

ABSTRACT

The Combination Therapy of Cempedak 80 % Ethanolic Extract Capsule and Sambiloto herb Diterpen Lakton (DTL) fraction tablet on Mice Infected Malaria

Combination therapy of Cempedak 80 % Ethanolic Extract Capsule (cempedak capsule) and Sambiloto herb DTL fraction tablet (sambiloto tablet) *Plasmodium berghei* infected mice were studied. Antimalarial activity test carried out during four days of therapy and by making the blood smear in malaria infected mice for seven days. The study was carried out by oral administration of cempedak capsule and sambiloto tablet. Treatment groups were divided in three groups, there are group I as a negative control of the group II (cempedak capsule) and group III (combination therapy of capsule cempedak and sambiloto tablet)

The doses used were cempedak capsul 10 mg /Kg bw twice a day for four days of therapy and sambiloto tablet 15 mg/Kg bw twice a day for four of therapy. The result showed that group II and group III inhibit parasite's growth on day 7 for 73,29 % and 79,29 %. It showed that group III (combination therapy cempedak capsule and sambiloto tablet) gives the best antimalarial activity among group II (cempedak capsule).

Toxicity test used the six test groups. Group I (infected mice), Group II (cempedak capsule with infected mice), group III (combination therapy of cempedak capsule and sambiloto tablet in infected mice), group IV (healthy mice), group V (cempedak capsules in healthy mice), and group VI (combination therapy in healthy mice). The study was conducted for 7 days. On the fifth day and seventh day to be taken dissected organs of mice liver and blood. Analysis of enzymes SGOT and SGPT and liver histopatologim.

The results of SGOT and SGPT enzymes were analyzed by ANOVA, the results obtained that the differences between the groups. Then the analysis continues LSD. The results showed that the cempedak capsule did not increase enzyme SGOT and SGPT, and combination therapy didn't raise the enzymes SGOT and SGPT during therapy. In liver preparations with the parameters of congestion, inflammation, necrosis, degeneration, and fibrosis showed no significant differences in the analysis with kruskall Wallis.

Key words : combination therapy, antimalarial activity test, toxicity test, cempedak capsul, and sambiloto tablet.