ABSTRACT

SEEDLING IMPROVEMENT GROWTH OF MIRABOW (Intsia palembanica) WITH SHADING AND FERTILIZATION

By

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Mirabow (*Intsia palembanica*) is one of high quality tropical wood. The wood of mirabow is categorized in durable class I, II and strong class I, II. Mirabow has the straight wood fiber, can be used as plywood, panels, furniture, musical instrument and beautiful shiny wood surface. Among the factors that affect plant growth were shading intensity and nutrients. The purpose of the research were to figure out the effect of shading intensity and fertilization to the growth of mirabow. The Block Randomized Design (BRD) of 4 groups and 3 treatment was employed as research design. Group of the research was the provision of no shading (0%), shading intensity 55%, shading intensity 65%, and shading intensity 75%, meanwhile the dose of NPK fertilizer of 0 g/polybag, 2 g/polybag, and 4 g/polybag were employed as the treatments. The large of experimental unit were used 1 seedling. The variable that was observed were high accretion, diameter accretion, root length, number of leaves, crown root ratio, dry weight of crown, dry weight of root, total dry weight and quality index of seedling. Then, analysis of

variance was used to the least significant difference. The entire data tested on 5% significant level. The results showed that 55% shading intensity, obviously increase the dry weight of crown, however the shading intensity more than 65% in fact, evidently decrease the dry weight crown and total dry weight of mirabow seedling. The dose of 4 g/polybag of NPK fertilizer, evidently the number of leaves, crown root ratio, dry weight of crown and total dry weight of mirabow seedling.

Keywords : mirabow, seed fertilisation, shading intensity.