

Keanekaragaman Lumut di Batuan Candi Plaosan Jawa Tengah

Ninda Nur Amalia (16/396959/BI/09717)

Pembimbing: Drs. Heri Sujadmiko, M.Si.

Intisari

Adanya lumut yang tumbuh pada batuan candi mampu menyebabkan pelapukan. Akan tetapi, keanekaragaman lumut di batuan Candi Plaosan, Jawa Tengah belum pernah diteliti. Penelitian ini bertujuan untuk mempelajari keanekaragaman lumut dan mengetahui distribusi lumut yang tumbuh di batuan Candi Plaosan, Jawa Tengah. Sampel lumut dikoleksi dengan metode jelajah. Analisis vegetasi lumut dilakukan dengan metode kuadrat plot 15 x 15 cm yang didistribusikan secara acak pada 52 plot. Parameter lingkungan yang diukur yaitu suhu udara, kelembaban udara, dan intensitas cahaya. Keanekaragaman jenis lumut dianalisis dengan indeks keanekaragaman Shannon-Wiener. Hasil identifikasi keanekaragaman jenis lumut yang diperoleh sebanyak 11 jenis lumut yang dikelompokkan menjadi dua kelas, yaitu Hepaticopsida dan Bryopsida, meliputi *Cyathodium smaragdinum*, *Riccia hasskarliana*, *Barbula indica*, *Brachymerium exile*, *Brachymerium indicum*, *Fissidens atroviridis*, *Fissidens virens*, *Fissidens zollingeri*, *Gymnostomiella vernicosa*, *Hyophila involuta*, dan *Philonotis hastata*. Jenis lumut yang terdistribusi luas dan merata adalah *B. indica*.

Kata kunci: Candi Plaosan, keanekaragaman, lumut

Diversity of Bryophytes in Plaosan Temple, Central Java

Ninda Nur Amalia (16/396959/BI/09717)

Pembimbing: Drs. Heri Sujadmiko, M.Si.

Abstract

The presence of bryophyte that grows on rock of temple can cause weathering. However, the diversity of bryophytes on the rocks of Plaosan Temple, Central Java has never been subjected to any studies. This research aims to study the diversity of bryophyte and to determine the distribution of bryophyte that grows in the rocks of Plaosan Temple, Central Java. Moss samples were collected using the cruise method. Vegetation analysis was carried out using the quadrat method of 15 x 15 cm plots which were randomly distributed in 52 plots. The environmental parameters measured were air temperature, humidity, and light intensity. Species diversity was analyzed using Shannon-Wiener index. The results of identification of bryophytes diversity obtained were 11 types of bryophytes which were grouped into two classes, namely Hepaticopsida and Bryopsida, including *Cyathodium smaragdinum*, *Riccia hasskarliana*, *Barbula indica*, *Brachymenium exile*, *Brachymenium indicum*, *Fissidens atroviridis*, *Fissidens virens*, *Fissidens zollingeri*, *Gymnostomiella vernicosa*, *Hyophila involuta*, and *Philonotis hastata*. Bryophyte that is widely and evenly distributed is *B. indica*.

Key words: bryophyte, diversity, Plaosan temple