

**KERAGAMAN FENOTIPE DAN POTENSI PRODUKSI BENIH JATI  
(*Tectona grandis*) PADA PERTANAMAN UJI SUMBER BENIH DI  
KHDTK WANAGAMA**

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**Intisari**

Pertanaman Uji Sumber Benih Jati (PPGM-T73-88) ditanam pada tahun 1994 di Petak 17 KHDTK Wanagama, tersusun atas 157 seedlot. Perlu dilakukan evaluasi lanjutan terhadap pertanaman uji sumber benih Jati ini, yang saat ini telah berumur 26 tahun. Penelitian ini dilakukan untuk mengevaluasi karakter fenotipik dan potensi produksi benih pada individu-individu penyusun pertanaman uji. Tujuan penelitian adalah (1) Mengevaluasi karakter fenotipik tegakan *Tectona grandis* di Petak KHDTK Wanagama 1 dan memilih pohon-pohon berfenotipe terbaik, yang akan dipilih sebagai penghasil materi propagasi vegetatif. (2) Menaksir potensi produksi benih pohon-pohon berfenotipe terbaik yang akan digunakan sebagai pohon induk untuk materi propagasi generatif.

Perankingan dilakukan dengan mengakumulasikan kedua karakter untuk memperoleh 50 pohon terbaik. Perhitungan potensi produksi benih dilakukan dengan menaksir total buah pada pohon sampel yang berbuah. Jumlah total buah per pohon kemudian dikalikan dengan jumlah total pohon berbuah dalam tegakan. Karakter kuantitatif (diameter batang, tinggi batang, TBBC) diukur dan data dianalisis varians (Anova) dengan bantuan aplikasi SPSS versi 25.0. Hasil analisis varians yang berbeda nyata diuji lanjut dengan DMRT.

Hasil evaluasi karakter fenotipik kualitatif dan kuantitatif pada tegakan *Tectona grandis* di petak 17 KHDTK Wanagama 1, menghasilkan pohon terbaik yaitu seedlot KB082 (Kebonharjo), CP139 (Cepu), dan KD001 (Kendal). Total produksi buah pada tegakan *Tectona grandis* di KHDTK Wanagama 1 pada periode pembungaan bulan Juni 2020 adalah sebanyak 143.704 buah. Persentase pohon yang berbuah sebesar 36% dari total 50 pohon terbaik yang diranking berdasarkan seedlot dengan fenotipe kuantitatif dan kualitatif terbaik.

Kata kunci: *Tectona grandis*, karakter fenotipik, potensi produksi benih, Wanagama.

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***PHENOTYPE DIVERSITY AND SEED PRODUCTION POTENTIAL OF  
TEAK (*Tectona grandis*) ON A SEED SOURCE TRIAL PLANTATION IN  
KHDTK WANAGAMA***

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***Abstract***

The Teak Seed Source Trial (PPGM-T73-88) was planted in Compartment 17 of KHDTK Wanagama in 1994, consisted of 157 seedlots from several seed sources in Java Island. It is necessary to conduct further evaluation of this teak seed source which is currently 26 years old. This research was conducted to assess phenotypic characters and the potential for seed production in the plantation. This study aimed to (1) Evaluate the phenotypic characters of teak planted in the seed source trial and select the best phenotypic trees which will be selected as the sources of the vegetative propagation materials. (2) Estimate the seed production potential of the best phenotypic trees which will be used as the mother trees for generative propagation materials.

The best 50 trees were ranked by accumulating both qualitative and qualitative scores. The potential for seed production is calculated by estimating the total fruit on the sampled fruiting trees. The number of fruits per tree was then multiplied to the number of total flowering trees in order to count the total fruits production in the plantation. The quantitative characters (stem diameter, stem height, TBBC) were analyzed for variance analysis (Anova) using the SPSS version 25.0 application. The significantly different results were further analyzed using DMRT.

The qualitative and quantitative characters evaluation on *Tectona grandis* seed source trial in Compartment 17 KHDTK Wanagama gained seedlot KB082 (Kebonharjo), CP139 (Cepu), and KD001 (Kendal) as the best seedlots. The total fruit production in the June 2020 flowering period was 143,704 fruits. The percentage of trees bearing fruit was 36% of the total 50 best trees.

**Keyword:** *Tectona grandis*, phenotypic characters, potential seed production, KHDTK Wanagama

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