

GROWTH RATE OF *Neolamarckia cadamba* (LARAN) USING DIFFERENT GERMINATION MEDIA AT NURSERY LEVEL

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PROGRAMME: FOREST PLANTATION AND AGROFORESTRY

2017

ABSTRACT

Neolamarckia cadamba or known as Laran was one of the industrial tree species that have been planted in forest plantation cause it was one of the fast growing speies dan due to the multipurpose and have a commercial value. Thus, selection of the germination media was very important in the early stage. The objectives of this study is to identify the effect of different germination media on the growth rate of N. cadamba seedlings, to identify a suitable germination media for the growth rate of N. cadamba seedlings and to identify the length ratio of shoot:root od N. cadamba using different germination media at nersery level at Forestry Complex, Faculty of Science and Natural Resources (FSSA), University Malaysia Sabah. The experimental design used in this research is Complete Randomized Design (CRD) and this study was using six different germination media which is for Treatment 1 was 100% top soil as a control. Treatment 2 was cocopeat 70% fine : 30% coarse. Treatment 3 was cocopeat 30% fine : 70% coarse. Treatment 4 was cocopeat 50% fine : 50% coarse, Treatment 5 was jiffy pellet and treatment 6 was germination media which is mixer of 1:1 (N. cadamba saw dust : vermicompost). ANOVA analysis show there was a signifikan value $P < 0.005$ and the correlation ratio of shoot root was positif, $r = 0.635$. As a result, top soil show the higher rate of growth with 6.3 cm height, 2.40 mm collar diameter, 2270.3 mm² leave area surface, 12 leaves, and the ratio of shoot root was 1:3.