

## **Sequence analysis of the ribosomal DNA internal transcribed spacer regions in *Termitomyces heimii* species**

### **Abstract**

*Termitomyces* represents a very poorly known genus of fungi whose essential characteristic is that all representatives of the genus are cultivated by termites (Macrotermitinae) in their nest. Many species of *Termitomyces* commonly form fruiting bodies which develop from fungus combs within the nest. Identification based on morphological characteristics is problematic, tedious, and prone to error. Therefore, correct identification at the species level is highly desirable. This is the first report on the identification of the Malaysian isolates of *Termitomyces* analyzed using the DNA sequence of their internal transcriber spacer regions (ITS1-5.8S-ITS2). The results clearly demonstrate that this group is clearly monophyletic and belongs to the Tricholomataceae family. Based on the morphological identification and the molecular analysis conducted in this study, we have determined that the isolates represent the termite fungi named *Termitomyces heimii*.