

KARAKTERISTIK VEGETASI DI BAWAH NAUNGAN DURIAN (*Durio zibethinus* Murr.) UMUR 4 TAHUN DI KECAMATAN WONOSALAM KABUPATEN JOMBANG

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INTISARI

Kecamatan Wonosalam, Kabupaten Jombang merupakan wilayah pengembangan durian, khususnya di Desa Wonosalam yang mencakup Dusun Sumber dan Dusun Tukum. Kedua dusun berada pada ketinggian 400–600 mdpl sehingga sesuai bagi pertumbuhan durian, namun kualitas buah yang dihasilkan berbeda dengan Dusun Tukum menunjukkan kualitas lebih baik. Perbedaan ini diduga berkaitan dengan peran vegetasi tumbuhan bawah yang secara ekologis penting, tetapi dapat menimbulkan kompetisi apabila tumbuh dominan. Oleh karena itu, penelitian ini dilakukan untuk mengkaji karakteristik dan keanekaragaman vegetasi tumbuhan bawah sebagai dasar pengelolaan budidaya durian berkelanjutan.

Penelitian ini dilaksanakan di Dusun Sumber dan Dusun Tukum dengan menggunakan metode plot. Peletakkan plot secara *purposive sampling* berupa plot berbentuk persegi berukuran 2 m × 2 m yang diletakkan di tengah area di antara empat pohon durian dengan jarak tanam 8 m × 8 m. Pada setiap lokasi penelitian terdapat 30 plot pengamatan. Data yang dikumpulkan meliputi jenis dan jumlah individu tumbuhan bawah. Analisis data dilakukan dengan menghitung Indeks Nilai Penting (INP), indeks keanekaragaman Shannon, kekayaan jenis, dan kemerataan jenis.

Hasil penelitian menunjukkan bahwa jumlah jenis tumbuhan yang ditemukan di Dusun Tukum lebih banyak dibanding dengan Dusun Sumber dengan masing-masing sebanyak 9 jenis dari 6 famili dan 7 jenis dari 4 famili keduanya didominasi oleh famili Asteraceae. Pada kedua lokasi penelitian jenis *Digitaria ciliaris* (Retz.) Koeler mendominasi dengan Indeks Nilai Penting sebesar 100,95% di Dusun Sumber dan 74,03% di Dusun Tukum. Nilai indeks keanekaragaman di Dusun Sumber sebesar 0,79 yang tergolong dalam kategori rendah, sedangkan di Dusun Tukum sebesar 1,37 termasuk kategori sedang. Sementara itu, indeks kemerataan jenis di Dusun Sumber sebesar 0,40 tergolong rendah, sedangkan di Dusun Tukum sebesar 0,62 tergolong tinggi.

Kata Kunci: Vegetasi bawah, Indeks Nilai Penting, Keanekaragaman jenis, Kemerataan Jenis, Wonosalam.

CHARACTERISTICS OF VEGETATION UNDER THE CANOPY OF 4-YEAR-OLD DURIAN (*Durio zibethinus* Murr.) IN WONOSALAM DISTRICT, JOMBANG REGENCY

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ABSTRACT

Wonosalam District, Jombang Regency, is a durian development area, particularly in Wonosalam Village, which includes Sumber and Tukum Hamlets. Both hamlets are located at an altitude of 400–600 meters above sea level, making them suitable for durian growth. However, the quality of the fruit produced differs, with Tukum Hamlet showing better quality. This difference is thought to be related to the role of understory vegetation, which is ecologically important but can cause competition if it grows dominantly. Therefore, this study was conducted to examine the characteristics and diversity of understory vegetation as a basis for sustainable durian cultivation management.

This study was conducted in Sumber Hamlet and Tukum Hamlet using a plot method. Plots were purposively placed in the form of square quadrats measuring $2\text{ m} \times 2\text{ m}$, positioned at the center of the area between four durian trees with a planting distance of $8\text{ m} \times 8\text{ m}$. A total of 30 observation plots were established at each study site. Data collected included species composition and the number of individual understory plants. Data analysis was performed by calculating the Important Value Index (IVI), Shannon diversity index, species richness, and species evenness.

The results of the study showed that the number of plant species found in Tukum Hamlet was greater than in Sumber Hamlet with 9 species from 6 families and 7 species from 4 families respectively, both dominated by the Asteraceae family. In both research locations, the *Digitaria ciliaris* (Retz.) Koeler species dominated with an Important Value Index of 100.95% in Sumber Hamlet and 74.03% in Tukum Hamlet. The diversity index value in Sumber Hamlet was 0.79 which is classified as low, while in Tukum Hamlet it was 1.37 which is included in the medium category. Meanwhile, the species evenness index in Sumber Hamlet was 0.40 which is classified as low, while in Tukum Hamlet it was 0.62 which is classified as high.

Keywords: Understory vegetation, Importance Value Index, Species diversity, Species evenness, Wonosalam.