#### **DATA SHEET #20**



### FOR TREES, SHRUBS, FLOWER BEDS and TURF

# DIEHARD™ BIORUSH®



## "Stimulates root growth naturally"

DIEHARD<sup>TM</sup> BioRush® is a dry, water soluble root growth stimulant with nitrogen fixing, phosphorus solubilizing and growth promoting beneficial bacteria packaged in pre-measured, labeled bags for easy use with tank sprayers. Contains humic acid extracts, Trichoderma pathogen fighting fungi, soluble sea kelp, yucca plant extracts, amino acids and natural sugars to "energize" the microbial activity in the ground and promote cell division and lateral bud development as well as delay the aging process of plant tissue. Our unique formulation of ingredients affect the permeability of cell wall membranes in roots, improve plant respiration, photosynthesis, promote cell division and lateral bud development as well as delay the aging process of. All these factors are well known to provide major benefit to plants promoting vigorous root growth and the overall general condition of the plant environment.

### **Product Benefits**

- Root Mass
- FLowering
- Improved color
- Transplant Survival
- Nutrient Availability
- Yields and Production
- Reduced Frost Damage
- Water & Nutrient Absorption
- Improved Plant Performance, especially under stress.

## Health & Safety

Inhalation If dusty conditions exist wear a dust mask.

Ingestion Drink large amounts of water, induce

vomiting, and seek medical attention.

Contact Avoid contact with open cuts.

Eyes FLush with large amounts of water.
Safety Product comes very slippery when wet.

## Non Plant Food Ingredient

Soluble Humic Acids	31% Derived from Leonardite
Soluble Yucca Extract	3% Yucca schidigera
Soluble Sea Kekp Extract	11% Ascophylium nodosum
Trichoderma	55 Million CFU's per cubic centimeter to include: Genus Trichoderma (6 species), Gliocladium virens (2 strains), Trichoderma harzianum (2 strains), Trichoderma Viride (2 strains)
Phosophate solubilizing, Nitrogen Fixing and Growth Promoting Bacteria.	36 Million CFU's per cc to include: Genus Bacillus (32 species), Genus Psuedomonas (2 species), Genus Streptomyces (2 species).
Root Promoting Vitamin	Biotin, Folic Acid, B, B2, B3,B6, B7, B12, C and K
Amino Acids (Protein)	Animal and plant proteins
Natural Sugars	9% Dextrose

## **Directions For Use**

Dilute 1 lb. in 100 gallon of water and apply as a foliar or drench.. Use when transplanting and laying sod and as a finishing treatment with flower bed plantings. Treatments last for up to 6 weeks, depending on the time of year and should be a part of an ongoing preventative maintenance program relating to grounds care. May be applied with a tank sprayer, garden hose sprayer, drench and as a foliar spray. May be combined with most fertilizers and pesticides.

**Turf:** Use ½ lb. per 1,650 sq. ft. with 50 gallons of water applied with tank sprayer, or hose end applicator.

**Sodding:** Use ½ lb. per 1,650 sq. ft. with 25 gallons of water.

**Soil Injection:** Inject  $\frac{1}{2}$  gallon using a 2  $\frac{1}{2}$  ft. grid pattern 6"-8" deep.

**Hydromulching**: Use 4 lbs. per acre mixed with mulch and seed.

**Foliar Applications:** Use ½ lb. per 2,500 sq. ft. mixed into 50 gallons of water till runoff.

**Established Trees:** Use ½ lb. per 25 gallons of water. Apply one gallon per inch caliper, 16 oz. per gallon size transplant.

## **Storage & Handling**

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



## FOR TREES, SHRUBS, FLOWER BEDS and TURF DIEHARD™ BIORUSH®



# "Stimulates root growth naturally"

### **HORTICU**

## DIEHARD<sup>TM</sup> Inoculants

#### **DIEHARD<sup>TM</sup> Transplant**

Contains live spores of endo (VA) and ectomycorrhizae (Pt) combined with humic acids, nitrogen fixing, phosphorus solubilizing and growth promoting beneficial bacteria, soluble sea kelp, natural surfactant from yucca plant extracts, and Horta-Sorb® MD. This is a complete transplant preparation to inoculate landscape trees and shrubs with live beneficial mycorrhizae fungi, "energize" the soil, and provide natural nutrients to trees and shrubs when planting.

#### DIEHARD<sup>TM</sup> Palm

Endomycorrhizae. beneficial bacteria, plus all the "goodies" for palms. Formulated by some of the top palm experts in the country.

#### DIEHARD<sup>TM</sup> FLower Bed

Endomycorrhizae, beneficial bacteria, plus a light portion of Horta-Sorb® MD to slow release the soluble components of the formulation.

#### DIEHARD<sup>TM</sup> Root Reviver

Endo and ectomycorrhizae, beneficial bacteria, plus a light portion of Horta-Sorb® MD to slow release the soluble components of the formulation. For use as a vertimulch application for trees and shrubs in decline and as a soil amendment for plantings, turf, and propagation mixes.

### **DIEHARD<sup>TM</sup> Injectables**

Endo and Ectomycorrhizae, beneficial bacteria, soluble sea kelp, yucca plant extracts and a slight amount of Horta-Sorb® SM gel to slow release all soluble components of the formulation. Also available with just endo or ectomycorrhizae.

#### DIEHARD<sup>TM</sup> Root Dips

Endo and ectomycorrhizae, beneficial bacteria, soluble sea kelp, yucca plant extracts and Horta-Sorb® SM water management gel to protect the roots, slow release all soluble components of the formulation, and boost survival. Also available with just endo or ectomycorrhizae.

#### DIEHARD<sup>TM</sup> BioRush® Fe

A dry, water soluble root growth stimulant with chelated iron, nitrogen fixing, phosphorus solubilizing and growth promoting beneficial bacteria packaged in pre-measured. labeled bags or easy use with tank sprayers. BioRush™ Fe contains humic acid extracts, soluble sea kelp, yucca plant extracts, amino acids and natural sugars to "energize" the microbial activity in the ground and promote cell division and lateral bud development as well as delay the aging process of plant tissue.

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:**