

**STUDY OF COMPATIBILITY BETWEEN ROOTSTOCK AND
SCION TEAK (*Tectona grandis* L.f.) ON BOTH SIDE GRAFTING
AND BUDS GRAFTING METHODS**

Indriyatno

ABSTRACT

The commercial use of vegetative propagation in forestry program around the world has become more popular recently. Vegetative propagation, as a part of regenerative method, will continue and may become the standard method of regeneration for many species that currently propagated by seedling, included teak (*T. grandis*), a group of Seasonal Tropical Forest plants which have produced a high value of wood economically. Among successful grafting, but there was a problem of incompatibility in grafting between Rootstock and Scion in growth. In this research, the compatibility started in seedling.

This research was to know the best compatibility between rootstock and scion on both grafting method and to know influence between side-grafting method and buds-grafting method towards grafting compatibility.

Method used in this research was split-split plot design composed by Randomized Completely Block Design in factorial. First factor was five rootstocks as a main plot, second there were five scion clones and the third, there were two grafting methods that repeated in three blocks.

Result of this research showed that there was a variation of significant grafting compatibility among rootstock, scion and grafting method. The best compatibility between rootstock and scion was combination rootstock of Pengkol Jati Ayu Karangmojo and scion of Marga Sari. Percentage value of lifetime was 86.67%, 22.65 centimeter in height, 5.27 millimeter in diameter, 4.29 in strong, and number of leaves were 9.37. Side-grafting method in this research has given the better growth from buds-grafting method. Side-grafting method in percentage of lifetime was 62.13 %, 18.58 centimeter in height, 5.13 millimeter in diameter, 3.33 cm/mm in strength of seedling and number of leaves were 9.03.

Keywords: Compatibility, Rootstock, Scion, *Tectona grandis*, Side Grafting, Buds Grafting.