# ACUTE TOXICITY STUDY OF BUTTERFLY PEA LEAF EXTRACTS ON EXPERIMENTAL MICE

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## STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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## ABSTRACT

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The extracts of butterfly pea leaves have been suggested to be an effective cure for diabetes. This study has the objective to test the acute oral toxicity of the extracts. Powder form of the extracts was initially prepared through freeze-drying process and was orally administered in high concentration to thirty male experimental mice (*Mus musculus*). The test method used in the study was based on OECD guidelines no. 423. Six dose concentrations of 2500mg/kg bw, 50000mg/kg bw, 10000mg/kg bw, 20000mg/kg bw, 40000mg/kg bw and 80000mg/kg bw were evaluated. Signs of toxicity and mortality rate were recorded and evaluated during a 4-hour critical observation and 7 days daily observation. The 3 first lower doses have 0% mortality rate while the highest dose have 100% mortality rate. Using probit analysis, the $LD_{50}$ value of the extracts was revealed to be 19380.692mg/kg bw and classified as practically non-toxic.

*Keywords: Clitoria ternatea, Herbal, Medicine, Toxicology, Acute Toxicity, $LD_{50}$, Histopathology, Mus musculus.*

## DEDICATION

I dedicate this work to the research development of medicinal plant cultivations, especially those that are vastly growing in Indonesia.

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