Early growth performance of terminalia subspathulata king in a spacing and fertiliser trial at segaliud lokan forest reserve Sandakan, Sabah

ABSTRACT

Terminalia subspathulata is an introduced tree species proposed for enrichment planting at Segaliud Lokan Forest Reserve (SLFR) Sandakan, Sabah. The objective of this study is to assess the early growth performance of T. Subspathulata in a spacing and fertiliser trial. A Randomised Complete Block Design (RCBD) trial with three block replicates (spacing), and three plot replicates (fertiliser) respectively was established on moderately degraded forest site. The height, collar diameter, number of leaves and survival of seedlings were recorded monthly and analysed based on four months of data collected. The average survival rate of early growth performance of T. Subspathulata was more than 88%. The Analysis of Variance (ANOVA) showed that there were significant differences ($P < 0.05$) for the mean collar diameter ($P = 0.011$), the number of leaves ($P = 0.034$) between the spacing treatments, and the mean height ($P = 0.043$) of T. subspathulata between the fertiliser treatments. The combination treatments of different spacing and fertiliser at four months after planting showed significant differences between the mean number of leaves ($P = 0.024$). The preliminarily report signifying the effect of spacing and fertiliser treatments on the early growth of T. Subspathulata samples assessed.