

## **PERTUMBUHAN *Acacia crassicarpa* UMUR 12 BULAN PADA BERBAGAI JARAK TANAM DI KHDTK WANAGAMA**

**Oleh :**

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### **Abstrak**

*Acacia crassicarpa* merupakan salah satu jenis tanaman cepat tumbuh yang dikembangkan untuk menghasilkan produk pulp and paper serta kayu pertukangan ringan. Salah satu tindakan silvikultur untuk meningkatkan pertumbuhan awal tanaman adalah pengaturan jarak tanam. Penelitian ini bertujuan untuk mengetahui pengaruh jarak tanam terhadap persen hidup, pertumbuhan tinggi dan diameter, serta indeks kompetisi *A. crassicarpa* pada umur 12 bulan. Pertanaman uji jarak tanam *A. crassicarpa* di petak 14 KHDTK Wanagama Rancangan penelitian menggunakan RCBD (*Randomized Completely Block Design*) dengan menggunakan 4 jarak tanam sebagai perlakuan dan 3 blok sebagai ulangan. Bentuk pada setiap perlakuan, bentuk plot *square plot* 5 x 5 tanaman, dan analisis data menggunakan 9 tanaman *inner plot*.

Hasil penelitian menunjukkan bahwa jarak tanam berpengaruh nyata pada pertumbuhan tinggi dan diameter, serta jarak tanam tidak berpengaruh nyata pada persen hidup dan indeks kompetisi pada tanaman umur 12 bulan. Persen hidup tertinggi pada jarak tanam 3 m x 3 m (89,33%) dan persen hidup terendah pada jarak tanam 5 m x 5 m (78,67%). Pertumbuhan tinggi dan diameter paling besar pada jarak tanam 3 m x 3 m. Pertumbuhan tinggi dan diameter paling kecil pada jarak tanam 2 m x 2 m. Indeks kompetisi terbesar pada jarak tanam 2 m x 2 m (31,09) dan indeks kompetisi terkecil pada jarak tanam 5 m x 5 m (17,84).

Kata kunci: *A. crassicarpa*, jarak tanam, persen hidup, pertumbuhan, indeks kompetisi.

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## **GROWTH OF *Acacia crassicarpa* AT 12 MONTHS AFTER PLANTING ON VARIOUS SPACING IN KHDTK Wanagama**

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### **Abstract**

*Acacia crassicarpa* is one of fast-growing species to produce pulp and paper and light wood construction. One of the silvicultural techniques to increase early plant growth is the spacing arrangement. This study aims to determine the effect of spacing on the survival rate, height, diameter, and competition index of *A. crassicarpa* 12 months after planting. The research was conducted in 14 compartments, KDTK Wanagama. The research design was Randomized Complete Block Design (RCBD) with 4 spacings as treatment and 3 blocks as replication. The plot of each treatment was the square plot of 5 x 5 trees, and nine trees were as the inner plot used for data analysis.

The results showed that the plant spacing was significantly different in growth in height, and diameter. Spacing wasn't significantly different in survival rate, and competition index in 12-month-old after planting. The highest percentage of survival was in 3 m x 3 m (89.33%) and the lowest survival rate was in the spacing of 5 m x 5 m (78.67%). The highest growth in height and diameter was at a spacing of 3 m x 3 m. Meanwhile, the smallest growth in height and diameter at a spacing of 2 m x 2 m. The highest and the lowest competition index was in a spacing of 2 m x 2 m (31.09) and 5 m x 5 m (17.84), respectively.

**Keywords:** *A. crassicarpa* , spacing, survival rate, growth, competition index  
competition index.

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