

RESEARCH ON SELECTION OF PLUS TREES OF *Pinus merkusii* WITH HIGH YIELDING RESIN IN NGHE AN PROVINCE

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Summary

Research on selection of plus trees of *Pinus merkusii* with high yielding resin of *Pinus merkusii* in Nghe An province shows that, out of 1,836 individuals in 15 investigated forest stands; there has selected 50 plus trees with superiority in resin yielding from 19 to 90.5% were selected; at selection intensity of 0.973. There are discrepancy of resin yielding between the plus trees, of which the highest amount (NA06 reached 8.0 kg/tree/year) surpassing the lowest one (NA05, 4.2 kg/tree/year) being 1.9 times in the same comparing criterion, but if comparison with the lowest resin yielding within the whole forest stands (reached only 1.4 kg/tree/year), it would be 5.7 times exceedingly. Having selected 26/50 dominant trees, possessing dominant level (σ) in possessing both resin yielding (1.9- 3.8, equivalent to 46.3- 90.5%) and diameter (0.7- 4.5, equivalent to 2.1- 15.3%). Resin yielding trends to proportionately increase to diameter grades and bark thickness, the diameter grade 18- 21 cm (with resin 2.6 kg/tree/year), if the diameter increase 1.14 times (22 - 24 cm), resin yielding would then increase 1.03 times, under the same environmental conditions. In the thick-barked trees group, resin yielding increases 1.32 and 1.76 times in comparison with the medium and thin bark ones, under the same environmental conditions. The success of this research partially contributes information, as the basis for *Pinus merkusii* dominant trees afforestation in Nghe An province, as well as other regions with same conditions.

Keywords: *Plus tree selection, resin, Pinus merkusii, forest stands of pine.*