

## SOIL MOIST MYCORRHIZAL PRODUCTS



Mycorrhiza is the symbiotic relationship between the plant root and beneficial fungi. Mycorrhizal fungi is found in undisturbed soils with other beneficial soil organisms. Today's common practices such as site preparation, tillage, mining, road and home construction and the removal of topsoil can degrade the mycorrhizal forming potential of soils. These activities plus unchecked erosion of soil can reduce and eliminate these beneficial soil fungi. The reintroduction of mycorrhizal fungi in areas where they have been disturbed and depleted can dramatically improve plant establishment and growth.

The roots of most plants are colonized by the fungus. This colonization extends far into the soil and are extensions of the root system. Mycorrhizal fungi improve water and nutrient uptake by providing a larger root mass. The larger root mass helps reduce plant stress and some diseases. Mycorrhizal fungi attack pathogen or disease organisms entering the root zone of fungal filaments. Specific antibiotics produce by the fungi immobilize and kill some diseases such as Phtophthora, Fusarium and rhizoctonia.

Soil structure is improved with mycorrhizal fungi filaments that produce humic compounds and glues. These polysaccharides bind soil in aggregates for increased soil porosity and soil structure. These improvements in the soil structure improve water penetration into the root zone for increased growth and distribution. All mycorrhizal products supplied by JRM Chemical contain a diverse selection of endomycorrhizal and ectomycorrhizal fungi with highly active spore and propagule counts. The ectomycorrhizal fungi in our products are adapted to a wide range of host plants and habitat conditions. They are collected and adapted to a variety of temperature and moisture regions. Several formulations include our water storing polymers. When incorporated in the soil they are designed to reduce plant watering by 50%. An effective biostimulant is incorporated in each formulation with high colony forming units (CFU's) from fifty strains of beneficial bacteria.

Included in the biosimulant are amino acids, vitamins and humic acid. For a complete listing of all ingredients in the biostimulant, refer to form 752.



Landscape Plants



Urban Tree Scapes

## Benefits:

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

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Product	Ingredients	Effective On*	Applications	Form
Transplant	5760 propagules per pound from 7 species of Endo. 586 million propagules per pound from 7 species of Ecto. Biostimulant – 5 billion CFU's per pound. Polymer – 5.4 ounces per pound.	Endo/Ecto Host Plants	Landscape, nursery, trees, shrubs	782
Transplant Plus	<ul> <li>5760 propagules per pound from 7 species of Endo.</li> <li>586 million propagules per pound from 7 species of Ecto.</li> <li>Biostimulant – 5 billion CFU's per pound.</li> <li>Polymer – 5.4 ounces per pound.</li> <li>3-3-3 – 105 grams per pound.</li> </ul>	Endo/Ecto Host Plants	Landscape, nursery, trees, shrubs	782A
Flower Bed	3780 propagules per pound from 7 species of Endo. Biostimulant – 2 billion CFU's per pound. Polymer – 3.2 ounces per pound.	Endo	Bedding plants broad area treatment	784
Vertimulch	720 propagules per pound from 7 species of Endo. 74 million propagules per pound from 7 species of Ecto. Biostimulant – 220 million CFU's per pound.	Endo/Ecto	Existing trees, shrubs	786
Ecto Dip	<ul> <li>5.9 billion propagules per pound from 7 species of Ecto.</li> <li>Biostimulant – 5 billion CFU's per pound.</li> <li>Polymer Fines – 15 ounces per pound.</li> </ul>	Ecto	Bareroot pines, firs, oaks	783
Ecto/Endo Dip	43,000 propagules per pound from 7 species of Endo. 5.9 billion propagules per pound from 7 species of Ecto. Biostimulant – 5 billion CFU's per pound. Polymer Fines – 5 ounces per pound.	Endo/Ecto	Bareroot, trees, shrubs	783
Injectable	97,000 propagules per pound from 7 species of Endo. 2.9 billion propagules per pound from 7 species of Ecto. Biostimulant – 9 billion CFU's per pound.	Endo/Ecto	Existing trees, shrubs	785
Plant Tabs	50 propagules per tablet from 7 species of Endo. 10 million propagules per tablet from 7 species of Ecto. Biostimulant – 50 million CFU's per pound.	Endo/Ecto	Landscape, nursery, trees, shrubs	751
Ecto Tabs	10 million propagules per tablet from 7 species of Ecto. Biostimulant – 60 million CFU's per pound.	Ecto	Landscape,trees, shrubs	750
Hydroseed	36,600 propagules per pound from 7 species of Endo. Biostimulant – 9 billion CFU's per pound. Polymer Fines – 6.3 ounces per pound.	Endo	Hydroseeding, grass, groundcover, wild flowers	787
Hydrobond Plus	Biostimulant – 56 billion CFU's per pound. Linear anionic polymer – 14.3 ounces per pound.	Endo	Hydroseeding, grass, groundcover. For soil erosion.	788

The above chart is a guide line only. Refer to the individual specification sheets for detailed information and application rates.

\* Endomycorrhizal fungi is effective on over 90% all plant species. Ectomycorrhizal fungi is effective on 5% of all plant species, primarily, pines, firs and oaks. Approximately 5% of all plant species do not benefit from mycorrhizal fungi. Most of these are in the Ericaceae family (azalea, rhododendron) and Brassica family (Broccoli, Brussels).

Refer to form E for a listing of plant species.



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without Mycorrhizal with Mycorrhizal

@ 2014 Form 780A Rev. 1/14.