

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 supervision 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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ACKNOWLEDGEMENT

Alhamdulillah to Allah for giving me the strength and determination to complete this study. I wish to thank my supervisors Dr Humera Naz and Dr Mizaton Hazizul Hasan for their time and commitment to my work and through guidance, comments and supports. They always at my side to helped and guide me in a field that totally new to me.

I am also indebted to all the staff and master students of Pharmacologic-Toxicology Laboratory especially to Mr. Saad for the help and support during this research work.

Last but not least, I am most thankful to my beloved family and friends for their tolerance of my predisposition, physically and emotionally. I am blessed by their unconditional love which has indeed given me the strength and motivation to stay focused and positive in completing this project.

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ABSTRACT

Lepisanthes rubiginosa is a well known herb amongst the local practitioner, 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.