

## RINGKASAN

Lumut termasuk tumbuhan tingkat rendah yang pertumbuhannya dipengaruhi oleh struktur permukaan substrat dan sensitif terhadap perubahan lingkungan. Informasi mengenai keanekaragaman lumut epifit belum banyak tersedia. Penelitian ini bertujuan untuk mengetahui keanekaragaman jenis lumut epifit pada pohon damar (*Agathis dammara*) di Kebun Raya Baturraden berdasarkan karakter morfologi dan anatomi. Penelitian dilakukan menggunakan metode survei eksploratif dengan teknik pengambilan sampel dilakukan secara *purposive sampling* pada 6 lokasi pengamatan yang dilakukan selama tiga bulan dari bulan Januari sampai Maret 2023. Variabel dalam penelitian ini adalah faktor lingkungan dan karakteristik lumut epifit. Parameter yang diamati meliputi karakter morfologi, karakter anatomi, serta faktor lingkungan. Pengamatan anatomi dilakukan dengan membuat preparat segar. Data hasil pengamatan dianalisis secara deskriptif.

Berdasarkan hasil penelitian jenis lumut epifit yang ditemukan pada pohon damar sebanyak 31 jenis lumut, yaitu *Leucobryum glaucum*, *Octoblepharum albidum*, *Campylopus subulatus*, *Campylopus atrovirens*, *Chaetomitrium horridulum*, *Hypnum cupressiforme*, *Isopterygium tenerum*, *Plagiothecium undulatum*, *Roaldia revoluta*, *Sematophyllum subpinnatum*, *Sematophyllum substrumosum*, *Sematophyllum demissum*, *Acroporium pungens*, *Dicranodontium asperulum*, *Pogonatum aloides*, *Thuidium delicatulum*, *Mnium hornum*, *Pyrrhobryum spiniforme*, *Marchantia polymorpha*, *Pallavicenia lyelli*, *Lejeunea dipterota*, *Cololejeunea rossettiana*, *Lejeunea discreta*, *Mastigolejeunea innovans*, *Porella bolanderi*, *Trichocolea tomentella*, *Heteroscyphus aselliformis*, *Plagiochila adianthoides*, *Plagiochila pautaphila*, *Plagiochila porelloides*, dan *Frullania acutiloba*. Jenis lumut epifit yang paling banyak dijumpai pada pohon damar adalah *Octoblepharum albidum*. Karakter morfologi yang membedakan antar jenis lumut epifit pada bentuk filoid, bentuk tepi, ujung, dan pangkal filoid, tipe kapsul, serta keberadaan costa. Karakter anatomi yang membedakan meliputi bentuk sel lamina filoid, keberadaan *hyalin cell* dan *alar cell*.

Kata kunci : *Agathis dammara*, anatomi, keanekaragaman, lumut epifit, morfologi

## SUMMARY

Bryophytes are lower plants whose growth is influenced by the surface structure of the substrate and is sensitive to environmental changes. Information on the diversity of epiphytic lichens is not widely available. This study aims to determine the diversity of epiphytic bryophytes species on resin trees (*Agathis dammara*) in the Baturraden Botanical Gardens based on morphological and anatomical characters. The research be conducted using the exploratory survey method with a purposive sampling technique at six observation locations, which will be carried out for three months from January to March 2023. The variables in this study are environmental factors and the characteristics of epiphytic bryophytes. Parameters to be observed included morphological characters, anatomical characters, and environmental factors. Anatomical observations were made by making fresh preparations. Observational data were analyzed descriptively.

The results of this research showed that the species of epiphytic bryophytes found on resin trees as many as 31 species of bryophytes, namely *Leucobryum glaucum*, *Octoblepharum albidum*, *Campylopus subulatus*, *Campylopus atrovirens*, *Chaetomitrium horridulum*, *Hypnum cupressiforme*, *Isopterygium tenerum*, *Plagiothecium undulatum*, *Roaldia revoluta*, *Sematophyllum subpinnatum*, *Sematophyllum substrumulosum*, *Sematophyllum demissum*, *Acroporium pungens*, *Dicranodontium asperulum*, *Pogonatum aloides*, *Thuidium delicatulum*, *Mnium hornum*, *Pyrrhobryum spiniforme*, *Marchantia polymorpha*, *Pallavicenia lyelli*, *Lejeunea dipterota*, *Cololejeunea rossettiana*, *Lejeunea discreta*, *Mastigolejeunea innovans*, *Porella bolanderi*, *Trichocolea tomentella*, *Heteroscyphus aselliformis*, *Plagiochila pautaphila*, *Plagiochila porelloides*, and *Frullania acutiloba*. The most common species of epiphytic bryophytes found on resin trees is *Octoblepharum albidum*. The morphological characters that distinguish between epiphytic bryophytes species are the phylloid shape, the shape of the edges, ends, and basal filoid, the type of capsule, and the presence of ribs. The distinguishing anatomical characteristics include the shape of the lamina filoid cells and the presence of *hyaline cells* and *alar cells*.

Keywords : *Agathis dammara*, *anatomy*, *diversity*, *epiphytic bryophytes*, *morphology*