

KOMPOSISI DAN KESESUAIAN LAHAN CENDANA
(*Santalum album* Linn.)
PADA SISTEM AGROFORESTRI DI DESA PETIR, KEC. RONGKOP,
KAB. GUNUNGKIDUL

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INTISARI

Cendana (*Santalum album* Linn.) merupakan jenis tanaman berkayu yang tumbuh secara alami di daerah Kepulauan Nusa Tenggara Timur, dan beberapa pulau lainnya di Indonesia. Upaya pelestarian cendana dilakukan dengan penanaman secara masif di berbagai daerah di luar habitat aslinya, termasuk Gunungkidul Yogyakarta. Penelitian ini bertujuan untuk mengetahui karakteristik struktur komposisi serta kemampuan tumbuh cendana dengan mengetahui kesesuaian lahan cendana pada sistem agroforestri.

Penelitian ini dilakukan di Desa Petir, Kecamatan Rongkop, Kabupaten Gunungkidul. Pengumpulan data dilakukan menggunakan metode satelit sampling berbasis kuadran dengan penempatan petak ukur secara *purposive sampling*, yaitu penentuan titik ukur berdasarkan dengan tujuan penelitian. Data yang diambil meliputi data biotik dan data fisik lingkungan pada lahan agroforestri yang terdapat pada tiga bukit. Analisis yang digunakan adalah analisis vegetasi menggunakan INP, analisis kesesuaian lahan, analisis statistik untuk mengetahui korelasi pertumbuhan antara cendana dengan jenis lain menggunakan bantuan *microsoft excel*.

Komposisi tegakan didominasi oleh cendana, formis, gamal, jati, dan mahoni. Tegakan cendana tersebar pada setiap bukit dengan nilai INP pada Bukit 1 tingkat hidup semai 123,75%, INP tingkat sapihan 107,79%. Pada Bukit 2 nilai INP cendana pada tingkat hidup semai sebesar 145,828%, tingkat sapihan 99,056%, tingkat tiang 69,085%. Pada Bukit 3 tingkat semai 132,18%, INP tingkat sapihan 49,97%. Mahoni merupakan salah satu inang yang memiliki nilai korelasi dengan cendana sebesar $R = -0,99$. Kelas kesesuaian lahan untuk cendana pada sistem agroforestri di Desa Petir adalah kelas S2.

Kata Kunci :Struktur, kesesuaian lahan, cendana, sistem agroforestri

Composition and Land Suitability of Sandalwood
(*Santalum album* Linn.)
on Agroforestry System in Petir Village, Rongkop Sub-District, Gunungkidul
District

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ABSTRACT

Sandalwood (*Santalum album* Linn.) is a woody plant species that grow naturally in the area of East Nusa Tenggara islands and several other islands in Indonesia. The sandalwood conservation effort is conducted by planting massively in various areas outside their natural habitat, including Gunungkidul District in Yogyakarta. This study aims to determine the characteristic of structure composition and the growing ability of sandalwood by knowing how land suitability of sandalwood in agroforestry systems.

This research was conducted in Petir Village, Rongkop Sub-District, Gunungkidul District. Data collecting was conducted by a satellite sampling method based on quadrant with the placement of plots by purposive sampling, namely the determination of the measurement point of based on the research objectives. The data taken was include the biotic and physical data of environment on agroforestry land which were on the three hills. The analysis used was the analysis of vegetation using INP, land suitability analysis, statistical analysis to determine the correlation between the growth of sandalwood with others using the Microsoft Excel.

Composition of stands dominated by sandalwood, *formis*, *gamal*, teak, and mahogany. Stands of sandalwood dispersed on every areas. At the Hill 1, IVI value on rate of seedlings was 123.75%, rate of sapling was 107.79%. At the Hill 2, IVI value on rate of seedling was 145.83%, rate of sapling was 99.06%, rate of poles was 69.09. At the hill 3, IVI on rate of seedlings was 132.18%, rate of sapling was 49.97%. Mahogany is one of the host that has a correlation with sandalwood value of $R = 0.99$. Suitability of land for sandalwood in agroforestry systems in the village of Petir is the class S2.

Key words: Structure, land suitability, sandalwood, agroforestry system.