

ABSTRACT

Study in TLC-Densitometri Profiles of The Endophytic Fungi *Aspergillus penicillioides*' (AGO B) metabolites from *Aglaia odorata* Lour.

Aspergillus penicillioides is one of endophytic fungi that infected the tissues of tropical wood plant that can be used as a medicine, *Aglaia odorata* Lour.. However, it is still unclear about what substances does this fungi produce so that it can affect the existences of other organisms. The growth of this fungi was observed by measuring the weight of the dried mycelium every 7 days, started from the 14th day after inoculation in *Potato Dextrose Broth* media. In this study, the profiles of the *Aspergillus penicillioides*' metabolites were analysed by TLC-Densitometri method. There were three kinds of extracts applied to the chromatogram. They were ethyl acetate extract derived from filtrate (*Potato Dextrose Broth* media), methanol extract from the biomass (mycelium), and dichloromethane extract that was obtained after the biomass was extracted with methanol 80%. Ethyl acetate : methanol : water (7 : 2 : 1) v/v; ethyl acetate : methanol (7 : 3) v/v and n-hexane : ethyl acetate (2 : 8) v/v were used as mobile phase in TLC of ethyl acetate extract and methanol extract, dichloromethane extract analysed with n-hexane : ethyl acetate (8 : 2) v/v as the mobile phase. Besides using UV lights, some reagents, such as anisaldehyd-sulphuric acid, vanillin-sulphuric acid, ninhidrin, cerri-sulphuric acid, and Dragendorff reagent were also used to analyse the profiles of metabolites. Then, the chromatograms were evaluated by Densitometri method. Results of this studi showed that ethyl acetate extract, methanol extract and the dichloromethane extract gave the positive reactions with some reagents. They were showed by the spots and their various colours when they applied to the chromatograms.

Keywords : *Aspergillus penicillioides*, *Potato Dextrose Broth* media, mycelium, the metabolites' profiles, TLC-Densitometri