SUMMARY

ERIK KURBANIANA. Effectiveness of Coconut Shells Charcoal and Bokashi Manure on the Growth of Leda (Eucalyptus deglupta Blume) Seedling at Tailing Medium. Supervised by BASUKI WASIS.

The disclosure a potential life of Eucalyptus deglupta at tailings has not been much done, where tailings are result of processing mine waste that could potentially reduce of soil fertility rates so that the plant is difficult to grow, while Eucalyptus deglupta is a fast growing species which have properties inversely proportional to tailings, such as soil fertility. The addition of coconut shell charcoal and bokashi manure expected to increase the quality of tailings as a growing medium in order to increase growth of Eucalyptus deglupta. Research was conducted to analyzing effect of giving coconut shell charcoal and bokashi manure on the growth of Leda (Eucalyptus deglupta Blume) seedling, and obtain information about their effectiveness as a soil fertility builders on gold mine tailings medium.

Research conducted in the Silviculture greenhouse and forest of influence laboratory Faculty of Forestry IPB, with the location of tailings sampling conducted at PT. Antam UPBE Pongkor and nutrient analysis conducted in Department of Soil Science and Land Resources laboratory Faculty of Agriculture, IPB. This research uses an experimental method with a completely randomized design (CRD) factorial pattern, the first factor of coconut shell charcoal, that is: Not given charcoal (A0), 2.5% charcoal (A1), 5% charcoal (A2), 7.5% charcoal (A3), and 10% charcoal (A4); the second factor of bokashi manure, that is: Not rated bokashi (B0), 20 g bokashi (B1), 40 g bokashi (B2), and 60 g bokashi (B3). Each treatment was repeated as many as 3 replication. Descriptive data analysis done by measuring the parameters height, diameter, total wet weight, total dry weight, ratio of top and root of Eucalyptus deglupta seedling that have grown during 3 months.

The results showed that the addition of coconut shell charcoal up to 10% and bokashi manure up to 60 grams into tailings medium can significantly increase high, diameter, total wet weight and total dry weight of Eucalyptus deglupta seedling, but could not significantly increase value of the top and root ratio. The addition of coconut shell charcoal and bokashi manure also able to improve nutrient availability at tailings.

Key word: tailing, Eucalyptus deglupta, coconut shells charcoal, bokashi manure