

Research article

Antimalarial activities extract of N-hexane, ethyl acetate and ethanol of soursop leaf (*Annona muricata* L) on mice (*Mus musculus*) infected with *Plasmodium berghei*

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Key words: Antimalarial, Soursop Leaf (*Annona muricata* L), Percentage degree of parasitemia.

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Abstract

Objective: The purpose of this study was to determine the ability of soursop leaves extract to inhibit the growth of the *Plasmodium berghei* parasite that causes malaria on mice. **Method:** Soursop leaves were extracted with multilevel maceration using n-hexane, ethyl acetate and ethanol. The extracts obtained were then tested for antimalarial activity in vivo by measuring the number of parasitemia through thin blood smear of mice infected with *Plasmodium berghei*. Antimalarial activities were divided into five treatment groups, namely CMC-Na 1%, chloroquine 10 mg/kg bw, n-hexane, ethyl acetate and ethanol soursop leaf extract at a dose of 150 mg/kg bw orally for 5 days and followed by measurement of percent parasitemia. The test data were analyzed statistically using ANOVA, followed by the Post Hoc Tuckey test with the SPSS program. **Result:** The results of testing the antimalarial activity extract of n-hexane, ethyl acetate and ethanol showed a decrease in parasitemia and a decrease in the smallest parasitemia was ethyl acetate extract by 0.12%, this number was lower than the administration of chloroquine as a positive control of 0.26%. The results of parasitic growth inhibition showed that ethanol extract had a percentage of parasite inhibition of 92.15%, the smallest compared to n-hexane extract of 93.51% and ethyl acetate extract of 99.31%. **Conclusion:** Extract of n-hexane, ethyl acetate and ethanol of soursop leaf (*Annona muricata* L) showed antimalarial activities.