

24% increase in fresh weight

LEUCAENA

Marc Beland et al.
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OBJECTIVE

Evaluate the benefits of mycorrhizal inoculation on *Leucaena leucocephala* in a forestry nursery in Mexico.

METHODS

Mycorrhizal inoculation was done on 3 weeks old seedlings at the Colima nursery in March 2004. Fungal inoculum of *Glomus intraradices* was added or not to 5 ml of water and applied individually to seedlings with a custom hand sprayer. Mycorrhizal inoculum was added according to the following recommendations:

Mycorrhizae 1 = 75 spores per plant
Mycorrhizae 2 = 150 spores per plant

There were 77 seedlings per tray and three trays per treatment. Ten plants per tray were

harvested after 16 weeks; measurement of their height, collar diameter, total fresh weight, aerial fresh/dry weight, root fresh/dry weight was recorded.

RESULTS

Leucaena leucocephala responded very well to endomycorrhizal inoculation (Figure 1). Growth increases were seen for all measured parameters. There was no difference between both levels of inoculum added. Increases for collar diameter (6%), height (18%), total fresh weight (24%), aerial fresh weight (24%), root fresh weight (25%) were recorded for mycorrhizal plants. Means for dry weights resulted in a slightly smaller increase for aerial dry weight (20% vs 24%) and for root dry weight (14% vs 25%).

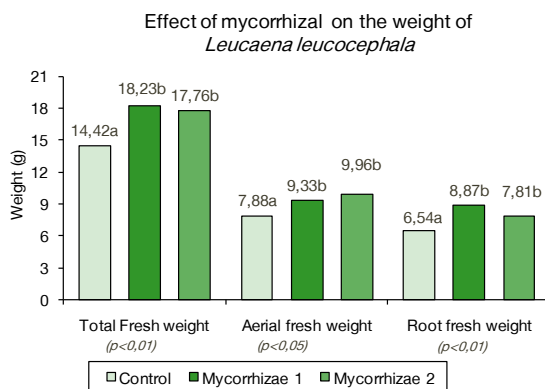
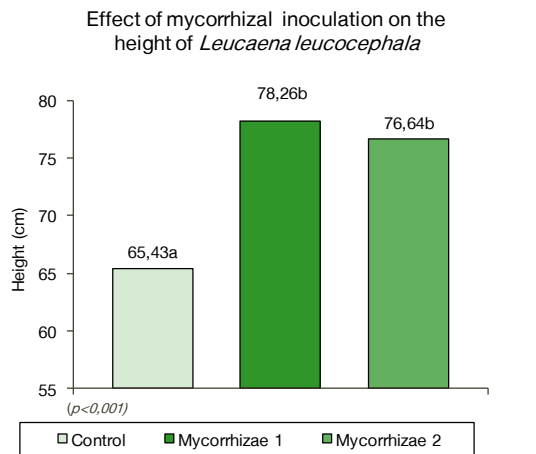


Figure 1
General appearance of *Leucaena leucocephala* exposed or not to mycorrhizal inoculation.