UNIVERSITI TEKNOLOGI MARA

# ISOLATION AND CHARACTERIZATION OF SECONDARY METABOLITES FROM MARINE FUNGI

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### **APPROVAL SHEET**

I hereby recommend that the thesis prepared under my supervision by Durrah Fathiah bt Abdul Mutalib entitled 'Isolation and Characterization of Secondary Metabolites from Marine Fungi' be accepted in partial fulfillment of the requirements for the degree of Bachelor of Pharmacy from the Faculty of Pharmacy, UiTM.

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#### ABSTRACTS

The secondary metabolites of marine fungi were extensively studied since centuries ago. Some secondary bioactive metabolites showed interesting antibacterial properties. In this study, the sample of sea water was collected from Pantai Langkawi,Kedah,Malaysia. In order to identify the secondary metabolites of the marine fungi, the sample was inoculated on the PDA plate containing antibiotics and left to grow for several weeks. The fungi that to be cultured in the large scale was selected based on the colony form on the PDA containing antibiotics. It was then inoculated back on PDA and left to grow for several weeks. The incubated fungus was then extracted and analyzed using HPLC and Semi-preparative HPLC. In addition, the fungal extraction was tested against *E.coli*, *P.aeruginosa*, *E.faecium* and *S.aureus*. This fungus is active against *E.coli*, *S.aureus* and *E.faecium*.