

**THE EFFECT OF GIVING JUWET LEAVE EXTRACT (*Syzygium Cumini*)
AS ADJUVANT TREATMENT TOWARD HISTOPATHOLOGICAL
PICTURE OF MOUSE LUNGS (*Mus musculus*) THAT IS
INFECTED BY *Plasmodium berghei***

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ABSTRACT

This research aims to understand the effect of juwet leave extract as adjuvant treatment in edema lung damage, hemmorhagy, alveolar congestion, and thickening of alveolar septa in mouse (*Mus musculus*) is infected by *Plasmodium berghei*. Twenty five mice are divided into five mice for three control groups which are K0, K1, K2 infected by *Plasmodium berghei* as 1×10^6 in 0,2 ml. Then, ten mice for two treatment groups which are P1 and P2 that are infected by *Plasmodium berghei* 1×10^6 in 0.2 ml. The data is analyzed by using *Kruskal Wallis Test*. If there is a significant change ($p < 0.05$) then it will be continued by using *Mann-Whitney Test* to compare every effect of each treatment. The statistic analysis in this research uses SPSS program (*Statistical Program of Social Science*). The result of the statistical analysis showed significant differences on edema lung damage, hemmorhagy, alveolar congestion, and thickening of alveolar septa of group K1 and P2, but there is no significant differences on edema lung damage, hemmorhagy, alveolar congestion, and thickening of alveolar septa of group K2 and P1. The increase of edema lung damage, hemmorhagy, alveolar congestion, and thickening of alveolar septa can be seen from K1 infected by *Plasmodium berghei* without treatment. The decrease of edema lung damage, hemmorhagy, alveolar congestion, and thickening of alveolar septa of P2 infected by *Plasmodium berghei* with chloroquine treatment and juwet leave extract. There is no significant difference in edema lung damage, hemmorhagy, alveolar congestion, and thickening of alveolar septa between K2 infected by *Plasmodium berghei* with chloroquine treatment and P1 infected by *Plasmodium berghei* with juwet leave extract treatment.

Keywords: *Syzygium cumini*, chloroquine, lung, edema, hemmorhagy, alveolar congestion, thickening of alveolar septa, *Plasmodium berghei*