MICROFUNGI FROM DECAY LEAVES OF *Melaleuca cajuputi* FROM SETIU BRIS ECOSYSTEM OF TERENGGANU

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Lihat Sebelah

MICROFUNGI FROM DECAY LEAVES OF *MELALEUCA CAJUPUTI* FROM SETIU BRIS ECOSYSTEM OF TERENGGANU

BY
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A research report submitted in partial fulfilment of the requirement of the award of the degree of Bachelor of Science (Biological Science)

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PENGAKUAN DAN PENGESAHAN LAPORAN PITA

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: Microfungi from Decay Leaves of *Melaleuca cajuputi* from Setiu BRIS Ecosystem of Terengganu oleh Nur Ashikin binti It Juanda, no. matrik: UK19744 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Muda Sains (Sains Biologi), Fakulti Sains dan Teknologi, Universiti Malaysia Terengganu.

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DECLARATION

I hereby declare that this thesis entitled Microfungi from Decay Leaves of *Melaleuca cajuputi* from Setiu BRIS Ecosystem of Terengganu is the result of my own research except as cited in the references.

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MICROFUNGI FROM DECAY LEAVES OF *MELALEUCA CAJUPUTI* FROM SETIU BRIS ECOSYSTEM OF TERENGGANU

ABSTRACT

Beach Ridges Interspersed with Swales (BRIS) ecosystem has extreme physical settings that not favour high decomposition rate. However, the role of microfungi in decomposition process could not be neglected. Decayed leaf samples of *Melaleuca cajuputi,* a dominant tree on the ecosystem, were collected and categorized into three decay levels; early, intermediate and late decay according to colour. Direct isolation technique was used to isolate leaf microfungi. Seven morphospecies of microfungi were isolated from two phyla of Ascomycotina and Zygomycotina. This study indicates that the decay leaves of *Melaleuca cajuputi* contains a microfungi reservoir which contributes to decomposition process.

KULAT MIKRO DARIPADA DAUN REPUT *MELALEUCA CAJUPUTI* DARIPADA EKOSISTEM BRIS, SETIU, TERENGGANU

ABSTRAK

Tanah BRIS mempunyai keadaan fizikal yang melampau dan tidak memihak kepada kadar penguraian yang tinggi. Walaubagaimanapun, peranan kulat mikro dalam proses penguraian tidak harus dipandang remeh. Sampel daun daripada pokok *Melaleuca cajuputi,* pokok yang dominan di ekosistem tersebut, telah dikumpul dan dikategorikan kepada tiga tahap pereputan; awal, pertengahan dan akhir mengikut warna. Teknik pemencilan langsung telah digunakan untuk memencilkan kulat mikro pada daun. Tujuh morfospesies kulat mikro telah dipencilkan daripada filum Askomikotina dan Zigomikotina. Kajian ini menandakan bahawa daun reput *Melaleuca cajuputi* mempunyai takungan kulat mikro yang menyumbang kepada proses pereputannya.