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Effects of chloroform extraction of Labisia Pumila Var Alata in post-portum white rats / Nor Salmah Mat Desa.

Lihat sebelah

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

By

Nor Salmah Binti Mat Desa

Research Report submitted in partial fulfillment of
the requirement for degree of
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Department Of Biological Sciences
Faculty of Science and Technology
KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA
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PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk 'EFFECTS OF CHLOROFORM EXTRACTION OF *Labisia pumila* var *alata* IN POST-PORTUM WHITE RATS' oleh Nor Salmah Binti Mat Desa no. matrik UK 7808 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Muda Sains (Sains Biologi), Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

Disahkan oleh:

.....

Penyelia Utama

Nama: PROF. MADYA DR. MOHD. EFFENDY ABD WAHID

Cop Rasmi: Pengarah
Pusat Bioteknologi Marin
Kolej Universiti Sains dan Teknologi Malaysia
21030 Kuala Terengganu.

Tarikh: 3 Mei 2006

.....

Ketua Jabatan Sains Biologi

Nama: PROF. MADYA DR. NAKISAH BT. MAT AMIN

Cop Rasmi: *Ketua*
Jabatan Sains Biologi
Fakulti Sains dan Teknologi
Kolej Universiti Sains dan Teknologi Malaysia
(KUSTEM)
21030 Kuala Terengganu.

Tarikh: 4 Mei 2006

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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

Penyelidikkan 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 pemerhation. 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.