

ABSTRAK

STRUKTUR KOMUNITAS MAKROFAUNA PERMUKAAN TANAH PADA BERBAGAI TIPE VEGETASI DI LANSKAP TELAGA GUPIT KECAMATAN GADINGREJO KABUPATEN PRINGSEWU

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Telaga Gupit Pringsewu Lampung memiliki berbagai macam vegetasi di sekitarnya yang berperan penting secara ekologis. Perbedaan dalam struktur dan jenis vegetasi menciptakan mikrohabitat yang berbeda, yang memengaruhi distribusi, kelimpahan, dan komposisi makrofauna tanah. Penelitian ini bertujuan untuk mengetahui struktur komunitas makrofauna tanah, keanekaragaman dan kelimpahan makrofauna tanah pada lanskap Telaga Gupit Kecamatan Gadingrejo, Kabupaten Pringsewu. Penelitian dilaksanakan pada bulan Februari – Maret 2024 di Telaga Gupit dan di Laboratorium Ekologi Universitas Lampung. Sampling dilakukan pada enam tipe vegetasi yaitu vegetasi semak, perkebunan kakao, perkebunan karet, perkebunan jati, perkebunan jagung, dan perkebunan singkong. Pada setiap vegetasi dipasang 10 *pitfall trap* dengan jarak sejauh 3 m yang dipasang selama 24 jam dan dilakukan pengulangan sebanyak tiga kali ulangan jeda 10 hari. Makrofauna tanah yang tertangkap diidentifikasi dan dihitung jumlah individunya, serta dilakukan analisis keanekaragaman, pemerataan dan dominansi makrofauna tanah. Hasil penelitian diperoleh 4 *Class* yaitu *Insecta*, *Arachnida*, *Amphibi*, dan *Malacostraca* yang terdiri dari 15 Family yaitu *Formicidae*, *Termitidae*, *Curculionidae*, *Gryllidae*, *Acrididae*, *Scarabaeidae*, *Muscidae*, *Culicidae*, *Anisolabididae*, *Scytodidae*, *Oxyopidae*, *Aglenidae*, *Bothriuridae*, *Ranidae*, dan *Philosciidae* dengan total sebanyak 17 jenis atau spesies makrofauna permukaan tanah. Jumlah individu tertinggi ditemukan pada vegetasi semak sebanyak 538 individu, sedangkan terendah terdapat pada vegetasi perkebunan jagung sebanyak 216 individu. Keanekaragaman makrofauna tanah pada setiap vegetasi berbeda, tapi pemerataan jenisnya menunjukkan ekosistem yang stabil dan menunjukkan tidak ada spesies yang mendominasi pada setiap vegetasi.

Kata kunci: makrofauna tanah, biodiversitas tanah, Telaga Gupit, *pitfall trap*

ABSTRACT

COMMUNITY STRUCTURE OF SOIL SURFACE MACROFAUNA IN VARIOUS VEGETATION TYPES IN THE LANDSCAPE OF TELAGA GUPIT GADINGREJO DISTRICT PRINGSEWU REGENCY

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Telaga Gupit Pringsewu Lampung has a wide variety of surrounding vegetation that plays an important ecological role. Differences in vegetation structure and type create different microhabitats, which affect the distribution, abundance and composition of soil macrofauna. This study aims to determine the structure of soil macrofauna communities, diversity and abundance of soil macrofauna in the landscape of Telaga Gupit, Gadingrejo District, Pringsewu Regency. The research was carried out in February – March 2024 at Telaga Gupit and at the Ecology Laboratory of the University of Lampung. Sampling was carried out on six types of vegetation, namely shrub vegetation, cocoa plantations, rubber plantations, teak plantations, corn plantations, and cassava plantations. In each vegetation, 10 pitfall traps with a distance of 3 m were installed for 24 hours and repeated three times with a 10-day interval. The captured soil macrofauna were identified and counted individually, and the diversity, evenness and dominance of soil macrofauna were analyzed. The results of the study were obtained in 4 classes, namely *Insecta*, *Arachnida*, *Amphibi*, and *Malacostraca* consisting of 15 families, namely *Formicidae*, *Termitidae*, *Curculionidae*, *Gryllidae*, *Acrididae*, *Scarabaeidae*, *Muscidae*, *Culicidae*, *Anisolabididae*, *Scytodidae*, *Oxyopidae*, *Aglenidae*, *Bothriuridae*, *Ranidae*, and *Philosciidae* with a total of 17 types or species of land-level macrofauna. The highest number of individuals was found in shrub vegetation as many as 538 individuals, while the lowest was found in corn plantation vegetation as many as 216 individuals. The diversity of soil macrofauna in each vegetation is different, but the evenness of the species indicates a stable ecosystem and shows that no species dominates in every vegetation.

Keywords: soil macrofauna, soil biodiversity, Telaga Gupit, *pitfall trap*