ABSTRACT

Antifungal Activity of Ethyl Acetate Extract from Endophytic Fungi Aspergillus salwaensis Strain DTO297C1 Isolated from Chromolaena odorata Against Candida albicans

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Endophytic microbes is well known for producing secondary metabolite similar with host plants. Endophytic microbes is a new and potential source in modern medicine, for example in production of antifungal agents. The preliminary test, has shown that the fungus fermentation liquid of A. salwaensis possess antifungal activity against Candida albicans. The current study focus on antifungal activity of ethyl acetate extract of A. salwaensis. The fungus was cultivated for four weeks in malt extract medium, followed by extraction with ethyl acetate. The antifungal assay was conducted against C. albicans by using disc diffusion method. The result showed that there was an antifungal activity from concentration of 100 µg/disc. Phytochemical screening was then performed on the ethyl acetate extract of A. salwaensis by TLC method. The identification results showed that ethyl acetate extract of A. salwaensis contains flavonoids, polyphenols, and terpenoid / steroid which are known to have antifungal activity.

Keywords : Endophytic, Chromolaena odorata, Aspergillus salwaensis, antifungal, disc diffusion method