

## Cost of Mycorrhizal Inoculation

David South of the Auburn University Nursery Cooperative sent me the following information in response to my article on "Mycortree Root Dip Inoculant" in the Equipment, Products and Services section of the last FNN. As usual, David has made some valid observations and rightly reminds us to always consider the cost of any chemical treatment or cultural practice. Many different types and brands of mycorrhizal inoculants are now available, and costs can range from as low as \$0.43 per thousand seedlings to as high as \$0.10 per seedling (Table 4). The most expensive treatments are those applied to seedlings at the time of outplanting.

David goes on to point out that, in spite of most people's perceptions, there are actually only a few published mycorrhizal inoculation. Still, there have been so many

articles on the potential benefits, that most people are convinced that there is a positive economic benefit. The one benefit that is difficult to assess, however, is customer acceptance. If a customer believes that mycorrhizal inoculation is beneficial and is willing to pay the difference, then the cost is inconsequential. Like the old saying goes—"the customer is always right"!

**Table 4. Cost of various types of mycorrhizal inoculations**

| <u>Type of Inoculum *</u>               | <u>Seedling Stock Type</u> | <u>Application Time</u>               | <u>Application Rate per Seedling</u> | <u>Application Cost per Thousand Seedlings</u> |
|---|----------------------------|---------------------------------------|--------------------------------------|--|
| P.t. spores                             | BR                         | At time of sowing                     | 2.6 mg\$                             | 0.43   |
| P.t. spores + Humate                    | C                          | Incorporated into media before sowing | 156.0 mg                             | 1.52   |
| P.t. spores                             | C                          | At time of sowing                     | 1.0 mg                               | 2.00   |
| P.t. spore pellets                      | BR                         | At time of sowing                     | 36.0 mg                              | 2.75   |
| VAM spores + clay carrier               | C                          | Incorporated into media before sowing | 2.2 mg                               | 5.00   |
| P.t. mycelia                            | BR                         | At time of sowing                     | 0.75 ml                              | 7.50   |
| P.t. mycelia                            | BR                         | At time of sowing                     | 1.00 ml                              | 10.00  |
| VAM spore pellets                       | BR                         | At time of sowing                     | 1.00 ml                              | 10.00  |
| P.t. spores + Gel+ Others               | BR                         | Before outplanting                    | 425.0mg                              | 40.00  |
| P.t. spores + VAM spores + gel + others | BR<br>Conifers             | Before outplanting                    | 425.0mg                              | 51.00  |
| P.t. spores + VAM spores + gel + others | BR<br>Hardwoods            | Before outplanting                    | 850.0 mg                             | 103.00   |

\* P.t. = inoculum of the ectomycorrhizal fungus *Pisolithus tinctorum* ectomycorrhiza;

VAM = vesicular-arbuscular inoculum