomyces, Penicillium and a host of other beneficial microorganisms. Boosting these microbe populations in the soil reduces diseases.

Amino Acids

The amino acids in DIEHARD™ products include aspartic acid, threonine, serine hydroxyproline, glutamic acid, proline, glycine, cystine, valine, methionine, isoleucine, leucine, phenylalanine, histidine, lysine, arginine and alanine. Amino acids enhance health and improve the overall nutrient efficiency by buffering heavy metals and sodium in the soil, improving the availability and exchange of plant nutrients on the root surface, and improving microbial activity in the soil.

Humus

Humus contained in DIEHARD™ products are composed of a complex mixture of colloidal substances containing lignin, protein, polyronides, and carbon improves the exchange capacity of the soil and enhances uptake of phosphates and other essential nutrients. These substances increase plant vigor, help keep fertilizer from leaching through the soil, and buffer plants against extreme concentrations of salts.

Langbeinite

Orginating from evaporated sea water, it contains Sulfur, Potash, Magnesium and many other important trace

Vitamins & Enzymes

Biotin, Folic Acid, B, B2, B3, B6, B7, B12, C, E, and K, riboFLavin, biotin, choline, thiamine, pantothenic acid, folic acid, and niacin enhance the biostimulant properties of fertilizer and are essential for the basic metabolic processes of the plant such as chlorophyll production, cell division, transpiration and respiration.

Trichoderma

A beneficial fungus that competes with disease causing fungi in the soil. The fungus grows around the roots depriving pathogenic fungi of nutrients and living space enhancing of mycorrhiza formulation.

Fish Meal

Dried ground tissue of whole fish or fish cuttings which contains Nitrogen and is rich in essential amino acids.

Sea Kelp Extracts

Sea kelp contains more than 60 macro and trace elements of cytokinins. Cytokinins are plant growth hormones involved in cell division, protein, carbohydrate and chlorophyll production.

Yucca Plant Extract

Yucca schidigera extract increases cell wall permeability, microbiological activity, helps control nematodes, is toxic to a wide number of insects and has been widely used for years as a soil conditioner, foliar spray, wetting agent and growth promoter.

Beneficial Bacteria

Beneficial bacteria in DIEHARD™ products contain a nitrogen fixing bacillus that converts atmospheric nitrogen to available nitrogen for plants, a phosphorus solubilizing bacillus that converts insoluble phosphorus to soluble, and a growth hormone promoting bacillus that stimulates root growth.

Limited Warranty: All information contained herein is offered in good faith. There are no warranties of merchantability of fitness for a particular purpose which extend beyond the information contained herein. Our liability is limited to replacement of any product which does not meet these specifications.

Distributed by:

Horticultural Alliance, Inc., 1550 66th Av. Dr. E., Sarasota, FL 34243 Tel: 941-739-9121, Toll-free: 800-628-6373, Fax: 941-752-1890
Web Page: http://www.horticulturalalliance.com, E-Mail: info@horticulturalalliance.com