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## *Specifications*

### DIEHARD™ PALM TRANSPLANT

#### Part 1: Product Description

All palms shall be treated when planting with an inoculum of live beneficial mycorrhizal fungi to promote new feeder root and mycorrhizal development on newly planted palms. The inoculum shall contain highly selected endomycorrhizal fungi that will quickly colonize the roots of palms to provide the best possible conditions for the roots to grow and extract from the root zone water and nutrients. The mycorrhizal fungi shall be combined with humic acids, biostimulants, beneficial bacteria, soluble sea kelp, yucca plant extracts, fulvic acid, nitrogen, phosphorous, potassium, and chelated magnesium, manganese, iron and zinc, to promote rapid root development.

#### Part 2: Product Specification

#### GUARANTEED NUTRIENT ANALYSIS 3-1-3

Total Nitrogen (N) .....	3%
1.3% Other Water Soluble Nitrogen and /or Urea Nitrogen	
2.1% Water Soluble Nitrogen	
2.6% Water Insoluble Nitrogen	
Available Phosphate (P205) .....	1%
Soluble Potash (K20) .....	3%
Total Magnesium (Mg) .....	2%
2.5% Water Soluble Magnesium (Mg)	
Total Manganese (Mn) .....	4%
4.0% Water Soluble Manganese (Mn)	
Total Zinc (Zn) .....	1.5%
1.5% Soluble Zinc (Zn)	
Total Iron (Fe) .....	1%
2.5% Soluble Iron as (Fe)	
Derived from Kelp ( Ascophyllum Nodosum), Manganese Sulfate, Zinc Sulfate, Iron Sulfate, Magnesium Sulfate, Superphosphate, Urea, And Potassium Sulfate.	



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## NONPLANT FOOD INGREDIENTS

Endomycorrhizal	9.6 Propagules per cubic centimeter <i>Glomus mosseae</i> (1.9), <i>Glomus intraradices</i> (1.9), <i>Glomus fasciculatum</i> (1.9), <i>Glomus dussii</i> (0.975), <i>Glomus clarum</i> (0.975), <i>Glomus deserticola</i> (0.975), <i>Glomus microaggregatum</i> (0.975).
Nitrogen Fixing, Phosphate Solubilizing and Growth Promoting Bacteria.	780,000 CFU's per cc to include <b>GENUS BACILLUS: (32 SPECIES)</b> <i>Bacillus azotofixans</i> (2 strains) <i>Bacillus azotoformans</i> (3 strains) <i>Bacillus polymyza</i> (5 strains) <i>Bacillus thuringiensis</i> (2 strains) <i>Bacillus licheniformis</i> (6 strains) <i>Bacillus pumulis</i> (2 strains) <i>Bacillus subtilis</i> (10 strains) <i>Bacillus megaterium</i> (2 strains) <b>GENUS PSUEDOMONAS: (2 SPECIES)</b> <i>Psuedomonas aureofaceans</i> (2 strains) <b>GENUS STREPTOMYCES (2 SPECIES)</b> <i>Streptomyces lydicus</i> (2 strains)
Trichoderma	5,056 CFU's <i>Genus Trichoderma</i> (6 species), <i>Trichoderma gliocladium virens</i> (2 strains), (2 strains), <i>Trichoderma viride</i> (2 strains). <i>Trichoderma harzianum</i>
Root Promoting Vitamin	Biotin, Folic Acid, B, B2, B3, B6, B7, B12, C and K
Amino Acids (Protein)	Animal and Plant Proteins
Root Promoting Vitamins	Biotin, Folic Acid, B, B2, B3, B6, B7, B12, C and K
8% Humic Acid Derived from Leonardite	
4% Sea Kelp Extract ( <i>Ascophyllum nodosum</i> )	
1% Yucca Plant Extract ( <i>Yucca schidigera</i> )	
25% Co-polymer (Crossed linked acrylamide and potassium acrylate)	

### Part 3: Application

Apply 1 - 8 oz. bag per palm incorporated as a soil amendment into the top 8 to 10 inches of the planting pit adjacent to the root ball of the tree.

### Part 4: Execution

Use in accordance with approved submittal for each type of planting required in strict accordance with supplier's instructions and recommendations.

### Part 5: Manufacturer's Service

At the request of specifier provide the services of a qualified technical representative to instruct the user in proper mixing and handling of the product.

### Part 6: Verification of Use

At the request of the specifier excavation of random plots of up to 1% of planted materials.



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### **Part 7: Alternative Procedures**

If it has been determined that product has not been used contractor shall immediately apply both a vertimulch application with product and a deep soil injection with an appropriate injection product containing endomycorrhizae and yucca extracts.

### **END OF SECTION**

#### **Free Of Charge Services Provided to Specifiers**

- We do a take off for you - fax your plant list to us and we will do a take off and fax back to you the amount of materials required for the job.
- We introduce your contractors to our products - give us a list of your contractors and we will introduce, educate and provide them with installation information and list of materials for the job.
- With toll-free phone and fax lines we are at your service at a moments notice.
- We can provide verification to you that the contractor has purchased products