SOIL MOIST ROOT DIP

Soil Moist Root Dip is formulated to inoculate bare-root stock prior to planting or shipping. Inoculation will promote new root development on newly planted trees and shrubs. Soil Moist Root Dip contains a diverse blend of seven species of healthy viable ectomycorrhizal propagules and seven species of healthy viable endomycorrhizal propagules that are adapted to a wide range of plants and habitat conditions. The formulation will provide the inoculated area to colonize on the newly planted stock in a wide variety of growing conditions. Soil Moist Root Dip – Ecto is for ectomycorrhizal host plants only and contains the same ingredients as Soil Moist Root Dip but without the endomycorrhizal fungi.

The mycorrhizal fungi colonize plant roots and extend far into the soil resource. The fungi improves the ability of the plants to utilize the soil resources. The fungi increases water and nutrient uptake by providing a larger root mass. The improvement in the plant / soil ecosystem increases plant establishment.

Each pound of Soil Moist Root Dip contains over 5 billion colony forming units (CFU) of bacteria in the biostimulant formulation. There are over fifty (50) strains of beneficial bacteria and soil microbes as well as natural plant extracts that promote root growth and formulation. Five strains of Trichoderma are included in the formulation to produce natural growth hormones and enhance disease suppression.

Soil Moist Fines™ (50-500 microns) water storing polymers are included in the formulation to reduce transplant stress and water maintenance while increasing the establishment of the newly planted stock. The small particle size of the Fines suspends the fungi and biostimulants in the slurry mix and increases the cohesion of them to the plant roots for colonization.

PRODUCT BENEFITS

- Improves soil and plant ecosystem
- Increases plant establishment and growth
- Reduces transplanting stress and plant loss
- Increases nutrient and water uptake
- Improves soil structure and porosity
- Reduces fertilizer use

COMPATIBILITY

Soil Moist Root Dip is effective on all types of plants and trees with the exception of Laurels, Rhododendrons and Azaleas. Soil Moist Root Dip – Ecto is effective on: Alder, Arbovitae, Arctostaphylos, Aspen, Basswood, Beech, Birch, Chestnut, Chinquapin, Eucalyptus, Fir, Hazelnut, Hemlock, Hickory, Larch, Linden, Madrone, Oak, Pecan, Pine, Poplar and Spruce.

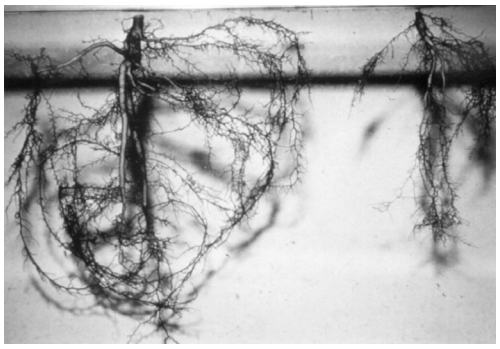
Fungicides: Do not use fungicides for three weeks before and after applying Soil Moist Root Dip. The following fungicides should not be used: Ridomil, Benlate, Bravo, Daconil, PCNB, Bayleton, Dithane, Zineb and Ziram.

STORAGE

Store in a cool, dry location. Avoid direct sunlight and high temperatures. Reseal any remaining materials in their original container. Product shelf life is up to twenty-four months.

NON PLANT FOOD INGREDIENTS

Endomycorrhizal Fungi	Minimum of 43,000 viable propagules per pound of *(Soil Moist Root Dip only)* material derived from seven species: Glomus intraradices, Glomus aggregatum, Glomus mosseae, Glomus clarum, Glomus deserticola, Glomus monosporum and Gigaspora margarita.
Ectomycorrhizal Fungi	Minimum of 5.9 billion viable propagules per pound of material derived from seven species: Pisolithus tinctorius, Rhizopogon rubescens, Rhizopogon fulvigleba, Rhizopogon villosuli and Rhizopogon amylopogon, two species of Scleroderma.
Soil Moist™	Crosslinked polyacrylamide, 50-500 micron size. Minimum 15 ounces per pound (Ecto only), 5 ounces per pound (Endo/Ecto).
Sea Kelp extract	Ecklonia maxima
Humic acid	Leonardite humates
Fungi	Five species of Trichoderma (Harzianum-3, Veride-2) to produce natural growth hormones and enhance disease suppression.
Beneficial bacteria	Over fifty (50) strains of bacteria which include fifteen strains of Bacillus, five strains of Psuedomonas and ten strains of Streptomycetes. Minimum of 5 billion colony forming units (CFU) per pound
Vitamins and other ingredients:	Folic and fulvic acid, biotin, natural sugars and vitamins (B, B1, B2, B3, B12, C & K)



Root mass growth difference with (left) and without (right) Soil Moist mycorrhizal.

APPLICATION RATES

ECTO DIP

Each three ounce package will make three gallons of slurry. While agitating three gallon of water, slowly pour the contents of the package in. Continue to mix for a few minutes to get a homogeneous mixture. Let the product stand for 5 minutes. The longer the gel is allowed to stand, the tackier it will become. Dip or spray plant roots immediately before planting or shipping. Adjust the slurry thickness to insure adherence to the roots when dipping or spraying.

Three gallons of slurry will treat up to 1000 four inch seedlings. **At this application rate each seedling will receive a minimum of 1 million viable propagules of Pisolithus tinctorius and 100,000 viable propagules from the four species of Rhizopagon.**

ENDO AND ECTO

Each three ounce package will make one gallon of slurry. Follow the same methods for stirring as the ECTO DIP.

One gallon of slurry will treat up to 300 three to four inch seedlings. **At this application rate each 1 foot seedling will receive a minimum of 100 viable propagules of endomycorrhizal fungi derived from seven species.**

Package Size	Amount of Water	Will Treat
3 oz. Ecto	3 gallons	up to 1000 seedlings
12 oz. Ecto	12 gallons	up to 4000 seedlings
5 lb. Ecto	80 gallons	up to 26,000 seedlings

Package Size	Amount of Water	Will Treat
3 oz. Endo/Ecto	1 gallons	up to 300 seedlings
12 oz. Endo/Ecto	4 gallons	up to 1200 seedlings
5 lb. Endo/Ecto	27 gallons	up to 8000 seedlings

Both products are packaged in premeasured three ounce packages and in twelve ounce resealable jars. Custom blends of root dip are available to meet any specific requirements. Special bulk package sizes are available, minimum quantities apply.

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Distributed by:

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