ABSTRACT

Antibacterial activity of extract of endophytic fungi
_Aspergillus salwaensis_ strain DTO297C1 isolated from
_Cromolaena odorata_

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_Aspergillus salwaensis_ strain DTO297C1 is one of endophytic fungi isolated from _Cromolaena odorata_. In this research, secondary metabolites from _A. salwaensis_ were extracted with ethyl acetate. Extract was examined by antibacterial activity assay against _Staphylococcus aureus_ ATCC 6538, _Escherichia coli_ ATCC 25922, and _Bacillus subtilis_ ATCC 6633. The antibacterial activities were tested at four concentrations of 75 µg; 100 µg; 150 µg; and 200 µg by disc diffusion method. Phytochemical screening was conducted by Thin Layer Chromathography (TLC) method.

Based on the results of antibacterial assay, ethyl acetate extract of _A. salwaensis_ had antibacterial activity at concentration 75 µg/disc against _S. aureus_ ATCC 6538 with diameter of inhibition 9,17 mm, _E. coli_ ATCC 25922 with diameter of inhibition 8,32 mm, and _B. subtilis_ ATCC 6633 with diameter of inhibition 9,26 mm. Phytochemical screening showed that _A. salwaensis_ contain compounds of flavonoid, polyphenol and terpenoid/steroid.

Key words: Antibacterial, extracts, endophytic fungi, _Aspergillus salwaensis, Chromolaena odorata_.

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