

**PRELIMINARY STUDIES ON GASTROINTESTINAL PARASITE IN
WILD RATS OF SAPI ISLAND**

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ABSTRACT

PRELIMINARY STUDIES ON GASTROINTESTINAL PARASITE IN WILD RATS OF SAPI ISLAND

A study was conducted on the gastrointestinal parasites infecting wild rats from Sapi island of Tunku Abdul Rahman Park between January 2020 to February 2020. The main objective of this study is to determine zoonotic potential of gastrointestinal parasites infection in wild rats from Sapi Island which may pose health risks towards the visitors. The wild rats identified from Sapi island consist of commensal rat species including *Rattus rattus*, *Rattus tiomanicus* and *Rattus argentiventer*. Overall, higher number of adults (87.5%) were captured compared to juveniles (12.5%) with more females (68.75 %) than males (31.25%). The identification of gastrointestinal parasites to the genus level was performed using centrifugal faecal flotation method whereas the enumeration of parasite eggs and oocysts were done using modified McMaster method. In general, the wild rats were infected with three non-zoonotic parasites including *Nippostrongylus* sp., *Heterakis* sp., *Strongyloides* sp. and *Eimeria* sp. In addition, the prevalence and mean intensity of parasitic infection across the age and sex of wild rats were calculated as well. Specifically, *Eimeria* sp. (81.25%) has the highest prevalence infecting the wild rats, followed by *Nippostrongylus* sp. (12.5%), *Heterakis* sp. (12.5%) and *Strongyloides* sp. (8.25%). However, both intrinsic factors of host age and host sex have no effect on the prevalence and mean intensity of parasitic infection in wild rats from Sapi island. To conclude, wild rats in Sapi have low zoonotic potential towards the visitors.