

EFFECTS OF GASTROINTESTINAL EXTRACTION OF
DABISIA PUMILA VAR *ALATA*
IN RESPERCUTUM WHITE RATS

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2006

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EFFECT OF CHLOROFORM EXTRACTION OF *LABISIA PUMILA* VAR. *ALATA* IN
POST-PORTUM WHITE RATS

By

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Research Report submitted in partial fulfillment of
the requirement for degree of
Bachelor of Science (Biological Sciences)

Department Of Biological Sciences
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KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA
2006

This project should be cited as:

Salmah M. D. N., 2006. Effects of Chloroform Extraction of *Labisia pumila* var. *alata* in Post-Portum White Rats. Undergraduate thesis, Bachelor of Science in Biological Sciences, Faculty of Science and Technology, Kolej Universiti Sains dan Teknologi Malaysia, Terengganu. 40p.

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PROJEK PENYELIDIKAN I DAN II**

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ACKNOWLEDGEMENT

Assalamualaikum w.b.t

I would like to express my grateful and thanks to God because with His Blessing I can finish my final year project completely. Special thanks to my supervisor, Prof Madya Dr Mohd Effendy bin Abdul Wahid for the guidance, advice and support for the whole period of my project and thanks for the constructive comments.

I also would like to extend my appreciation to my beloved parents for the love and support to finish this project. Most thanks to all staff of the Department of Biological Sciences especially Laboratory Histological Assistances, En Mohammad Bin Embong and Master Student, Cik Siti Nur Tahirah Binti Jaafar for the helps, opinions and guidance. I am very appreciating all of the assistance to carry out my project smoothly.

I wish this thanks to all my friends for their moral support and help throughout my campus life in KUSTEM especially to my housemate and course mate.

Lastly, thanks to all peoples who involve directly or indirectly in my final year project. Thank you very much.

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LIST OF ABBREVIATIONS

g	gram
CCL ₄	carbon tetrachloride
mg/kg	Milligram per kilogram
C	Celsius
μ	micron
%	percentage

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ABSTRACT

This study is to investigate the effect of *Labisia pumila* var. *alata* to the changes of uterus upon administration chloroform extract and the side effect to the liver and kidney of post-partum white rats. The rats are divided into Group A, Group B, Group C and Group D. Group A was not given any treatment while Group B was given 1 ml coconut oil. Group C and Group D were treated by 500 mg/kg and 1000 mg/kg extract of *L. pumila* var. *alata* which was diluted with coconut oil and were given after the rats giving birth. Organ liver, kidney and uterus were taken at day 7, 14 and 21 after treatment and the histological process was done for the observation. In uterus, the number and perimeter of endometrial glands, area and thickness of uterus were determined to compare the difference. The results showed the changes significant ($p < 0.05$) in area and thickness of uterus between the groups and days. The lesions were defined to the most part of kidney in Group C and Group D. The conditions were influenced by the dose level because most of the cells in Group D were damaged. The evidence of toxic material were detected in liver include fatty liver, inflammatory and necrosis especially in Group C and Group D. Hence, *L. pumila* var. *alata* caused side effects to the animal and more study should be done to identify the compound had given effect and the suitable dose for treatment.

KESAN PENGEKSTRAKAN *Labisia pumila* var. *alata* KE ATAS TIKUS PUTIH SELEPAS MELAHIRKAN ANAK

ABSTRAK

Penyelidikan dijalankan untuk mengkaji kesan *Labisia pumila* var. *alata* atau Kacip Fatimah perubahan ke atas uterus yang diberi secara oral dan kesan sampingannya terhadap hati dan ginjal kepada tikus putih selepas melahirkan anak. Tikus tersebut dibahagikan kepada kumpulan A, B, dan C dan D. Kumpulan A tidak diberi sebarang rawatan manakala kumpulan B diberi 1 ml minyak kelapa. Kumpulan C dan D masing-masing diberi 500 mg/kg dan 1000 mg/kg ekstrak *L. pumila* var. *alata* yang dicairkan dengan minyak kelapa dan diberikan selepas tikus melahirkan anak. Organ hati, ginjal dan uterus diambil pada hari ke 7, 14 dan 21 selepas rawatan dan proses histologi dijalankan untuk pemerhatian. Bilangan dan perimeter kelenjar endometrial serta ketebalan dan keluasan uterus diambil kira untuk membandingkan perbezaan yang hadir. Keputusan menunjukkan terdapat perbezaan ($p < 0.05$) kepada keluasan dan ketebalan uterus apabila perbandingan antara kumpulan dan hari rawatan. Kerosakan sel pada ginjal dikesan dalam kumpulan C dan D. Keadaan ini dipengaruhi oleh dos yang diberi kerana hampir kesemua sel dalam kumpulan D mengalami kerosakan. Bukti kehadiran kesan toksik pada hati termasuklah necrosis, hyaline dan pembengkakan sel terutama dalam kumpulan C dan D. Oleh itu, *L. pumila* var. *alata* memberi kesan sampingan terhadap organ-organ tikus dan kajian lanjut perlu di laksanakan untuk mencari bahan aktif yang memberi kesan toksik.