ANALISIS VEGETASI TINGKAT SAPLING PADA ZONA SUBMONTANA DI KAWASAN GUNUNG TANDIKAT, SUMATERA BARAT

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ABSTRAK

Penelitian ini dilakukan di Zona Submontana Gunung Tandikat, Sumatera Barat, dengan tujuan menganalisis komposisi, struktur, dan keanekaragaman vegetasi tingkat sapling. Metode penelitian menggunakan purposive sampling untuk menentukan lokasi penelitian, dilanjutkan dengan pembuatan garis transek dan penempatan petak pengamatan secara systematic sampling. Pengamatan dilakukan pada 20 petak berukuran 5 × 5 m dengan diameter pohon ≥2-10≤ cm. Analisis data meliputi kerapatan, frekuensi, dominansi, Indeks Nilai Penting (INP), dan indeks keanekaragaman Shannon-Wiener. Hasil penelitian menunjukkan bahwa vegetasi tingkat sapling terdiri atas 21 famili, 31 genus, 41 spesies, dan 132 individu, dengan famili Meliaceae sebagai famili kodominan. Spesies dengan nilai INP tertinggi adalah *Viburnum sambucinum* sebesar 20,836%, sedangkan nilai terendah terdapat pada *Guioa diplopeta* sebesar 1,652%. Nilai indeks keanekaragaman Shannon-Wiener (H') sebesar 3,46 tergolong tinggi, yang menunjukkan komunitas vegetasi relatif stabil dengan distribusi individu antarspesies yang cukup merata. Kondisi lingkungan lokasi penelitian, seperti suhu rata-rata 19,8°C, kelembapan udara 83,1%, dan intensitas cahaya rendah akibat tutupan kanopi hutan, mendukung pertumbuhan vegetasi tingkat sapling. Berdasarkan hasil penelitian, Zona Submontana Gunung Tandikat memiliki potensi regenerasi hutan yang baik dalam mendukung pengelolaan dan konservasi ekosistem hutan pegunungan di Sumatera Barat.

Kata kunci: vegetasi anakan, hutan sumontana Tandikat, Nilai Penting, Indeks keanekaragaman.

ABSTRACT

This study was conducted in the Submontane Zone of Mount Tandikat, West Sumatra, with the aim of analyzing the composition, structure, and diversity of sapling-level vegetation. The research method employed purposive sampling to determine the study location, followed by the establishment of line transects and the placement of observation plots using systematic sampling. Observations were carried out in 20 plots measuring 5 × 5 m with a tree diameter of ≥2-10≤ cm. Data analysis included density, frequency, dominance, Important Value Index (IVI), and the Shannon-Wiener diversity index. The results showed that the sapling-level vegetation consisted of 21 families, 31 genera, 41 species, and 132 individuals, with Meliaceae identified as the codominant family. The species with the highest IVI was *Viburnum sambucinum* at 20.836%, while the lowest value was recorded for *Guioa diplopeta* at 1.652%. The Shannon-Wiener diversity index (H') value of 3.46 was categorized as high, indicating a relatively stable vegetation community with a fairly even distribution of individuals among species. Environmental conditions at the study site, including an average temperature of 19.8°C, air humidity of 83.1%, and low light intensity due to dense forest canopy cover, supported the growth of sapling-level vegetation. Based on the findings, the Submontane Zone of Mount Tandikat has good forest regeneration potential to support the management and conservation of montane forest ecosystems in West Sumatra.

Keywords: Sapling vegetation, submonatane forest Tandikat, Important Value, Index diversity