ABSTRACT

Antimalarial Activity The Result of Subfractionation from The Fraction of 6 Dichloromethane Extracts of The Stem Bark of *Cratoxylum sumatranum* (Jack) Bl.

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Malaria is a disease caused by *Plasmodium* parasites. In the prevention of malaria, it is necessary to make efforts to develop new anti-malarial drugs by using natural ingredients. *Cratoxylum* spesies was one of the plants that showed potential antimalarial activity. The purpose of this study was to determine the antimalarial activity the result of subfractionation from the fraction of 6 dichloromethane extracts of the stem bark of *Cratoxylum sumatranum* (Jack) Bl. The fraction of 6 dichloromethane extract of the stem bark of *C. sumatranum* (Jack) Blume was fractionated using the preparative Thin Layer Chromatography method on RP18 plates with methanol-water mixed eluent (9:1), obtained 10 subfractions (SB 6.1-SB 6.10). All subfraction results obtained from the preparative Thin Layer Chromatography method were samples tested with the Lactate Dehydrogenase (LDH) test at a concentration of 4 µg/mL and continued with the determination of IC_{50} at a concentration of 10 µg/mL; 4 µg/mL; 1µg/mL; 0.4 µg/mL; 0.1 µg/mL; 0.04 µg/mL; 0.01 µg/mL; and 0.004 µg/mL. Subfraction 4 (IC_{50} value 0.35 ± 0.02 µg/mL) and subfraction 7 (IC_{50} value 0.74 ± 0.02 µg/mL) had antimalarial activity in inhibiting the growth of *Plasmodium falciparum* in the LDH assay method while the other subfractions did not active. Subfraction 4 has the highest antimalarial activity compared to the IC_{50} value of subfraction 7 and is included in the strong active category as an antimalarial because it has an IC_{50} value ≤ 5µg/ mL and possibly contains xanthones.

Keywords : *Cratoxylum sumatranum*, antimalarial, Lactate Dehydrogenase *assay*