

ABSTRAK

PERAN TANAMAN INANG DAN TANAMAN NEKTAR DALAM MENDUKUNG KEBERADAAN KUPU-KUPU (*Lepidoptera: Papilionoidea*) DI KAWASAN UNIVERSITAS LAMPUNG

Oleh

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Kupu-kupu (*Papilionoidea*) berperan penting sebagai penyerbuk dan bioindikator kualitas lingkungan, sehingga keberadaannya sangat dipengaruhi oleh ketersediaan tanaman inang dan tanaman nektar. Penelitian ini bertujuan untuk mengidentifikasi jenis tanaman inang dan nektar, jenis kupu-kupu, menganalisis hubungan serta peran antara komunitas tanaman dan kupu-kupu di kawasan Universitas Lampung. Penelitian dilaksanakan pada bulan September–November 2025 dengan frekuensi pengambilan sampel dua kali seminggu pada pukul 08.00–11.00 WIB. Metode yang digunakan adalah deskriptif eksploratif dengan kombinasi metode jelajah dan sensus melalui observasi langsung, serta identifikasi dibantu dengan aplikasi digital. Pengambilan sampel kupu-kupu dilakukan menggunakan *insect net* untuk menangkap individu secara selektif guna mempermudah proses identifikasi dan dokumentasi. Analisis data mencakup indeks keanekaragaman, dominansi, pemerataan, similaritas, dan korelasi. Hasil penelitian mengidentifikasi 20 spesies kupu-kupu dari famili *Papilionidae*, *Nymphalidae*, *Pieridae*, dan *Hesperiidae*, serta 57 spesies tanaman yang terdiri atas 15 tanaman inang dan 42 tanaman nektar. Indeks keanekaragaman tanaman tergolong sedang (1,5842–2,8164), sedangkan kupu-kupu umumnya sedang (1,0986–2,5994) dengan nilai rendah pada lokasi tertentu (0). Nilai dominansi tanaman (0,0829–0,3251) dan kupu-kupu (0,0932–0,5) tergolong rendah, menunjukkan tidak adanya spesies yang mendominasi. Pemerataan tanaman berkisar sedang hingga tinggi (0,5637–0,8644), sedangkan kupu-kupu tinggi (0,8593–0,9609) kecuali pada lokasi tertentu (0). Similaritas tanaman tertinggi terdapat pada pasangan FMIPA–Rektorat (70,00%) dan terendah FKIP–FISIP (27,03%), sedangkan kupu-kupu tertinggi pada FKIP–FK (85,71%) dan terendah (0,00%) pada beberapa pasangan lokasi. Analisis korelasi menunjukkan hubungan positif sangat kuat dan signifikan antara komposisi tanaman dengan keanekaragaman dan kelimpahan kupu-kupu, dengan variasi distribusi antar lokasi dipengaruhi oleh komposisi vegetasi dan ketersediaan sumber pakan. Secara keseluruhan, komunitas tanaman dan kupu-kupu di kawasan Universitas Lampung berada dalam kondisi relatif stabil, sehingga keberagaman vegetasi menjadi faktor utama dalam menjaga keberlanjutan populasi kupu-kupu di lingkungan kampus.

Kata Kunci: kupu-kupu, tanaman inang, tanaman nektar, keanekaragaman.

ABSTRACT

THE ROLE OF HOST PLANTS AND NECTAR PLANTS IN SUPPORTING BUTTERFLY (*Lepidoptera: Papilionoidea*) IN THE UNIVERSITY OF LAMPUNG AREA

By

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Butterflies (*Papilionoidea*) play an important role as pollinators and bioindicators of environmental quality, so their presence is greatly influenced by the availability of host plants and nectar plants. This study aims to identify the types of host and nectar plants, types of butterflies, and to analyze the relationship and role between plant and butterfly communities in the University of Lampung area. The research was conducted from September to November 2025 with sample collection carried out twice a week from 08:00 to 11:00 AM WIB. The method used is descriptive exploratory with a combination of survey and census methods through direct observation, and identification assisted by digital applications. Butterfly collection was carried out using an insect net to selectively capture individuals to facilitate the identification and documentation process. Data analysis includes diversity index, dominance, evenness, similarity, and correlation. The study identified 20 butterfly species from the families *Papilionidae*, *Nymphalidae*, *Pieridae*, and *Hesperiidae*, as well as 57 plant species consisting of 15 host plants and 42 nectar plants. The plant diversity index was classified as moderate (1.5842–2.8164), while butterflies were generally moderate (1.0986–2.5994) with low values in certain locations (0). Plant dominance values (0.0829–0.3251) and butterfly dominance values (0.0932–0.5) were considered low, indicating no species dominance. Plant evenness ranged from moderate to high (0.5637–0.8644), while butterfly evenness was high (0.8593–0.9609) except in certain locations (0). The highest plant similarity was found between FMIPA–Rectorate (70.00%) and the lowest between FKIP–FISIP (27.03%), whereas butterfly similarity was highest between FKIP–FK (85.71%) and lowest (0.00%) at several location pairs. Correlation analysis shows a very strong and significant positive relationship between plant composition and butterfly diversity and abundance, with variations in distribution between locations influenced by vegetation composition and the availability of food sources. Overall, the plant and butterfly communities in the Universitas Lampung area are in relatively stable condition, making vegetation diversity a main factor in maintaining the sustainability of butterfly populations on the campus.

Keywords: butterflies, host plants, nectar plants, diversity.