

THE EFFECT OF KACIP FATIMAH (*Tabisia pumila*)
EXTRACT ON BLOOD PICTURE AND UTERINE INVOLUTION
IN GUINEA PIG (*Cavia porcellus*)

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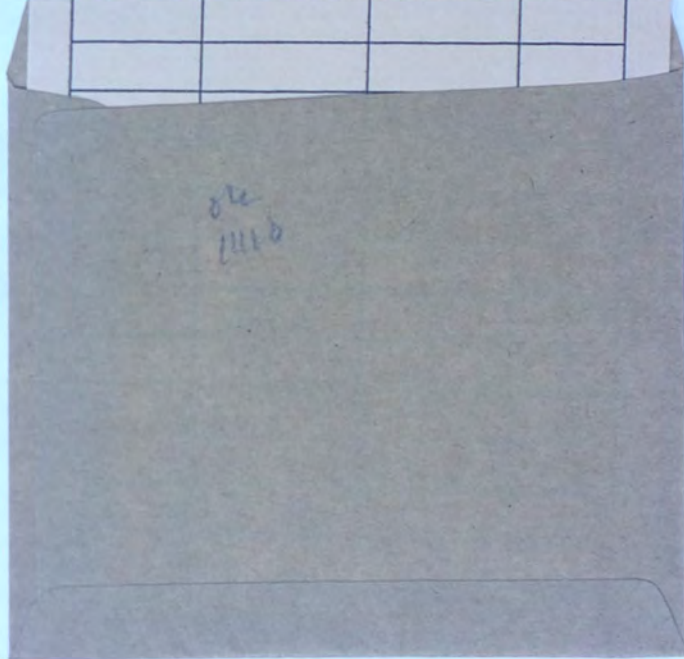
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**THE EFFECT OF KACIP FATIMAH (*Labisia pumila*) EXTRACT ON
BLOOD PICTURE AND UTERINE INVOLUTION IN GUINEA PIG
(*Cavia porcellus*)**

BY

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ABSTRACT

Studies on the roots and leaves of Kacip Fatimah (*Labisia pumila* var. *alata*), employing extraction of the plant from petroleum-ether and chromatographic technique has been conducted. Under Thin Layer Chromatography (TLC), the phytochemical in the roots and leaves revealed only slight different of the R_f value 0.88 and 0.89 respectively. A pure compound namely PLP 8 isolated from petroleum-ether extract of *Labisia pumila* var. *alata* leaves was found in the roots also.

The crude extract of Kacip Fatimah (*Labisia pumila* var. *alata*) roots from petroleum-ether were used to study the uterine involution process by performing an *in vivo* subcutaneous on guinea pig. Strong pathophysiological ($p < 0.05$) changes seen by using 2 mg of this extract. The changes were indicated by the reduction in the uterine thickness, reduction in number and perimeter of the endometrial glands and decreasing size of the blood vessel. Significant changes ($p < 0.05$) in the uterine thickness, number and perimeter of the endometrial glands were observed on day 6, 4 and 2 post parturition except the diameter of the blood vessel remained unchanged ($p > 0.05$).

The blood picture revealed no significant difference ($p > 0.05$) after the administration of this extract. However, slight differences ($p < 0.05$) were observed between the packed cell volume, plasma protein, red blood cell and white blood cell during gestation period till slaughtered. This was due to the physiological changes in the body during gestation period.

ABSTRAK

Kajian terhadap akar dan daun Kacip Fatimah (*Labisia pumila* var. *alata*) dijalankan melalui pengekstrakan tumbuhan dari petroleum-eter dan penggunaan teknik kromatografi. Di bawah kromatografi lapisan nipis (KLN), bahan fitokimia dalam akar dan daun menunjukkan perbezaan dengan nilai R_f 0.88 dan 0.89 masing-masing. Satu kompaun tulen yang dinamakan PLP 8 yang diasingkan dari ekstrak petroleum-eter daun *Labisia pumila* var. *alata* terkandung di dalam akar juga.

Pengekstrakan akar Kacip Fatimah (*Labisia pumila* var. *alata*) dari petroleum-eter digunakan untuk menguji kesannya ke atas pengecutan uterus. Kajian ini dijalankan secara *in vivo* ke atas tikus belanda (*Cavia porcellus*). Kesan pathofisiologi yang nyata ($p < 0.05$) dapat diperhatikan dengan menggunakan 2 mg ekstrak ini. Ini jelas ditunjukkan melalui pengurangan ketebalan uterus, pengurangan bilangan dan perimeter kelenjar uterus dan pengurangan saiz saluran darah. Perbezaan yang nyata ($p < 0.05$) dalam ketebalan uterus, bilangan dan perimeter kelenjar uterus dapat diperhatikan di antara haiwan yang dibedah pada hari ke 6, 4 dan 2 selepas kelahiran kecuali saiz saluran darah yang tidak menunjukkan perubahan ($p > 0.05$).

Gambaran darah menunjukkan tiada perbezaan yang nyata ($p > 0.05$) selepas disuntik dengan ekstrak ini. Walau bagaimanapun, sedikit perbezaan ($p < 0.05$) dapat diperhatikan di antara kandungan darah, protein plasma, sel darah merah dan sel darah putih sewaktu tempoh kehamilan hingga dibedah. Ini adalah disebabkan oleh perubahan fisiologi badan ketika tempoh kehamilan.