

**POTENCY OF TOMATO FRUIT MICRONUTRIENT (*Solanum lycopersicum* L.) AND SELENIUM AS ADJUVANT THERAPY ON MICE (*Mus musculus*) WHICH INFECTED BY *Plasmodium berghei***

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**ABSTRACT**

The study is aimed to know potency of tomato fruit micronutrient (*Solanum lycopersicum* L.) and selenium as adjuvant therapy on mice (*Mus musculus*) which infected by *Plasmodium berghei*. Forty eight mice divided into eight control groups namely K(-) treated by drug solvent, K(+) treated by chloroquine 25 mg/kgBW, P1 treated by tomato juice 1,7 mg/kgBW, P2 treated by selenium 1mg/kgBW, P3 treated by combinations tomato juice 1,7 mg/kgBW and chloroquine 25 mg/kgBW, P4 treated by combinations selenium 1 mg/kgBW and chloroquine 25 mg/kgBW, P5 treated by combinations tomato juice 1,7 mg/kgBW and selenium 1 mg/kgBW, P6 treated by combinations tomato juice 1,7 mg/kgBW, selenium 1 mg/kgBW and chloroquine 25 mg/kgBW which infected by *Plasmodium berghei* in the amount of  $1 \times 10^5$  in 0,2 ml. The data were analyzed by univariate ANOVA using SPSS and followed with Duncan's test. The results of statistical analysis show parasitemia and percentage of growth constraints in each treatment groups was different. P2 treated by selenium 1 mg/kgBW did not show better results than group K(-) but in group P4 selenium as adjuvant demonstrated significant ( $p < 0,05$ ). Conclusively, antioxidant micronutrients have potential antimalarial activity and may be of benefit in malaria therapeutics.

**Keyword** : Micronutrient, Tomato fruit, Selenium, Adjuvant therapy, *Plasmodium berghei*