

STUDY ON THE PREVALENCE OF ECTOPARASITES IN GOATS IN  
BATU RAKIT TERENGGANU

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**STUDY ON THE PREVALENCE OF ECTOPARASITES IN GOATS  
IN BATU RAKIT TERENGGANU**

**TAN CHEE SIONG**

**The project report is submitted in partial fulfillment of the requirement  
for the Degree of Bachelor of Science (HONS) Biology**

**Faculty Of Science And Technology  
UNIVERSITY PUTRA MALAYSIA TERENGGANU  
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## ABSTRACT

The project is to study the prevalence of the ectoparasites in goats that located in Batu Rakit area. Besides that, study on the distribution and population of the parasites in the goat also have been done to know the goat's body part that ectoparasites are frequently exist. All the ectoparsites that examinated from the goats also have been identified for the purpose to know which kind of ectoparasites that exist in the goat's body.

Result that obtained indicated that *Ctenocephalides sp.* a kind of flea frequently exist in the goats' body. *Ixodes sp.* that is a kind of tick is also takes goats as their final host to complete their life cycle. Two of them are wells present as ectoparasites in goat.

*Ctenocephalides sp.* is distributed all over the host's body. But they are present in the large number in upper front leg, upper rear leg, ventral and lateral body part which humidity is high in those areas. It can be say that humidity is the main factor that causes *Ctenocephalides sp.* infection.

Infection of *Ixodes sp.* is found in the ears, tail and in the area which near the teat. *Ixodes sp.* exist in goats as their final host in order to complete there three host life cycle.

Result shown that preweaning goats were much easy infected by ectoparasites compared to weaning and postweaning goats. It also show that preweaning goats have the

highest population of ectoparasites infection. It is followed by weaning goats which have the second higher population of ectoparasit infection. Postweaning goats was the age groups that have the lowest number population of ectoparasit infection.

Statistical analysis shows that there is a significant difference ( $p \leq 0.05$ ) in prevalence and distribution of ticks and fleas according to body part of goat. There are significant difference ( $p \leq 0.05$ ) in prevalence and distribution of ticks in preweaning, weaning and postweaning goats. There are no significant differences ( $p \geq 0.05$ ) in prevalence and distribution of fleas in preweaning, weaning and postweaning goats.

## ABSTRAK

Projek ini adalah untuk mengkaji prevalen ektoparasit pada kambing yang berada di sekitar kawasan Batu Rakit. Selain itu, kajian terhadap taburan dan populasi ektoparasit pada kambing juga dijalankan demi mengetahui lokasi bahagian badan pada kambing yang menjadi pilihan ektoparasit. Semua sampel ektoparasit yang diambil daripada kambing telah diperiksa dan pengecaman telah dijalankan terhadap jenis ektoparasit yang berada pada kambing.

Keputusan menunjukkan bahawa *Ctenocephalides sp.* iaitu sejenis pinjal wujud sebagai penghuni yang agak banyak pada perumahannya. Selain itu, *Ixodes sp.* sejenis sengkenit juga menjangkiti kambing sebagai perumah terakhirnya demi melengkapkan kitaran hidupnya yang mempunyai tiga perumah yang berlainan. Kedua-dua jenis ektoparasit ini wujud dengan bilangan yang agak pada kambing di sekitar Batu Rakit.

*Ctenocephalides sp.* yang wujud dan boleh dikatakan tersebar pada keseluruhan badan. Tetapi kebanyakan daripada mereka terdapat pada bahagian ventral badan iaitu di kawasan seperti ketiak dan ekor dimana ia mempunyai kelembapan yang agak tinggi. Jangkitan sengkenit jenis *Ixodes sp.* pada perumah adalah wujud dengan banyak pada kawasan telinga, ekor dan bahagian yang dekat dengan kelenjar susu.

Kajian telah membuktikan bahawa kambing yang juvenile adalah paling senang dijangkiti ektoparasit jika dibandingkan dengan kambing yang telah cerai susu dan kambing yang dewasa. Selain itu, kambing yang juvenile juga mempunyai populasi

ektoparasit yang tertinggi. Ini diikuti dengan kambing yang telah cerai susu dimana ia mempunyai bilangan populasi ektoparasit yang sederhana. Kambing dewasa merupakan kambing yang mempunyai populasi ektoparasit yang terendah

Keputusan analisis statistik telah menunjukkan terdapat perbezaan bererti ( $p \leq 0.05$ ) pada prevalen dan taburan *Ctenocephalides sp.* dan *Ixodes sp.* pada bahagian – bahagian badan kambing. Terdapat perbezaan bererti ( $p \leq 0.05$ ) pada prevalen dan taburan *Ixodes sp.* pada kambing pada peringkat umur yang berlainan. Tiada perbezaan bererti ( $p \geq 0.05$ ) pada prevalen dan taburan *Ctenocephalides sp.* pada kambing pada peringkat umur yang berlainan

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