
SILVICULTURAL CHARACTERISTICS OF *Machilus bonii* Lecomte SPECIES IN THAI NGUYEN PROVINCE

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SUMMARY

The study of silvicultural characteristics of *Machilus bonii* Lecomte (*Machilus bonii*) in Thai Nguyen province is a result of the ministerial level research project: study on breeding and planting techniques of *Machilus bonii* providing guidance on planting operation to obtain large timbers in several provinces of Northeast Vietnam. The results of study showed that the mean density of woody species layers where *Machilus bonii* occurring was 272 stems/ha, of which the mean density of *Machilus bonii* was 24 stems/ha. Important Value Index (IV%) of *Machilus bonii* ranged from 9.23% to 12.1%. Vertical forest structure included two woody species layers (canopy layer and overstory layer), a shrubs layer, and a ground cover layer. Woody species composition diversified from 32 to 36 species, of which the dominant woody plants were from 4 to 9 species appearing in tree species composition formulation. *Machilus bonii* has always occurred in the canopy and overstory layers. Density of natural regeneration of trees varied from 2793 stems/ha to 2880 stems/ha, of which *Machilus bonii* density varied between 327 stems/ha and 460 stems/ha. Rate of promising regenerated trees on average was from 36.48 % to 41.79%, of which *Machilus bonii* accounted for 15.9 - 22.88%. *Machilus bonii* species had a good regeneration ability of seedling (100%) and high quality seedling. The high density of regenerated *Machilus bonii* was mainly found with a height of less than 0.5 m and lowest density was found with a height of greater than 3 m.

Keywords: Composition, density, *Machilus bonii*, regeneration, silvicultural characteristics.

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