

INFLUENCE OF SEVERAL ECOLOGICAL FACTORS TO NATURAL REGENERATION OF *Dipterocarpus alatus* IN TROPICAL MOIST EVERGREEN CLOSED FOREST IN TAN PHU ZONE OF DONG NAI PROVINCE

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Summary

This article presents the research results on the influence of some ecological factors to natural regeneration of *Dipterocarpus alatus*. The objective of the study was to determine the major ecological factors affecting natural regeneration of *Dipterocarpus alatus* population, being the scientific basis for forest management and silvicultural practices. In this research, the basic characteristics of stands with predominance of *Dipterocarpus alatus* trees were investigated meticulously from nine typical sample plots with a size of 0.25 ha. The results have indicated that density, origin and quality of regenerated *Dipterocarpus alatus* majority were significantly depended on the domination of the mother trees, stand structure and timber trees competition in stands. *Dipterocarpus alatus* individuals regenerated perfectly in the groups with dominant index of the plus trees from 30% to 32%, complex index of the stand structure from 0.4 to 0.5 and the competitive index of coverage from 1.5 to 1.7. Low density of plus trees was the insufficient seed source for revival of new generation. On the contrary, high density of plus trees also was the factor limiting natural regeneration ability. The *Dipterocarpus Alatus* stands with SCI > 0.5, being the least regeneration. The increase of competitive level between timber trees in the stand resulted in the decrease of natural regeneration of *Dipterocarpus Alatus species*.

Keywords: *Ecological factors, crown competition index, domination of the mother trees, natural regeneration, stand.*