



ABSTRACT

Planting medium is one of the critical success factors of growth in *A. malaccensis*, in the nursery and in the field. Use of topsoil as seedling medium is less efficient and effective. Therefore it is a need for innovation in mixing the composition of the media to overcome the limitations of existing material. This study aims to determine the composition of the planting medium is best for growing seedlings *A. malaccensis* up to 3 months.

Research conducted at the Laboratory of Intensive Silviculture, Faculty of Forestry UGM, in December 2016 to May 2017. The experimental design was CRD (Completely Randomized Design) with media composition alluvial soil: manure: husk 2: 2: 1 (P1); 4: 2: 1 (P2); 6: 2: 1 (P3); 8: 2: 1 (P4). One Way Anova with SPSS's applications was conducted in the statistical analysis. The research variables measured were the survival, percentage of seedlings, seedlings height, and seedlings diameter.

The results showed that the mixture of several media in *A. malaccensis* seedlings had a significant different effect on the survival percentage, plant height and diameter. Treatment of P2 (2: 2: 1) showed poor survival percentage (44,00%), but showed best result in plant height (4,5 cm), and diameter (0,102 cm). The treatment of P4 (8: 2: 1) showed the best survival percentage (65.33%), but showed the poor growth (2.3 cm height and of diameter 0.067 cm).

Keyword : Media composition, The growth of seedlings, *Aquilaria malaccensis* Lamk.