UNIVERSITI TEKNOLOGI MARA

IN-VITRO ANTI-INFLAMMATORY ACTIVITY OF METHANOLIC EXTRACT OF *LEPISANTHES RUBIGINOSA* BARK.

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Dissertation submitted in partial fulfilment of the requirements for the Bachelor of Pharmacy

Faculty of Pharmacy

January 2012

APPROVAL SHEET

I hereby recommended that the thesis prepared under my supersivion by Azwa binti Abdullah entitled "*In-vitro* anti-inflammatory activity of methanolic extract of *Lepisanthes rubiginosa* bark" be accepted in partial fulfilment of the requirement for the degree of Bachelor of Pharmacy from the Faculty of Pharmacy, UiTM.

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ABSTRACT

Lepinsanthes rubiginosa is a well known herb amongst the local practioner, traditional healer as well as the local people in Terengganu where they used traditionally for treatment of bone fracture and muscle sprain. Therefore, this study was conducted to provide scientific basis for the use of this plant as an anti-inflammatory agent. Macrophage RAW 264.7 was induced with Lipopolysaccharide and treated with different concentration of methanolic extract of *Lepisanthes rubiginosa* bark and absorbance was read at 450 nm with background correction at 630 nm. Inhibition of myeloperoxidase (MPO) activity indicated the presence of anti-inflammatory properties. At 20 µg/mL of methanolic extract of *Lepisanthes rubiginosa* bark, MPO concentration was decreased by 51.9%. As a conclusion, the methanolic extract of *Lepisanthes rubiginosa* bark was able to lower the concentration of MPO that will lead to inhibition of neutrophil infiltration. Thus, proven the methanolic extract of the bark of *L. rubiginosa* may possess anti-inflammatory activity.