

APLIKASI JENIS DAN TAKARAN PUPUK KANDANG TERHADAP RATA-RATA PERTUMBUHAN SEMAI JATI (*Tectona grandis* L.f.) PADA TANAH ALFISOL

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INTISARI

Pemberian pupuk kandang dengan jenis dan takaran yang tepat akan memperbaiki kandungan unsure hara dalam media (tanah alfisol) sehingga mendorong pertumbuhan semai jati menjadi lebih baik. Penelitian ini bertujuan untuk mempelajari pengaruh jenis, takaran dan interaksi antara jenis dan takaran pupuk kandang terhadap pertumbuhan semai jati.

Penelitian ini menggunakan rancangan acak lengkap dengan penyusunan faktorial 3x4 dengan 6 ulangan, terdiri atas 3 jenis pupuk kandang yaitu ayam (P1), kambing (P2), dan sapi (P3) dan 4 takaran pupuk berdasarkan volume yaitu 0%(D0), 25% (D1), 50% (D2), dan 75%(D3). Variabel yang diamati adalah tinggi, diameter, kekokohan dan *top-root ratio*.

Hasil penelitian menunjukkan bahwa jenis pupuk kambing (P2) memberikan hasil terbaik terhadap rata-rata hasil pertambahan tinggi (12,43 cm), pertambahan diameter (4,1 mm), *top-root ratio* semai (2,861). Pemberian takaran pupuk 75% (D3) memberikan hasil yang terbaik terhadap rata-rata pertumbuhan semai dengan pertambahan tinggi 14,15cm, pertambahan diameter 5,1 mm dan *top-root ratio* semai 3,091. Interaksi antara jenis pupuk dan takaran pupuk, pupuk kambing 75% (P2D3) memberikan hasil pertambahan tinggi terbaik 15,93 cm, pupuk ayam 75% (P1D3) memberikan pertambahan diameter terbaik yaitu 5,7 mm, kekokohan semai pada perlakuan tanpa pupuk (P2D0) yaitu 3,59, dan *top-root ratio* pada perlakuan pupuk kambing 25% (P2D1) sebesar 3,98.

Kata kunci : Jati, alfisol, jenis dan takaran pupuk kandang, pertumbuhan

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APPLICATION BETWEEN LEVEL AND VARIOUS OF MANURE TOWARDS THE GROWTH OF TEAK (*Tectona grandis* L.f.) SEEDLINGS IN ALFISOL SOIL

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ABSTRACT

Addition of the manure can increase nutrient content in the media (alfisol soil) and improve teak seedlings growth. Application of the manure in the right variety and level will push the process better. This research aimed to study the influence of variety, level, and interaction between variety and level of manure on teak seedling growth.

This experiment used Completely Randomized Design (CRD) arranged factorial consisted two treatment and six replications. The first treatment was variety of manure, which consist of three various, manure from cow (P3), manure from sheep (P2), manure from chicken (P1). The second treatment was levels of manure, which consist of four levels, 0% (D0), 25% (D1), 50% (D2) and 75% (D3). Variable measured were seedling height, diameter, sturdiness and top-root ratio.

The result showed that the manure from sheep give the best growth to the seedlings. Growth value of seedling height was 12.34 cm, diameter 4.1 mm, top-root ratio 2.861. Optimum level of manure based on result was 75% (growth value of seedling height was 14.15 cm, diameter 5.1 mm, top-root ratio 3.091). Interaction between manure from sheep with level 75% (P2D3) give the best growth value of seedling height was 15.93 cm, interaction between manure from chicken with level 75% (P1D3) give the best growth value of diameter was 5.7 mm, unused of manure (P2D0) give the best value of sturdiness at 3.59 and interaction between manure from sheep with level 25% (P2D1) give the best value of top-root ratio at 3.98.

Keywords : Teak, alfisol, variety and level of manure, growth

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