

KEANEKARAGAMAN ACARINA TANAH (ARACHNIDA: ACARINA) DI BUKIT PLAWANGAN DAN PRONOJIWO, TAMAN NASIONAL GUNUNG MERAPI, SLEMAN, YOGYAKARTA

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INTISARI

Bukit Plawangan dan Bukit Pronojiwo merupakan kawasan yang berada di Taman Nasional Gunung Merapi (TNGM). Tempat ini memiliki keanekaragaman hayati yang tinggi, termasuk dalam hal fauna dan satwa. Wilayah ini dikenal memiliki keanekaragaman flora dan fauna yang cukup tinggi. Kelompok fauna yang melimpah di antaranya adalah mamalia, reptil, burung (aves), serangga (insekta), dan kelompok Arachnida seperti Acarina. Acarina termasuk dalam Class Arachnida, Phylum Arthropoda, dan dapat ditemukan pada berbagai jenis habitat, baik perairan maupun daratan (terrestrial). Di habitat terrestrial, Acarina banyak dijumpai pada materi organik dan detritus. Kelompok ini memiliki berbagai peran ekologis, di antaranya sebagai predator, fitofag (pemakan tumbuhan), mikofag (pemakan jamur), saprofag (pemakan sisa organik), maupun dekomposer. Distribusi dan kelimpahan Acarina sangat dipengaruhi oleh faktor lingkungan seperti kelembaban, suhu, pH tanah, serta kandungan bahan organik. Penelitian yang dilakukan bertujuan untuk mengetahui dan mengidentifikasi keanekaragaman Acarina tanah di Bukit Plawangan dan Bukit Pronojiwo serta mengkaji peran ekologisnya dan faktor lingkungan yang mempengaruhi keberadaannya. Pengambilan sampel dilakukan di tiga zona ketinggian dengan empat titik pengambilan sampel di tiap zona, masing-masing titik dilakukan tiga kali ulangan. Pada setiap subtitik pengambilan, diukur parameter lingkungan berupa suhu tanah, kelembaban, dan pH. Hasil penelitian menunjukkan bahwa terdapat 15 famili Acarina di Bukit Plawangan dan 11 famili di Bukit Pronojiwo. Acarina yang ditemukan di kedua lokasi menunjukkan peran ekologis yang beragam, meliputi saprofag, mikofag, fitofag, dan predator. Tingkat keanekaragaman Acarina di kedua bukit tergolong sedang, mengindikasikan kondisi lingkungan yang masih cukup mendukung keberadaan mikroartropoda tersebut.

KATA KUNCI : Acarina, keanekaragaman, Plawangan, Pronojiwo, Taman Nasional Gunung Merapi

**SOIL ACARINA (ARACHNIDA: ACARINA) DIVERSITY IN BUKIT
PLAWANGAN AND PRONOJIWO, TAMAN NASIONAL GUNUNG
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ABSTRACT

Bukit Plawangan and Bukit Pronojiwo are areas located within Taman Nasional Gunung Merapi (TNGM). These sites are known for their high biodiversity, particularly in terms of flora and fauna. The abundant faunal groups include mammals, reptiles, birds (Aves), insects (Insecta), and arachnids such as Acarina. Acarina belong to the class Arachnida, phylum Arthropoda, and can be found in various types of habitats, both aquatic and terrestrial. In terrestrial habitats, Acarina are commonly found in organic matter and detritus. This group plays various ecological roles, including as predators, phytophages (plant feeders), mycophages (fungus feeders), saprophages (organic matter feeders), and decomposers. The distribution and abundance of Acarina are strongly influenced by environmental factors such as humidity, temperature, soil pH, and organic matter content. The objective of this study was to identify and assess the diversity of soil Acarina in Bukit Plawangan and Bukit Pronojiwo, as well as to explore their ecological roles and the environmental factors affecting their presence. Sampling was conducted at three elevation zones, with four sampling points in each zone, and each point was replicated three times. At each sub-point, environmental parameters such as soil temperature, humidity, and pH were measured. The results showed the presence of 15 Acarina families in Bukit Plawangan and 11 families in Bukit Pronojiwo. Acarina found in both sites displayed a variety of ecological functions, including saprophages, mycophages, phytophages, and predators. The diversity level of Acarina in both hills was categorized as moderate, indicating that the environmental conditions still sufficiently support the existence of these microarthropods.

KEYWORD: Acarina, Divesity, Plawangan, Pronojiwo, Taman Nasional Gunung Merapi