

ABSTRACT

ISOLATION SECONDARY METABOLITES FROM FRACTIONS 3 AND 12 OF ETHYL ACETATE EXTRACT FROM ENDOPHYTIC FUNGI *CLADOSPORIUM* *OXYSPORUM* ISOLATED FROM *AGLAIA ODORATA* LOUR.

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Discovering compounds derived from natural product is of solution for antibiotic resistance problem. Endophytic fungi are microorganism that live in terrestrial plant or sponges without causing any problems in its host. These endophytes could produce some substances that have activity against pathogenic microbes. *C. oxysporum* is one of endophytic fungus isolated from *Aglaia odorata* Lour. It was proven that 6 from 13 of its ethyl acetate fraction had activity against *Staphylococcus aureus* ATCC 6538, *Escherichia coli* ATCC 8739, and *Candida albicans* ATCC 10231.

Isolation of the secondary metabolites from fractions 3 and 12 using column chromatography with Sephadex LH-20 as stationary phase and methanol as mobile phase was held. Further fractionation was performed using silica gel 60 as stationary phase and dicloromethane and ethyl acetate 4:1 as mobile phase. 9 subfractons were produced from fraction 3 and 3 subfractions were from fraction 12.

Subfraction 3.8.1 was not UV active and gave red purple color when sprayed by anisaldehyde reagent. Subfraction 3.8.2 was UV 254 active and purple color when sprayed by anisaldehyde reagent. Subfraction 3.8.9 was UV 366 active and gave intensive dark purple color when sprayed by anisaldehyde reagent. All of them are classified as steroid or terpenoid group based on its TLC profile using anisaldehyde reagent.

Subfraction 12.1 was UV 254 active and gave brown color when sprayed by anisaldehyde reagent and it could be classified as steroid or terpenoid group based on its TLC profile using anisaldehyde reagent.

Keywords : Isolation, secondary metabolite, endophytic fungi.