ABSTRACT

IN VITRO TOXICITY TEST OF INFUSION AND 70% ETHANOLIC EXTRACT OF *Graptophyllum pictum* (L.) Griff LEAVES ON RED BLOOD CELLS USING *VISUAL COLOUR ASSESSMENT*

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In traditional medicine, *Graptophyllum pictum* leaves are used to cure hemorrhoids. The efficacy and safety of Indonesian traditional medicine products are proven empirically and there is no safety guarantee because has not passed the toxicity test yet. The objective of this study was to examined the interaction of infusion and 70% ethanolic extract of *Graptophyllum pictum* leaves with human red blood cells to evaluate their toxicity.

The hemolysis of RBC can be detected by visual color assessment method. The infusion and the extract respectively, was made into ten concentrations by double dilution with the highest concentration 10,000 ppm. A number of 20 µl of each sample was added to 180 µl whole blood on 96-well microplate V-bottom then observed after 45 minutes incubation. Neither infusion nor ethanolic extract of *Graptophyllum pictum* leaves had no toxicity effect on human RBC. Based on phytochemical screening test, alkaloid presence in 70% ethanolic extract but absence in the infusion.

Keywords: In vitro toxicity test, hemolysis, visual colour assessment**,** *Graptophyllum pictum*, red blood cell