

KEANEKARAGAMAN LUMUT EPIFIT DI LERENG SELATAN GUNUNG LAWU KARANGANYAR, JAWA TENGAH

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INTISARI

Penelitian mengenai Keanekaragaman Lumut Epifit di Lereng Selatan, Gunung Lawu, Karanganyar, Jawa Tengah telah dilakukan dengan tujuan untuk dipelajari tentang keanekaragaman, klasifikasi, dan distribusi lumut di Gunung Lawu. Hal ini dilakukan karena Gunung Lawu terletak di perbatasan Provinsi Jawa Tengah yang memiliki kondisi iklim agak basah dan Provinsi Jawa Timur yang cenderung kering. Kondisi lingkungan tersebut menyebabkan adanya keunikan pada habitat dan tumbuhan penyusun vegetasi di Gunung Lawu, termasuk tumbuhan lumut. Lumut epifit memiliki peran penting dalam ekosistem hutan pegunungan. Penelitian mengenai keanekaragaman lumut epifit di lereng utara Gunung Lawu telah dilakukan, sedangkan di lereng selatan masih belum dilakukan, sehingga menarik untuk diteliti. Metode yang digunakan dalam penelitian ini adalah metode penjelajahan dan metode kuadrat dengan plot berukuran 15 x 15 cm yang didistribusikan secara acak pada keenam stasiun pengamatan. Penelitian ini dilakukan pula pengukuran parameter lingkungan seperti: suhu udara, ketinggian tempat, kelembaban udara, dan intensitas cahaya. Analisis keanekaragaman ditentukan menggunakan Indeks Shannon-Wiener. Analisis distribusi ditentukan berdasarkan Dominansi, Densitas, Frekuensi, dan Nilai Penting.

Hasil penelitian menunjukkan bahwa keanekaragaman Lumut Epifit di Lereng Selatan Gunung Lawu terdiri atas 14 jenis. Jenis lumut yang ditemukan yaitu *Lejeunea flava* (Sw.) Nees, *Bazzania tridens* (Reinw., Blume & Nees) Trevis, *Pyrrhobryum spiniforme* (Hedw.) Mitt., *Bryum billardieri* Schwagr., *Bryum microerythrocarpum* C.Mull. & Kmdb, *Bryum coronatum* Schwaegr, *Barbula unguiculata* Hedw., *Calymperes tenerum* C.Mull, *Octobleparum albidum* Hedw., *Hyophila involuta* (Hook.) Jaeg, *Acroporium lamprophyllum* (Mitt.) Fleisch., *Leucobryum javense* (Brid.) Mitt., *Fissidens asperisetus* Lac, dan *Homaliodendron scalpellifolium* Fleisch. Dari 14 jenis lumut tersebut dapat dibuat klasifikasi ke dalam 2 kelas, 7 bangsa dan 10 suku. Keragaman lumut yang ditemukan tergolong ke dalam keragaman sedang. Jenis lumut dengan distribusi yang luas dan merata yaitu *Lejeunea flava* (Sw.) Nees.

Kata kunci: Gunung Lawu, Keanekaragaman, Lumut Epifit, Lereng Selatan

DIVERSITY OF EPIPHYTE BRYOPHYTE ON THE SOUTHERN SLOPE OF MOUNT LAWU, KARANGANYAR, CENTRAL JAVA

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ABSTRACT

Study of epiphytic bryophyte in South Slope of Lawu Mountain, Karanganyar, Middle Java, have been done in purpose of learning the classification, diversity, and distribution of mosses in Lawu Mountain. The study has been held regarding to the position of Lawu Mountain which located on the border of Province of Middle Java, with relatively moist climate, and Province of East Java, with relatively arid climate. The climate difference induced a particular habitat thus plant vegetation inhabited Lawu Mountain, including mosses. Epiphytic bryophytes have an important role in mountain forest ecosystems. Research on the diversity of epiphytic bryophytes on the northern slope of Mount Lawu has been published, while on the southern slope it has not been carried out, so it is interesting to study. The method used in this study is the exploratory method and the quadratic method with plots measuring 15 x 15 cm² which are distributed at the six observation stations. Environmental parameters were also measured, such as: air temperature, altitude, humidity, and light intensity. Diversity analysis was determined using the Shannon-Wiener Index. Distribution analysis is determined based on Dominance, Density, Frequency, and Importance.

*The study result has showed that the diversity of musci on the South Slope of Mount Lawu consists of 14 species. Moss species found in Mountain Lawu are *Lejeunea flava* (Sw.) Nees, *Bazzania tridens* (Reinw., Blume & Nees) Trevis, *Pyrrhobryum spiniforme* (Hedw.) Mitt., *Bryum billardieri* Schwagr., *Bryum microerythrocarpum* C.Mull. & Kmdb, *Bryum coronatum* Schwaegr., *Barbula unguiculata* Hedw., *Calymperes tenerum* C.Mull, *Octobleparum albidum* Hedw., *Hyophila involuta* (Hook.) Jaeg, *Acroporium lamprophyllum* (Mitt.) Fleisch., *Leucobryum javense* (Brid.) Mitt., *Fissidens asperisetus* Lac, and *Homaliodendron scalpellifolium* Fleisch. From the 14 identified species, they have been classified 2 classes, 7 orde, and 10 families. The diversity of epiphytic bryophytes found belongs to the moderate diversity. The species of Bryophytes with a wide and even distribution is *Lejeunea flava* (Sw.) Nees.*

Keywords: Diversity, Epiphytic Bryophytes, Mount Lawu, Southern Slope