

Abstract of thesis presented to the Senate of Universiti Malaysia Terengganu in fulfillment of the requirements for the Master of Science

**SPECIES RICHNESS AND COMPOSITION OF LIVERWORT  
(MARCHANTIOPHYTA) IN THREE DIFFERENT FOREST TYPES IN  
TERENGGANU, PENINSULAR MALAYSIA**

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A study on liverwort diversity (Marchantiophyta) across three different forest types in Terengganu, Peninsular Malaysia was conducted. This study aims to identify, describe, and illustrate all the liverwort species collected from one-hectare plot in lowland dipterocarp forest (Belukar Bukit Recreational Forest), mangrove forest (Pulau Telaga Tujuh) and heath forest (Jambu Bongkok Forest Reserve). It also aims to construct a taxonomic key and evaluate the species richness of liverwort that occur in each forest type. A total of 373 specimens consisting of 43 species from 14 genera, and five families were recorded in Belukar Bukit Recreational Forest, 121 specimens, 15 species from nine genera, three families in Pulau Telaga Tujuh, and 51 specimens, 17 species from nine genera and two families were recorded in Jambu Bongkok Forest Reserve. The Sorensen similarity index between the three different forest types shows a low similarity percentage.

Keywords: Liverwort, Diversity, Heath, Mangrove, Plot

Abstrak tesis yang dikemukakan kepada Senat Universiti Malaysia Terengganu sebagai memenuhi keperluan untuk Ijazah Sarjana Sains Penyelidikan

**KEKAYAAN SPESIES DAN KOMPOSISI LUMUT HATI  
(MARCHANTIOPHYTA) DALAM TIGA JENIS HUTAN BERBEZA DI  
TERENGGANU, SEMENANJUNG MALAYSIA**

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Kajian tentang kepelbagaian lumut hati (Marchantiophyta) dalam tiga jenis hutan berbeza di Terengganu, Semenanjung Malaysia telah dijalankan. Kajian ini bertujuan untuk mengenal pasti, menghuraikan, dan menggambarkan semua spesies lumut hati yang dikumpul dari plot seluas satu hektar di hutan dipterokarpa tanah pamah (Hutan Lipur Belukar Bukit), hutan bakau (Pulau Telaga Tujuh) dan hutan kerangas (Hutan Simpan Jambu Bongkok). Ia juga bertujuan bagi membina kekunci taksonomi dan menilai kekayaan spesies lumut hati dalam setiap jenis hutan. Sebanyak 373 spesimen, 43 spesies daripada 14 genera, dan lima famili direkodkan di Hutan Lipur Belukar Bukit, 121 spesimen, 15 spesies daripada sembilan genera, tiga famili di Pulau Telaga Tujuh, dan 51 spesimen, 17 spesies daripada sembilan genera, dua keluarga direkodkan di Hutan Simpan Jambu Bongkok. Nilai indeks persamaan Sorensen antara tiga jenis hutan menunjukkan peratusan persamaan yang rendah.

Kata kunci: Lumut Hati, Kepelbagaian, Kerangas, Bakau, Plot