

## **IDENTIFIKASI TINGKAT KEALAMIAAN AGROFORESTRI BERBASIS JATI DI BANARAN, PLAYEN, GUNUNGKIDUL**

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### **INTISARI**

Agroforestri merupakan teknik membangun hutan yang mampu meningkatkan kelas luasan hutan rakyat di Gunungkidul mencapai 31.672,83 ha. Teknik ini dirancang untuk membentuk struktur dan komposisi menyerupai hutan alam. Namun, pengelolaan agroforestri bersifat dinamis, seperti praktik pola tanam tumpangsari, sehingga perlu dievaluasi menggunakan pendekatan kealamian. Tingkat kealamian adalah ukuran kealamian yang digunakan untuk mendeskripsikan perubahan alam dan mengevaluasi perencanaan tata kelola ruang. Tujuan penelitian ini untuk mengidentifikasi: (1) struktur, komposisi, dan dimensi pertumbuhan tegakan, (2) penerapan teknik silvikultur, dan (3) tingkat kealamian agroforestri berbasis jati.

Penelitian ini dilakukan di Banaran, Playen, Gunungkidul dalam rentang waktu November 2023 – Juli 2024. Unit lahan yang digunakan sebanyak 12 unit lahan, terdiri dari kelas luas kecil ( $<500 \text{ m}^2$ ), sedang ( $500 - 750 \text{ m}^2$ ), dan besar ( $>750 \text{ m}^2$ ). Setiap kelas luas dibagi menjadi lahan tumpangsari aktif dan non aktif. Data tanaman diambil pada setiap tingkat pertumbuhan, sedangkan data sosial dilakukan wawancara dengan *snowball sampling*. Analisis data digunakan metode gabungan, deskriptif kualitatif dan deskriptif kuantitatif.

Hasil penelitian menunjukkan bahwa: (1) agroforestri berbasis jati di Banaran, Playen, Gunungkidul terdiri dari tanaman multistrata dan multispesies dengan dimensi pertumbuhan stabil, Praktik pola tanam dan luasan lahan mempengaruhi struktur, komposisi, dan dimensi tegakan, (2) penerapan teknik silvikultur terbatas. Tanaman jati umumnya dilakukan pruning, thinning, dan pemupukan, Pada lahan tumpangsari aktif, penerapan teknik silvikultur dilakukan bersamaan dengan tanaman pertanian, (3) tingkat kealamian dipengaruhi oleh kelas luasan lahan dan praktik pola tanam. Rentang kealamian lahan tumpangsari aktif berkisar dari 3 – 5, sedangkan lahan tumpangsari non aktif berkisar dari 6 – 7.

**Kata kunci:** agroforestri, jati, kealamian, tumpangsari

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## **IDENTIFICATION OF THE NATURALNESS INDEX OF TEAK-BASED AGROFORESTRY IN BANARAN, PLAYEN, GUNUNGKIDUL**

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### **ABSTRACT**

Agroforestry is a building forests technique that can increase the community forest area in Gunungkidul to 31,672.83 ha. The goal of this technique is to form a structure and composition that resembles real forests. However, agroforestry management is dynamic, such as the practice of intercropping patterns, so it needs to be evaluated using a naturalness approach. The Naturalness Index is a measure of naturalness used to describe natural changes and evaluate management and planning. The purpose of this research is to identify: (1) the structure, composition, and growth dimensions of stands, (2) the application of silvicultural techniques, and (3) the naturalness index of teak-based agroforestry.

This research was conducted in Banaran, Playen, Gunungkidul between November 2023 and July 2024. The land units used were 12 land units, consisting of small area classes (<500 m<sup>2</sup>), medium (500 – 750 m<sup>2</sup>), and large (>750 m<sup>2</sup>). Each area class is divided into active and non-active intercropping land. Plant data were taken at each growth level, while social data were collected through interviews by snowball sampling. Data analysis used a combined method, descriptive qualitative and descriptive quantitative.

This research showed that: (1) teak-based agroforestry in Banaran, Playen, Gunungkidul consists of multistratum and multispecies plants with stable growth dimensions. Intercropping practices and land area affect the structure, composition, and growth dimensions of stands, (2) the application of silvicultural techniques is limited. Teak plants are generally pruned, thinned, and fertilized. On active intercropping land, the application of silvicultural techniques is carried out simultaneously with agricultural plants, (3) the naturalness level is influenced by land area class and intercropping practices. The naturalness range of active intercropping land ranges from 3 to 5, while non-active intercropping land ranges from 6 to 7.

**Keywords:** agroforestry, teak, naturalness, intercropping

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