ABSTRACT

ANTIMALARIAL ACTIVITY OF ETHYL ACETATE-96 AND ETHYL ACETATE-70 FRACTION GRANULE AND OF SAMBILOTO HERBS (Andrographis paniculata Nees) IN VIVO ON Plasmodium berghei INFECTED MICE

Eka Rusmalina Hardiyanti

This study aim was to determine the antimalarial activity of granule from ethanol 96% and ethanol 70% extract of Sambiloto which fractionated with ethyl acetate (namely ethyl acetate-96 and ethyl acetate-70 fractions). Antimalarial activity test was conducted based Peter Test (The 4-day suppressive test of blood schizontocidal action) used P. berghei infected mice. Mice were divided into 10 groups, group 1-8 treated with granule at a dose of 6.25, 12.5, 25, and 50 mg/kg BW, CMC-Na 0.5% as negative control and chloroquine 10 mg /kg BW as positive control.

Probit analysis result showed that ethyl acetate-96 and ethyl acetate-70 fraction granules has ED50 value of 6.81 mg / kg BW, and 10.16 mg / kg BW respectively. Ethyl acetate-96 fraction granules showed higher activity than ethyl acetate-70 fraction granules.

Further more, both granule proven can increase survival time compared to negative control.

Keywords: Andrographis paniculata Nees; fraction granule; antimalarial activity; survival time