

## **SELEKSI POHON INDUK UNTUK PROPAGASI VEGETATIF PADA TEGAKAN HIBRID DAN RESIPROKAL EKALIPTUS**

**(*Eucalyptus pellita* x *E. brassiana*)**

Oleh:

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### **Intisari**

Dengan mempertimbangkan makin meningkatnya kebutuhan terhadap *eucalyptus* sebagai bahan baku kayu konstruksi, pulp dan kertas maupun *cinéol*, maka dianggap sangat perlu untuk membangun dan mengembangkan sumber benih yang menyediakan materi genetik *eucalyptus* unggul di Wanagama. Salah satu tegakan hibrid *eucalyptus* di Wanagama adalah *Eucalyptus pellita* x *E. brassiana*, yang ditanam pada tahun 1998. Pada tahun 2019, tegakan ini telah berumur 21 tahun. Namun, belum pernah dilakukan evaluasi terhadap kualitas fenotipik individu di dalamnya. Penelitian ini bertujuan untuk (1) Mengetahui karakter fenotipik pada tegakan hibrid dan resiprokal *Eucalyptus pellita* x *E. brassiana* di KHDTK Wanagama; dan (2) Memilih pohon-pohon dengan fenotipe terbaik untuk karakter kayu pertukangan sebagai pohon induk untuk materi propagasi vegetatif.

Pengukuran dilakukan pada karakter kuantitatif dengan alat ukur dan karakter kualitatif dengan skoring. Tahapan-tahapan penelitian adalah (1) Dilakukan pengukuran karakter kuantitatif berupa tinggi pohon, tinggi batang bebas cabang, dan diameter setinggi dada; (2) Dilakukan pembobotan nilai (skoring) terhadap karakter kualitatif berupa sudut percabangan, kelurusan batang, pruning alami, bentuk batang/silindrisitas, permukaan batang, dan kesehatan batang dengan mengikuti metode skoring yang dibuat oleh Departemen Kehutanan (2006) dan Djamhuri dkk, (2006).

Hasil penelitian didapatkan bahwa karakter fenotipik kuantitatif (tinggi, diameter dan tinggi batang bebas cabang) dan karakter fenotipik kualitatif (pruning alami) pada tegakan hibrid dan resiprokal *Eucalyptus pellita* x *E. brassiana* di KHDTK Wanagama I, Gunung Kidul berbeda nyata antar kombinasi persilangan. Sementara itu, karakter fenotipik kualitatif (sudut percabangan, kelurusan batang, silindrisitas batang, permukaan batang, dan kesehatan batang) tidak berbeda nyata antar kombinasi persilangan. Pohon hibrid yang dipilih sebagai pohon induk karena memiliki fenotip terbaik untuk karakter kayu pertukangan adalah kombinasi persilangan B5P1 dan B3P5.

Kata kunci: hibrid *Eucalyptus pellita* x *E. brassiana*, karakter fenotipik, seleksi, kayu pertukangan, pohon induk, propagasi vegetatif

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**SELECTING PARENT TREES FOR VEGETATIVE PROPAGATION IN  
THE HYBRID AND ITS RECIPROCAL OF EUCALYPT  
(*Eucalyptus pellita* x *E. brassiana*) PLANTATION**

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**Abstract**

*Considering the raise on demand on eucalypts for materials of construction woods, pulp and paper, and cineole, therefore it considered important to develop the planting material sources, which will provide the superior genetic materials of eucalypts in Wanagama. One of hybrid plantation in Wanagama is the hybrid of Eucalyptus pellita x E. brassiana, which was planted in year 1998. This plantation is 21 year-old in 2019, however the evaluation on its phenotypic characters have not been conducted. This study aimed to (1) assess the quantitative and qualitative phenotypic characters of individuals planted in the hybrid plantation of Eucalyptus pellita x E. brassiana in Wanagama; and (2) select the phenotypically superior individuals according to the construction wood standar, as parent trees for vegetative propagation.*

*Measurements were made on quantitative characters with measuring instruments, and qualitative characters by scoring. The stages of the research were (1) Quantitative characters were measured in the form of tree height, the height of free branches, and diameter at breast height; (2) Weighing the values (scoring) of the qualitative characters in the form of branching angle, stem straightness, natural pruning, stem form/cylindricity, stem surface, and stem health by following the scoring method developed by the Ministry of Forestry (2006) and Djamhuri et al. (2006).*

*The results showed that the quantitative phenotypic characters (tree height, tree diameter and the height of free branches) and qualitative phenotypic characters (natural pruning) among hybrid trees and reciprocal of Eucalyptus pellita x E. brassiana in Wanagama I, Gunung Kidul differed significantly among hybrid combinations. Similarly, the qualitative phenotypic characters (the angle of branching, stem straightness, stem form/cylindricity and stem health) not differed significantly among hybrid combinations. Individuals selected for parent trees for vegetative propagation are B5P1 dan B3P5; which performed best phenotype for construction wood characters.*

**Keywords:** *hybrid of Eucalyptus pellita x E. brassiana and its reciprocal, phenotypic characters, selection, construction wood, parent trees, vegetative propagation*

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