COMPARISON OF ANTIBACTERIAL ACTIVITY AGAINST *Escherichia coli* AND TOTAL TANNINS CONTENTS BETWEEN DECOCTA AND STEEPINGS OF AGARWOOD (*Aquilariamalaccensis*Lamk.) LEAVES

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ABSTRACT

Background: Agarwood plant (*Aquilariamalaccensis*Lamk.) so far is only used its trunkfor incense material and air freshener. Other parts of this plant, especially leaves are still underutilized, whereas according to the empirical treatment, it can be used as an antidiarrheal drug.
Objective: This study has been carried out antibacterial activity test against *Escherichia coli* and determination of total tanninscontent from steeping and decocta ofagarwood leaves.
Outcome: antibacterial activity and content tannins
Methods: Antibacterial activity test was carried out using agar diffusion method with chloramphenicol as standard comparator. Determination of the total tannins content was done by using spectrophotometer UV-visible, Folin Ciocalteu reagents and tannic acid as standard comparator at 740 nm.
Result: The result showed antibacterial effects of Agarwood leaves in decocta was achieved at concentration 3%-6%, while in leaves steeping was achieved at concentration 4%-6%. Decocta of agarwood leaveshad 1,42% of tannins contents, while leaves steeping had 0,942%.
Conclussion: Decocta ofagarwood leaves had stronger antibacterial activity and content more total tannins than its steeping.

Key words: Agarwood leaves, *Aquilariamalaccensis*Lamk., antibacterial activity, tannin, agar diffusion, FolinCiocalteu.