Effects of Pseudomonas fluorescens and Mycorrhizal Fungi in Grafts

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In the experiment, four groups of five trees each were tested to determine if Pseudomonas fluorescens or Mycorrhizal fungi would improve the success rate of grafting with trees. The tests were run by making a slice in the stem of the tree and adding a scion with the appropriate variable for each group. Each stem was wrapped in plastic wrap to hold it in place. Sterilized water and the variable were added to the graft every 3 days for two weeks via a pipet through the plastic wrap to keep the graft from drying out. All trees were kept in the greenhouse and watered to keep them alive and well. The tests were run by making a slice in the stem of the tree and adding the scion with a tablespoon of sterilized soil and the appropriate variable for each group. Each stem was wrapped in plastic wrap to hold it in place. Sterilized water and the variable was added to the graft every 3 days for two weeks via a pipet through the plastic wrap to keep the graft from drying out. All trees were kept in the greenhouse and watered to keep them alive and well. Based on this experiment, Pseudomonas fluorescens can help promote grafting in plants. The hypothesis was partially supported because the Pseudomonas fluorescens had more successful grafts than the other trials. Based on a t-test this group outperformed the others. The t-value was 2.739 compared to the critical value of 1.860.

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