

## Growth increase by 26% (total fresh weight)

### MICHOACAN PINE

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#### OBJECTIVE

Demonstrate the benefits of mycorrhizal inoculation on Michoacan Pines (*Pinus michoacána*) in a forestry nursery in Mexico.

#### METHODS

Mycorrhizal inoculation was done on germinated seedlings (10 weeks old) at Morelia nursery on March 2004. Fungal inoculum of *Pisolithus tinctorius* was added or not to 5 ml of water and applied with a custom hand sprayer individually to seedlings. Mycorrhizal inoculum was added according to the following recommendations:

Spores 1 = 1 million spores per plant  
Spores 2 = 3 million spores per plant  
Hyphae 1 = 50 propagules per plant  
Hyphae 2 = 100 propagules per plant

There were 77 seedlings per tray and 4 trays per treatment. Eight individuals per tray were harvested after 16 weeks; height, collar diameter, fresh weight, aerial fresh/dry weight, root fresh/dry weight were measured.

#### RESULTS

*Pinus michoacána* responded very well to mycorrhizal inoculation with *Pisolithus tinctorius*. Significant increases in all growth parameters measured were observed between mycorrhizal and non-mycorrhizal seedlings. There was no significant difference between inoculum types. A significant effect of inoculum level was detected. Significant increases for pooled mycorrhizal treatments on collar diameter (20%), total fresh weight (26%), aerial fresh weight (24%), root fresh weight (33%), aerial dry weight (18%) and dry root weight (28%) resulted in plants of greater vigour.



General appearance of *Pinus michoacána* exposed to various treatments

