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**RESEARCH ON SELECTION OF PLUS TREES OF *Pinus merkusii* Jungle & De Vriese  
FOR FAST GROWING, ABILITY FOR HIGH RESIN IN TAM DAO DISTRICT,  
VINH PHUC PROVINCE**

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**SUMMARY**

The research carried on *Pinus merkusii* population in Dai Dinh commune, Tam Dao district, Vinh Phuc province to select plus trees with fast growing and ability for high resin. Results show that the annual average growth rate of diameter and height of *Pinus merkusii* plantation at the age of 32 was 0.73 cm and 0.48 m respectively. Compared to the general pine population within the study site, five plus trees were selected, including TN3, TN6, TN5, TN1 and TN2 which were outward growth of trunk diameter from 30.1 - 33.5% (with the ratio of selection of 1.45% and selection intensity of 0.98); Seven selected individual trees including TN2, TN5, TN4, TN6, TN3, TN8 and TN1 were outward of stem volume ranged from 61.1 - 94,6% (with the ratio of selection of 2.04% and selection intensity of 0.97). The trunk diameter of the plus pine individuals were found out that individual with the trunk diameter  $\geq 36$  cm performed ability for high resin, and 12 individuals out of the *Pinus merkusii* population at the study site were selected as plus trees. These plus *Pinus merkusii* individuals are really valuable for seeding source which provide basic material for further studies and expanding *Pinus merkusii* plantation at the local and other regions with similar conditions in Vietnam.

**Keywords:** Pine, *Pinus merkusii*, plantation, plus tree selection, resin.

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