THE ACUTE TOXICITY TEST OF BLACK TEA *Camellia sinensis* ON CHANGE HISTOPATHOLOGY KIDNEY IN MICE

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Abstract

The aims of this research were to know causing lethal dose 50% (LD$_{50}$) black tea of *Camellia sinensis* at acute toxicity test and to know change histopathology kidney of mice in the form of congestion, degeneracy and necrosis. 160 of mice (*Mus musculus*), body weight between 20-30 grams, divided into two group of treatment per oral and intra peritoneal, then each group of treatment divided into four sub treatment that is 1$^{st}$ treatment dose 15 g/kg BW, 2$^{nd}$ treatment dose 30 g/kg BW, 3$^{rd}$ treatment dose 45 g/kg BW, 4$^{th}$ treatment dose 60 g/kg BW. Treatment is done during 24 hours, then observed by delaying toxicity effect during 14 days then it is autopsy and it will made histopathology kidney preparation. At per oral treatment is not seen existence of toxicity effect and at observation of kidney histopathology nor there is existence the change of pathology. At treatment intra peritoneal happened death of 95% mice at dose 30 g/kg BW then it be calculated causing lethal dose of 50% mice (LD$_{50}$) that is 21,577 g/kg BW/IP. Inspection of kidney histopathology at treatment intra peritoneal there is change in the form of congestion and degeneracy. Data obtained from inspection of histopathology either per oral and also intra peritoneal furthermore have statistic test Kruskal Wallis and both showing result that not significant ($\alpha$≥0,05).

Keywords: Black tea, LD$_{50}$, histopathology, kidney