

KEANEKARAGAMAN LUMUT DI SITUS GUA SELUMAN, BANTUL, DIY

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INTISARI

Lumut merupakan agen biologis yang berpotensi dalam pelapukan batuan secara biologis, sehingga keberadaan maupun kehadirannya di Situs Gua Seluman, Bantul perlu dicegah agar kelestarian Situs Gua Seluman, Bantul tetap terjaga. Penelitian mengenai keanekaragaman lumut ini telah dilakukan dengan tujuan untuk mengetahui keanekaragaman jenis, klasifikasi, dan distribusi lumut yang terdapat di Situs tersebut. Penelitian tentang keanekaragaman lumut dilakukan di Situs Gua Seluman, Bantul yang merupakan bangunan pesanggrahan yang dibangun dari bahan material batu bata. Penelitian mengenai lumut yang hidup di bangunan yang berbahan batu bata telah dilakukan oleh Pradnyawati (2016), Iswanto (2016), dan Aryani (2014). Namun data tumbuhan lumut di Situs Gua Seluman, Bantul belum pernah dilakukan. Oleh karena itu, perlu dilakukan pendataan lumut di Situs tersebut. Dari hasil penelitian ini akan diketahui jenis-jenis lumut yang paling berpotensi merusak batuan Situs Gua.

Metode penelitian ini dilakukan dengan metode jelajah pada enam stasiun pengamatan di area situs Gua Seluman, Bantul, yaitu sisi barat/Lorong utama, Lorong selatan 1, Lorong selatan 2, bekas tempat pemandian selir, Arca Burung Beri, dan sisi atas/atap gerbang Pesanggrahan. Koleksi sampel dengan metode teknik herbarium kering untuk diidentifikasi di laboratorium. Analisis vegetasi lumut dilakukan dengan metode kuadrat plot 15 cm x 15 cm yang didistribusikan secara acak pada keenam stasiun pengamatan. Variasi keanekaragaman jenis lumut dianalisis dengan indeks keanekaragaman Shannon-Wiener. Analisis distribusi dan penentuan jenis-jenis lumut yang mendominasi didasarkan atas nilai penting.

Hasil identifikasi ditemukan 11 jenis lumut yaitu : *Riccia hasskarliana* Steph. , *Cyathodium smaragdinum* Schiffm. , *Fissidens zippelianus* Dozy & Molk. , *Gymnostomiella vernicosa* (Hook.) Fleisch. , *Barbula indica* (Hook.) Spreng in Steud. , *Barbula consanguinea* (Thw. & Mitt.) Jaeg , *Barbula javanica* Doz. & Molk , *Hyophila involuta* (Hook.) Jaeg., *Funaria hygrometrica* Hedw., *Brachymenium exile* (Dozy & Molk.) Bosch & Lac., dan *Brachymenium indicum* (Dozy & Molk.) Bosch & Lac. Ke-11 jenis lumut tersebut dapat dikelompokkan dalam 2 kelas yaitu Hepaticopsida dan Bryopsida. Jenis lumut yang mempunyai distribusi luas dan merata yang ditemukan di Situs Gua Seluman, Bantul adalah jenis *Gymnostomiella vernicosa*. Secara keseluruhan keanekaragaman lumut yang ditemukan di Situs Gua Seluman, Bantul tergolong rendah dengan nilai indeks keanekaragaman Shannon-Wiener sebesar 1,781146585.

Kata kunci : Keanekaragaman; lumut; Situs Gua Seluman, Bantul

THE DIVERSITY OF BRYOPHYTE AT GUA SELUMAN SITE, BANTUL, DIY

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ABSTRACT

Bryophyte has potential in the heritage site of rock weathering, so that the presence in the Gua Seluman Site, Bantul need to be prevented for the preservation of Gua Seluman Site, Bantul remain awake. This reaearch aims to know the species diversity, clasification, and bryophyte distribution on the brick of Gua Seluman Site, Bantul. Research on the diversity of mosses is done at the Gua Seluman Site, Bantul which is a pesanggrahan building constructed of brick material. Research on moss living in buildings made of bricks has been done by Pradnyawati (2016), Iswanto (2016), and Aryani (2014). But the results of moss plant in Gua Seluman Site, Bantul has never been done. From the results of this study will be known types of the most potentially damaging bryophyte rock site.

The collecting method of bryophyte samples was conducted by exploration method, in six observation stations at Gua Seluman Site, Bantul area, such as in west side/main hallway, south side of the hallway 1, south side of the hallway 2, a former concubine bath, statues of beri birds, and the upper side/roof of the site. Bryophyte samples collected using dried herbarium techniques, were identified in the laboratory. The bryophyte vegetation analysis used quadrat method 15 cm x 15 cm was randomly distributed on the six observation station. Variation of bryophyte species diversity was analyzed by the Shannon-Wiener diversity index. The distribution analysis and the determination of the bryophyte that dominate were obtained based on importance values.

Based on the results the study shows that there are eleven species live on brick of Gua Seluman Site, Bantul, nomely as *Riccia hasskarliana* Steph. , *Cyathodium smaragdinum* Schiffm. , *Fissidens zippelianus* Dozy & Molk. , *Gymnostomiella vernicosa* (Hook.) Fleisch. , *Barbula indica* (Hook.) Spreng in Steud. , *Barbula consanguinea* (Thw. & Mitt.) Jaeg , *Barbula javanica* Doz. & Molk , *Hyophila involuta* (Hook.) Jaeg., *Funaria hygrometrica* Hedw., *Brachymenium exile* (Dozy & Molk.) Bosch & Lac., and *Brachymenium indicum* (Dozy & Molk.) Bosch & Lac. These can be classified into 2 classes as Hepaticopsida and Bryopsida. Bryophyte species which have been broadly distributed on the concrete brick of Gua Seluman Site, Bantul was *Gymnostomiella vernicosa*. Overall, the moss diversity found in the Gua Seluman Site, Bantul is low, with the value of the Shannon-Wiener's diversity index being 1,781146585.

Keywords : Diversity; bryophyte; Gua Seluman Site, Bantul.