

## **PENGARUH JARAK TEGAKAN TINGGAL TERHADAP PERTUMBUHAN TRUBUSAN JATI (*Tectona grandis*) UMUR 7 TAHUN DI KPH NGAWI**

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### **INTISARI**

Tanaman Jati merupakan jenis tanaman penghasil trubusan yang dapat dipelihara menjadi tegakan jati menjanjikan di masa mendatang. Pertumbuhan trubusan dari tegakan jati yang telah dijarangi, kemungkinan akan menimbulkan variasi pertumbuhan tegakan jati karena adanya perbedaan jarak dan tingkat naungan antar trubusan maupun dengan tegakan tinggal. Berkenaan dengan hal tersebut, maka diperlukan kajian tentang pengaruh jarak tegakan tinggal terhadap pertumbuhan trubusan jati pasca penjarangan.

Penelitian dilaksanakan di hutan tanaman jati dengan jarak tanam 3m x 3m yang mendapat perlakuan penjarangan sebesar 83% yang bekas tebangannya kemudian dirawat menjadi trubusan. Pengambilan data dilakukan secara sensus pada 6 blok tanaman, yang setiap bloknya terdiri atas beberapa unit perlakuan. Satu unit perlakuan terdiri 3 variasi jarak trubusan dengan tegakan tinggal yaitu 3, 6, dan 9 meter. Parameter yang diamati berupa pertumbuhan, indeks kompetisi, LAI (*Leaf Area Index*), dan keterbukaan kanopi. Untuk pengambilan data LAI dan keterbukaan kanopi menggunakan metode *Hemispherical Photography*.

Hasil penelitian menunjukkan bahwa trubusan pada jarak 9 meter dari tegakan tinggal memiliki pertumbuhan terbaik dibandingkan dengan jarak 3 meter dan 6 meter. Trubusan jarak 9 meter menghasilkan rerata diameter dan tinggi masing-masing sebesar 12,7 cm dan 11,6 m. Sedangkan untuk indeks kompetisi dan *Leaf Area Index* tertinggi berada pada trubusan berjarak 3 meter karena trubusan berdekatan dengan tegakan tinggal, sehingga tingkat kompetisi dan naungannya sangat tinggi.

**Kata Kunci: Trubusan, Jati, Jarak, Tegakan Tinggal, Pertumbuhan**

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## THE EFFECT OF RESIDUAL STAND DISTANCE ON THE GROWTH OF 7-YEAR-OLD COPPICE TEAK (*Tectona grandis*) IN KPH NGAWI

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### ABSTRACT

Teak is a type of coppice-producing plant that can be cultivated into promising teak stands in the future. Growth of coppice on teak stands which have been thinned, will likely cause variations in the growth of teak stands due to differences in distance and shading level between coppices and residual stands. In this regard, it is necessary to study the effect of residual stand distance on the growth of teak coppice after thinning.

The research was carried out in teak plantations with a spacing of 3m x 3m which received an 83% thinning treatment, which was then treated into coppices. Data collection was carried out by census on 6 plant blocks, which consisted of treatment units. One treatment unit consisted of 3 variations of distance from residual stands, namely 3, 6, and 9 meters. The variables observed were growth, competition index, LAI (Leaf Area Index), and canopy openness. The hemispherical photography method was used to collect data on LAI and canopy openness.

The results showed that the coppices at a distance of 9 meters from the residual stands had higher growth compared to distances of 3 meters and 6 meters. The result of the diameter and height of coppices at a 9-meter distance was 12.7 cm and 11.6 m, respectively. The highest competition index and leaf area index were found on the coppice at a distance of 3 meters because the coppices are close to the residual stands, so the level of competition and shading area is very high.

Keywords: Coppice, Teak, Distance, Residual Stand, Growth

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