

Mycorrhizal Applications for FORESTRY

Why are Mycorrhizae Important?

Mycorrhizal fungi are essential to living soils, and allowed plants to colonize the non-aquatic surface of our planet over 450 million years ago. Approximately 95% of all plant species form symbiotic relationships with beneficial mycorrhizal fungi; however, human activity, wildfire, and intensive management practices have depleted many mycorrhizal populations. With the MycoApply® products we provide, forest managers can re-establish these essential microbes and benefit from this age-old symbiotic relationship to get seedlings started right, in living soils which promote strong roots, help reduce the need for expensive soil inputs, increase tree uniformity and vigor, and ultimately result in healthy forests.

The use of beneficial mycorrhizal fungi gives conifer nurseries and forestry managers a new tool to improve tree health and quality, and experience maximum regeneration success and ultimately increase tree growth and forest product yield.

Benefit to Trees and Forests

Mycorrhizal inoculations increase trees' effective rooting and surface area by as much as 50 times.

Mycorrhizal colonization results in a significant increase in a tree's ability to absorb soil nutrients.

The symbiosis with mycorrhizal mycelia can increase water absorption several hundred to several thousand times compared to roots alone.



Treated with MycoApply® | Control, Not Treated

FEATURES

Mycorrhizal Applications has the largest diversity of Endo- and Ectomycorrhizal fungi commercially available.

Fertilizer usage can be reduced by one-third by using MycoApply® inoculum.

Drought tolerance is greatly increased by using MycoApply® inoculum.

Transplant success is boosted through the use of MycoApply® mycorrhizal fungi.

ADVANTAGES

MycoApply® products are available for almost every tree, shrub, and groundcover species used in forestry.

Increased plant and tree health and vigor in all soil conditions.

Increased drought resilience and overall survivability.

Reforestation plant quality and survivability is increased.

BENEFITS

Tree health, survival, height, and caliper can increase for each tree inoculated with the correct MycoApply® product applied appropriately.

Reforestation costs can drop, tree quality can improve, and time to maturity can decrease.

Reforestation success can increase, tree quality can improve, and overall yield can increase.

With inoculation costs of less than 1/2 cent per seedling, mycorrhizal inoculation is easy and affordable insurance, and pays big dividends.



☑ Increase Drought Protection

Greater root mass and vigor = Greater stress tolerance

☑ Reduce Reforestation Costs

Increased water absorption and nutrient utilization reduce culls and increase survivability

☑ Quicker Establishment

Mycorrhizae give your seedlings a head start leading to accelerated rooting and more successful outplanting

☑ Healthy Soil Biology

Re-establish the living soils and symbiotic relationships critical for sustainable performance

☑ Better Nutrient Uptake

Mycorrhizae not only increase rooting mass and surface area, but also release powerful enzymes into the soil that dissolve tightly bound soil nutrients for plant utilization

Recommended Products for Forestry

Custom Ecto Liquid

- Custom Ectomycorrhizal Liquid Suspensions
- Can be custom formulated from 10 available Ecto species to benefit the tree and plant species mix, application method, and conditions.
- Subject to inventory availability

Custom Ecto Powder

- Custom Ectomycorrhizal Powder Formulations
- Can be custom formulated from 10 available Ecto species to benefit the tree and plant species mix, application method, and conditions.
- Subject to inventory availability

MycoApply® Endo/Ecto

- Granular formulation - mixable with soil
- 4 species Endomycorrhizal fungi:
Glomus intraradices, *G. mosseae*, *G. aggregatum*, & *G. etunicatum*
- 7 species Ectomycorrhizal fungi:
Rhizopogon villosulus, *R. luteolus*, *R. amylopogon*, *R. fulvigleba*, *Pisolithus tinctorius*, *Scleroderma cepa*, & *S. citrinum*
- 60,000 Endo & 110 million Ecto Propagules per lb.



MycoApply® Micronized Endo/Ecto

- Suspensible Powder (can pass a #50 screen)
- 4 species Endomycorrhizal fungi:
Glomus intraradices, *G. mosseae*, *G. aggregatum*, & *G. etunicatum*
- 7 species Ectomycorrhizal fungi:
Rhizopogon villosulus, *R. luteolus*, *R. amylopogon*, *R. fulvigleba*, *Pisolithus tinctorius*, *Scleroderma cepa*, & *S. citrinum*
- 100,000 Endo & 110 million Ecto Propagules per lb.
- Mixable or used as a soil drench



A Subsidiary of **VALENT BIOSCIENCES**

CONTACT US

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