ABSTRACT

Study profile metabolites of *Kabatiella caulivora* (ALE 30.A), endophytic fungi of *Alyxia reinwardtii Bl.* with TLC-Densitometry method

Kabatiella caulivora (ALE 30.A) is an endophytic fungi isolated from *Alyxia reinwardtii* Bl. and was determinated by Institut für Pharmazeutische Biologie, Universitut Düsseldorf, Germany. The metabolites are not already studied so the function is still unknown. In this study, there were procedures such as observed the fungi's macroscopis, microscopis, the growth curve and also the profiles of its metabolites.

The observing of fungi's macroscopis was done with using 4 kinds of medium. Malt Extract Agar was used to know the fungi's microscopis. The growth of this fungi was observed by measuring the weight of the mycelium every 7 days from the 14th day after inoculation in Malt Extract Agar.

There were three kinds of extracts which were extracted from *Kabatiella caulivora* (ALE 30.A). They were ethyl acetate extract derived from filtrate, methanol extract and dichloromethane extract from biomassa (mycelium). N-hexane:etyl acetate (2:8) and etyl acetat:methanol:water (7:2:1) were used as mobile phase in TLC of ethyl acetate extract and methanol extract. While dicloromethane extract analyzed with n-heksan:etil asetat (2:8 ; 8:2). Silica gel $60F_{254}$ was the stationary phase which was used. Besides using UV lights, some reagents, such as anisaldehid-sulphuric acid, vanillin-sulphuric acid, ninhydrin, ceri-sulphuric acid and dragendorf reagent were also used to analyze the profiles of metabolites. Then, the densitogram and spectra were evaluated by densitometry. Results of this study showed that ethyl acetate extract and methanol extract contain some substances which had positive results with UV lights, anisaldehid-sulphuric acid, vanillin-sulphuric acid, ninhydrin, ceri-sulphuric acid reagent. The dicloromethane extract contain some substances those showed positive results with anisaldehid-sulphuric acid, vanillin-sulphuric acid, ceri-sulphuric acid and dragendorff reagent.

Keywords: *Kabatiella caulivora*, ALE 30.A, Malt Extract Agar, mycelium, filtrate, metabolites, KLT-Densitometry.