ABSTRACT

ISOLATION AND IDENTIFICATION OF ALKALOID COMPOUND FRACTION C.9 FROM CHLOROFORM FRACTION OF *Cassia spectabilis* LEAVES

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Cassia spectabilis is a plant from Genus *Cassia* that can be used for malarial remedies. *C.spectabilis* contain alkaloid. Previous study reported that methanolic extract of *C.spectabilis* leaves has antimalarial activity againts *Plasmodium falciparum*. This research focus on isolation of alkaloid from fraction C.9 of chloroform fraction of *C.spectabilis* leaves. Fraction C.9 showed antimalarial activity (IC_{50} 0,012 µg/ml). Fraction C.9 was purified by preparative TLC. From this fraction, a alkaloid compound was isolated. Structure determination of the isolated compound was performed by ^{1}H-NMR spectroscopy. The ^{1}H-NMR spectrum exhibited signals at δ_H 3,75 ppm and δ_H 2,85 corresponding to a hydroxy methine. There were signal at δ_H 2,44 ppm and δ_H 2,11 ppm corresponding to methylen group with ketone and a methyl keton, respectively. There are methylene group observed at δ_H 1,3-1,4 ppm.^{1}H-NMR data comparison of the isolated compound to literature data showed that the structure of the isolated compound was similar to spectaline (piperidine alkaloid).

Keyword : *isolation*, *Cassia spectabilis*, *piperidine alkaloids*