

## EVALUASI KEBERHASILAN TANAMAN REHABILITASI DI HKI-04 PT. HUTAN KETAPANG INDUSTRI, KALIMANTAN BARAT

Oleh:

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### INTISARI

Rehabilitasi hutan dan lahan merupakan upaya yang dilakukan dengan tujuan untuk memulihkan, mempertahankan, serta meningkatkan fungsi hutan dan lahan sehingga meningkatkan daya dukung, produktivitas dan peranannya dalam mendukung sistem penyangga kehidupan. Rehabilitasi hutan dan lahan pada umumnya dilakukan dengan berbagai kegiatan, salah satunya yaitu kegiatan penanaman yang dilakukan pada lahan-lahan kritis. Penelitian dilakukan di HKI-04 PT. Hutan Ketapang Industri Kalimantan Barat yang sedang melakukan kegiatan rehabilitasi hutan dan lahan pada kawasan hutan kerangas terbuka dengan penanaman dua jenis pohon, yaitu balangeran dan gamal. Penelitian ini bertujuan untuk mengevaluasi tingkat keberhasilan kegiatan rehabilitasi yang telah dilakukan di HKI-04 PT. Hutan Ketapang Industri, Kalimantan Barat.

Penelitian dilakukan dengan menggunakan metode *Randomized Complete Block Design* (RCBD) dengan dua perlakuan, tujuh blok, dan lima unit eksperimen. Pengamatan dilakukan selama lima bulan dengan pengambilan data setiap dua minggu sekali. Parameter yang diamati berupa tinggi, diameter, kondisi dan kesehatan tanaman, serta identifikasi hama dan penyakit tanaman. Hasil pengamatan berupa tinggi dan diameter tanaman dianalisis menggunakan *Independent Sample T-Test* serta perhitungan rerata pertumbuhan tinggi dan diameter tanaman. Kondisi dan kesehatan tanaman dianalisis dengan perhitungan persen hidup serta persen tanaman yang sehat dan sakit, sedangkan identifikasi hama dan penyakit dilakukan dengan analisis deskriptif.

Berdasarkan hasil analisis dari *Independent Sample T-Test* menunjukkan perbedaan yang signifikan terhadap tinggi dan diameter tanaman rehabilitasi. Rerata tinggi balangeran yaitu 64,51 cm dan tinggi gamal yaitu 111,94 cm. sedangkan rerata diameter balangeran yaitu 0,83 cm dan diameter gamal yaitu 1,26 cm. Persen hidup yang diperoleh sebesar 97,14% untuk balangeran dan 91,43% untuk gamal. Berdasarkan persen hidup tersebut, dapat dikatakan rehabilitasi hutan dan lahan berhasil karena nilai tersebut lebih dari 75% sesuai dengan Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor 23 Tahun 2021 tentang Pelaksanaan Rehabilitasi Hutan dan Lahan.

**Kata kunci:** Rehabilitasi hutan dan lahan, evaluasi pertumbuhan

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## **EVALUATION ON THE GROWTH OF REHABILITATION PLANTS AT HKI-04 PT. HUTAN KETAPANG INDUSTRI, WEST KALIMANTAN**

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### **ABSTRACT**

Forest and land rehabilitation is an effort made with the aims of restoring, maintaining, and improving the function of forests and land so as to increase their carrying capacity, productivity and their role in supporting life support systems. Forest and land rehabilitation is generally carried out with various activities, one of which is planting activities carried out on critical lands. The research was conducted at HKI-04 PT. Hutan Ketapang Industri, West Kalimantan which is carrying out forest and land rehabilitation activities in an open heath forest area by planting two types of trees, namely balangeran and gamal. This study aims to evaluate the success rate of rehabilitation activities that have been carried out at HKI-04 PT. Hutan Ketapang Industri, West Kalimantan.

The research was designed Randomized Complete Block Design (RCBD) method with two treatments, seven blocks, and five experimental units. Observations were made for five months with data collection every two weeks. Parameters observed were height, diameter, condition and plant health, as well as identification of plant pests and diseases. Observations in the form of plant height and diameter were analyzed using the Independent Sample T-Test and calculating the average growth of plant height and diameter. The condition and health of the plants were analyzed by calculating the percentage of life and the percentage of healthy and diseased plants, while the identification of pests and diseases was carried out by descriptive analysis.

Based on the results of the analysis from the Independent Sample T-Test, it showed a significant difference in the height and diameter of the rehabilitation plants. The average height of the balangeran is 64.51 cm and the height of the gamal is 111.94 cm. while the average diameter of the balangeran is 0.83 cm and the diameter of the gamal is 1.26 cm. The percentage of life obtained was 97.14% for balangeran and 91.43% for gamal. Based on this percentage of survivors, it can be said that forest and land rehabilitation is successful because the value is more than 75% in accordance with the Minister of Environment and Forestry Regulation Number 23 of 2021 concerning Implementation of Forest and Land Rehabilitation.

**Keywords:** Forest and land rehabilitation, evaluation of growth

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