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Preferensi Habitat Anggrek Terestrial dan Keanekaragamannya di Kampung Pitu, Nglanggeran, Yogyakarta
Rahma Widiastuti Cahyaningrum, Dr. Ir. Daryono Prehaten, S.Hut., M.Sc., IPM. ; Latifa Nuraini, M.Sc., ph.D.
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PREFERENSI HABITAT ANGGREK TERESTRIAL DAN KEANEKARAGAMANNYA DI KAMPUNG PITU, NGLANGGERAN, YOGYAKARTA

Rahma Widiastuti Cahyaningrum[1], Daryono Prehaten[2], Latifa Nuraini[3]

INTISARI

Keberadaan anggrek terestrial di ekosistem lantai hutan memegang peranan ekologis penting, meskipun kelestariannya rentan terganggu oleh dinamika habitat maupun aktifitas manusia. Meskipun kawasan Gunung Api Purba Nglanggeran telah banyak diteliti, studi mendalam mengenai struktur komunitas, preferensi lingkungan edafik, serta mikroklimat spesies anggrek tanah di area Kampung Pitu masih belum tersedia. Oleh sebab itu, riset ini dilaksanakan guna menginventarisasi keanekaragaman jenis anggrek terestrial sekaligus mengevaluasi variabel lingkungan yang memengaruhi persebarannya di Kampung Pitu.

Penelitian ini menggunakan metode deskriptif-eksploratif dengan pendekatan kualitatif dan kuantitatif. Pengumpulan data lapangan menggunakan 9 plot pengamatan berukuran 20 m × 20 m yang disesuaikan dengan kondisi topografi lokasi. Variabel ekologi yang diukur meliputi kelimpahan individu anggrek, mikroklimat (temperatur, kelembapan, pencahayaan), serta sifat edafik tanah (pH, tekstur, struktur, warna, tutupan vegetasi bawah, kondisi seresah, kandungan C-organik, dan N-total). Tingkat keanekaragaman dihitung menggunakan rumus Shannon-Wiener (H'), lalu interaksi antarvariabel dianalisis melalui Uji Korelasi Spearman.

Riset ini berhasil mendokumentasikan 39 individu dari 7 spesimen anggrek tanah, mencakup *Geodorum densiflorum, Malaxis koordersii., Nervilia plicata, Nervilia concolor, Polystachya concreta, Pecteilis susannae*, dan *Cheirostylis spathulata*. Keanekaragaman pada tingkat petak ukur pengamatan terbilang rendah (H' < 1), di mana petak ukur 4 memiliki nilai tertinggi (H' = 0,79). Namun, secara akumulatif kawasan, keanekaragaman anggrek terestrial tergolong kategori sedang (H' = 1,43). Secara statistik, faktor mikroklimat dan edafik tidak menunjukkan hubungan signifikan terhadap nilai H'.

Kata kunci: anggrek terestrial, deskriptif eksploratif, edafik, keanekaragaman, mikroklimat

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HABITAT PREFERENCE AND DIVERSITY OF TERRESTRIAL ORCHIDS IN KAMPUNG PITU, NGLANGGERAN, YOGYAKARTA

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ABSTRACT

Terrestrial orchids play a vital ecological role in forest floor ecosystems, yet their survival is vulnerable to disruption by habitat dynamics and human activities. Although the Nglanggeran Ancient Volcano area has been extensively studied, in-depth research regarding the community structure, edaphic preferences, and microclimate associations of terrestrial orchid species in the Kampung Pitu area remains lacking. Therefore, this research was conducted to inventory terrestrial orchid species diversity and evaluate the environmental variables influencing their distribution in Kampung Pitu.

This study employed a descriptive-exploratory method using both qualitative and quantitative approaches. Field data collection utilized nine 20 m × 20 m observation plots, adapted to the site's topographic conditions. Ecological variables measured included orchid individual abundance, microclimate (temperature, humidity, and light intensity), and soil edaphic properties (pH, texture, structure, color, understory cover, litter condition, organic carbon content, and total nitrogen). Diversity levels were calculated using the Shannon-Wiener formula (H'), and interactions between variables were analyzed via the Spearman Correlation Test.

This research successfully documented 39 individuals representing seven terrestrial orchid taxa: Geodorum densiflorum, Malaxis koordersii., Nervilia plicata, Nervilia concolor, Polystachya concreta, Pecteilis susannae, and Cheirostylis spathulata. Diversity at the individual sampling plot level was low (H' < 1), with plot 4 exhibiting the highest value (H' = 0.79). However, when aggregated across the entire area, terrestrial orchid diversity fell into the moderate category (H' = 1.43). Statistically, microclimatic and edaphic factors showed no significant relationship with H' values.

***Keywords**: terrestrial orchids, descriptive-exploratory, edaphic, diversity, microclimate*

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