STUDI VARIASI GENETIK TANAMAN KAYU PUTIH (*Melaleuca leucadendron* Linn.) UHUR 8 BULAN PADA UJI KETURUNAN HALF-SIB DI WANAGAMA I

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I N T I S A R I

Penelitian tentang Studi Variasi Genetik Tanaman Kayu Putih (*Melaleuca leucadendron* Linn.) Umur 8 bulan pada Uji Keturunan Half-sib di Wanagama I bertujuan untuk :(1). Mengetahui tingkat keberhasilan tanaman (2). Mengetahui variasi genetik pertumbuhan tinggi tanaman, diameter batang dan jumlah cabang (3). Mengetahui nilai heritabilitas famili pada karakter tinggi tanaman, diameter batang dan jumlah cabang (4). Mengetahui korelasi genetik antar sifat yang diamati.

Penelitian dilakukan di petak 18 Wanagama I. Materi yang digunakan sebanyak 59 seedlot berasal dari petak 5 Wanagama I (18 seedlot), petak 7 Wanagama I (20 seedlot) dan petak 13 Wanagama I (21 seedlot). Rancangan acak lengkap berblok, 4 treeplot, 5 blok. Jarak tanam 3 x 3 m. Pemeliharaan dengan sistem tumpangsari. Analisis data dengan analisis varians irreguler experiment.

Hasil penelitian menunjukkan bahwa sampai umur 8 bulan tingkat keberhasilan tanaman mencapai 84,5 %. Variasi yang nyata terjadi pada sifat tinggi tanaman, pertumbuhan diameter batang dan jumlah cabang, dengan seedlot terbaik D12. Nilai heritabilitas untuk sifat tinggi sebesar 0,34 diameter batang sebesar 0,10 dan jumlah cabang sebesar 0,51. Sedangkan nilai korelasi genetik antara tinggi dengan diameter sebesar 0,81; tinggi dengan jumlah cabang sebesar 0,46; dan diameter dengan jumlah cabang sebesar 0,46.

STUDY OF GENETICAL VARIETY of KAYU PUTIH PLANT (*Melaleuca leucadendron* Linn.) AGED 8 MONTH ON HALF-SIB PROGENY TRIAL at WANAGAMA I

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A B S T R A C T

The research on Study of Genetical Variety of Kayu Putih Plant (*Melaleuca leucadendron* Linn.) Aged 8 month On Half-Sib Progeny Trial at Wanagama I is aimed to know: (1) the degree of plant success, (2) and to know genetic variety of the growth of plant-height, stem diameter and the numbers of branch. (3) The research is also aimed to know about family heritability value on the plant-height characteristic, stem diameter and the numbers of branch. (4) It is also to discern the genetical correlations between the observed characteristics.

The research is carried on at petak 18 Wanagama I. Materials used are 59 seedlot which are gathered from petak 5 Wanagama I (18 seedlot), petak 7 Wanagama I (20 seedlot), and petak 13 Wanagama I (21 seedlot). The complete random arrangment is blocked; 4 treeplot, 5 block. The planting distance is 3 x 3 m, with tumpangsari system. The data is analysed with varians analysis of irregular experiment.

The result shows that when the plant is 8-month old, the degree of plant success is 84,5 %. Distant variety occurs on plant height feature, the growth of stem diameter and the numbers of branch, with the best seedlot D12. Heritability score for height characteristic is 0,34, for stem diameter is 0,10 and for the number of branch is 0,51. Whereas genetical correlation score between the height and diameter is 0,81; between the height and teha number of branch is 0,46; and between diameter and the number of branch is 0,46.