

# Analisis Kelimpahan Lumut Epifit di Ruang Terbuka Hijau (RTH) Hutan Kota Srengseng Sawah dan Tepi Jalan Moch. Kahfi II, Jagakarsa, Jakarta Selatan = Analysis of Epiphytic Bryophytes Abundance in Green Open Space (GOS) Srengseng Sawah Urban Forest and Moch. Kahfi II Roadside, Jagakarsa, South Jakarta

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## Abstrak

Ruang Terbuka Hijau (RTH) merupakan area hijau yang menjadi tempat berlindung lumut pada cuaca panas dan kering di wilayah urban. Spesies lumut yang mampu menoleransi kekeringan akan memiliki tutupan lumut yang besar dan melimpah pada suhu udara tinggi dan kelembapan udara rendah. Lumut epifit dapat menjadi bioindikator karena lumut sensitif terhadap perubahan lingkungan. Kelimpahan suatu spesies lumut epifit dapat menunjukkan lingkungan yang ekstrim di suatu area. Penelitian ini bertujuan untuk mengetahui perbedaan kelimpahan lumut epifit serta mengetahui hubungan faktor lingkungan dan inang pohon dengan kelimpahan lumut epifit di Hutan Kota Srengseng Sawah dan tepi Jalan Moch. Kahfi II. Penelitian dilakukan dengan mengoleksi sampel lumut epifit pada pohon inang yang dipilih secara random dengan ketentuan DBH batang pohon >20 cm. penelitian dilakukan pada 3 plot di dalam hutan kota dan 3 plot di tepi jalan luar hutan kota. Hasil analisis data rata-rata tutupan lumut epifit di dalam hutan lebih besar  $43,32 \pm 31,69\%$  daripada di luar hutan  $39,63 \pm 29,44\%$ , namun tidak beda signifikan ( $p = 0,566$ ). Berdasarkan divisinya, rata-rata tutupan lumut sejati di dalam hutan sebesar  $35,71 \pm 27,81\%$  dan lumut hati sebesar  $47,96 \pm 33,57\%$ . Sedangkan di luar hutan, rata-rata tutupan lumut sejati sebesar  $41,85 \pm 29,11\%$  dan lumut hati sebesar  $26,56 \pm 29,56\%$ . Lumut melimpah pada pohon jati belanda, tipe kulit scaly-smooth, DBH batang pohon 37,9–58,7, rentang nilai pH 4,96–5,92, dan tutupan kanopi sebesar 33–56%. Rata-rata tutupan lumut tinggi pada ketinggian 0–100 dan arah utara di dalam hutan. Berdasarkan uji korelasi Spearman, hasil data kelimpahan lumut tidak berkorelasi antara parameter abiotik yaitu suhu, kelembapan, dan intensitas cahaya dengan tutupan lumut di hutan kota dan tepi jalan. Hasil penelitian ini adalah persentase tutupan lumut dapat menjadi indikator parameter kelembapan udara di wilayah urban.

.....Green Open Space (GOS) became an area for epiphytic bryophyte to refuge from hot and dry weather in urban district. Bryophyte species that can tolerate desiccation will have large and abundant bryophyte cover at high air temperature and low humidity percentage. Epiphytic bryophyte known to be used as bioindicator because it's sensitivity to environmental changes. The abundance of some epiphytic species may indicate that they are present in the harsh environment of the area. This study aimed to see the significant difference of epiphytic bryophyte abundance and also the relationship between the abundance of epiphytic bryophyte with environmental factors and tree hosts in Srengseng Sawah City Forest and Moch. Kahfi II Roadside. This research collected epiphytic bryophyte sampels on random host trees with DBH >20 cm. The research carried out in 3 plots inside and 3 plots outside of city forest. The abundance of epiphytic bryophyte cover and its relations with environmental parameters were analysed. Data results state that the mean cover of bryophyte in the forest is greater  $43,32 \pm 31,69\%$  than outside the forest  $39,63 \pm 29,44\%$ , but not significantly different ( $p = 0,566$ ). Based on division, the average moss (Bryophyte) cover in the forest is  $35,71 \pm 27,81\%$  and liverworts (Marchantiophyta) are  $47,96 \pm 33,57\%$ . Meanwhile, the average moss cover

outside forest  $41,85 \pm 29,11\%$  and liverworts are  $26,56 \pm 29,56\%$ . Moss is abundant on *Guazuma ulmifolia* trees, scaly-smooth bark type, tree DBH range 37,9–58,7, pH value range 4,96–5,92, and canopy cover of 33–56%. The average bryophyte cover is high at heights 0–100 and facing north in the forest. Based on the Spearman correlation test, data results of bryophyte abundance did not correlate between abiotic parameter, that is air temperature, humidity, and light intensity with bryophyte cover at city forest and roadside. This research conclude that percentage of bryophyte cover can be an indicator for air humidity in urban district.