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**A SURVEY OF ENDOPARASITIC ZONOSSES IN STRAY DOGS AT A
SELECTED LOCALITY (THAMANKADUWA) IN POLONNARUWA DISTRICT**

A PROJECT REPORT PRESENTED

BY

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to the

POSTGRADUATE INSTITUTE OF SCIENCE

In partial fulfilment of the requirement for the award of the degree of

MASTER OF SCIENCE

of the

UNIVERSITY OF PERADENIYA

SRI LANKA

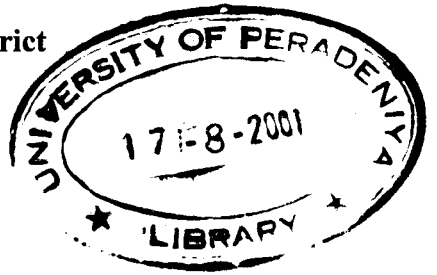
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**A Survey of Endoparasitic Zoonoses in Stray Dogs at a Selected Locality
(Thamankaduwa) in Polonnaruwa District**

T.M.D.R. de Alwis



Project report submitted through the Board of study of Zoological Sciences for the degree
of M.Sc. in Parasitology

ABSTRACT

To assess the prevalence of endoparasitic infections with zoonotic potential among stray dogs (122) at Thamankaduwa health area in the Polunnaruwa district were examined at the necropsy from January 1999 to March 1999.

Ten species of parasites namely; *Toxocara canis*, *Ancylostoma caninum*, *Dipylidium caninum*, *Cholonorchis sinensis*, *Diphyllobothrium latum*, *Taenia pisiformis*, *Spirocerca lupi*, *Dirofilaria repens*, *Babesia canis*, *Babesia gibsoni* and *Hepatozoon canis* were detected. Of the 10 endoparasites observed *Toxocara canis*, *Ancylostoma caninum*, *Dipylidium caninum* and *Dirofilaria repens* are proved zoonoses in this country.

Ancylostoma caninum, *Dipylidium caninum* and microfilariae of *Dirofilaria repens* had the highest prevalence and detected in 59.0%, 54.9% and 50.0% of observed dogs respectively. *Diphyllobothrium latum* and *Taenia pisiformis* had the lowest prevalence and were found in 0.8% and 1.6% of observed dogs respectively. The overall prevalence

of endoparasites was 98.4% with the presence of at least one of the above parasite species. Ninety one percent of the animals had mixed infections.

Relationships were not found between prevalence of parasitic infections and the sex of the animals. A very strong association was observed between *T. canis* infection and the age group of the animal with the infection was very common in <6 months age category ($r=0.80$). *S. lupi* infection is more common in >6 months age category ($r=0.31$). Some of the infections are of public health concern.