

**THE EFFECT OF JUWET LEAF (*Syzygium cumini*) ETANOLEXTRACT
AS ADJUVANT THERAPY TO MICROGLIA CELL COUNTON
MICE (*Mus musculus*) BRAIN WHICH INFECTED
BY *Plasmodium berghei***

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ABSTRACT

This study is aimed to know the effect of juwet leaf extract as adjuvant therapy on microglia brain cell count on mice (*Mus musculus*) which infected by *Plasmodium berghei*. Twenty five mice divided into fifteen mice for three control groups namely K0, K1 and K2 which infected by *Plasmodium berghei* in the amount of 1×10^6 in 0,2 ml and ten mice for two treatment groups namely P1 and P2 which infected by *Plasmodium berghei* in the amount of 1×10^6 in 0,2 ml. The data were analyzed by univariate ANOVA using SPSS and followed with Turkey HSD test. The results of statistical analysis showed significant differences microglia cell count of K1 group's and P2 group's, but there was no differences microglia cell count of K2 and P1 group's. An increase of microglia cell count seen in K1 which infected by *Plasmodium berghei* without therapy and decrease of microglia cell count seen in P2 which infected by *Plasmodium berghei* with therapy chloroquine and juwet leaf extract. There was no significant difference of microglia cells count between K2 which infected by *Plasmodium berghei* with therapy chloroquine and P1 which infected by *Plasmodium berghei* with therapy juwet leaf extract.

Keywords: *Syzygium cumini*, chloroquine, Brain, Microglia cell, *Plasmodium berghei*