

GROWTH PERFORMANCE OF *Neolamarckia cadamba* (LARAN) TREES PLANTED AT TWO DIFFERENT SITE CONDITIONS AT SANDAKAN, SABAH

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2016

ABSTRACT

This study reports the effect of two different site conditions, flat and steep area on the growth performance of *Neolamarckia cadamba* (Laran) trees planted in Sandakan, Sabah. The main objectives of this study are to study the growth performance, basal area and volume, and to test the Vanclay's plantation growth model for Laran trees at different site conditions. For the growth performance of Laran on the two different site conditions, there is no significant difference in the growth performance ($p > 0.05$). The mean diameters of Laran on flat and steep sites are 9.78 cm and 8.2 cm respectively and range from 5.0 – 9.9 cm. As for the height, the mean heights of Laran trees on flat and steep sites are 6.5 m and 6.6 m respectively and range from 6.0 – 8.9m, with. As for the basal area and volume, flat area recorded the highest reading with 10.22m²/ha and 34.97m³/ha respectively. Meanwhile steep area recorded total basal area of 8.27m²/ha and total volume of 31.42m³/ha. Vanclay's growth model predicted that both Laran trees planted on flat and steep area will have uniform height of 24 meter at 15 years old tree stand.