

Phylogenetic Relationships of *Termitomyces aurantiacus* Inferred from Internal Transcribed Spacers DNA Sequences

ABSTRACT

Fungus-growing termites cultivate species of the mutualistic basidiomycete genus *Termitomyces* on a substrate called the fungal comb. Identification of fungal species based on morphological features is complicated, tedious, and prone to errors. As an alternative, nuclear ribosomal DNA sequences consisting of the internal transcribed spacers (ITS1 and ITS2) and 5.8S rDNA were used to identify Malaysian isolates of *Termitomyces* sp. The morphological characteristics and molecular data indicate that Malaysian *Termitomyces* isolated is clearly monophyletic and belongs to the Tricholomataceae family. The Malaysian isolates analyzed in this study represent the termite fungus species called *T. aurantiacus*.