

Portia Tree Leaves Extract (*Thespesia populnea* (L.) Soland ex Correa) as Adjuvant Therapy on Increasing Leukocytes Count of White Mice (*Mus musculus*) BALB/C Strain Infected by *Plasmodium berghei*

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ABSTRACT

Background: There are 3.2 billion peoples who are at risk of being infected by malaria in 97 countries at 2013 and there are 198 million cases estimated. In Indonesia, point prevalence of malaria at 2013 is 1.3%, raise two times fold than at 2010 which is only 0.6%. Indonesia rich in various kinds of plants which can be used as medicines, one of them is leaf of Portia tree (*Thespesia populnea* (L.) Soland ex Correa) which is rich in natural antioxidant and anti-inflammation such as flavonoid that can be used in malaria disease.

Objective: To know the effect of Portia tree leaves extract (*Thespesia populnea* (L.) Soland ex Correa) dose 200 mg/kg BB as adjuvant therapy on leukocytes count of white mice (*Mus musculus*) BALB/C strain infected by *Plasmodium berghei*.

Method: This is a pure laboratory experimental research using post-test only group design method. Using 27 mice which are fulfilling the inclusion criteria and randomly divided into 3 groups that is aquadest group (K-), chloroquin group (K+) and chloroquin with Portia tree leaves extract (KP). Leukocytes count done to every group at 4th day.

Results: According to data analysis using Kruskal-Wallis statistic tests, significance value between groups is less than 0.05 (Sig<0.05) that is 0.015.

Conclusion: Portia tree leaves extract (*Thespesia populnea* (L.) Soland ex Correa) dose 200 mg/kg BB as adjuvant therapy tends to increasing leukocytes count of white mice (*Mus musculus*) BALB/C strain infected by *Plasmodium berghei*.

Keywords: Malaria, Portia tree leaves (*Thespesia populnea* (L.) Soland ex Correa), Leukocyte

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