

**IDENTIFICATION OF HELMINTH AND PROTOZOA
PARASITES ON EXTERNAL SURFACE OF
COCKROACHES COLLECTED FROM RESIDENTIAL
AREAS IN SENAWANG, NEGERI SEMBILAN**

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ABSTRACT

IDENTIFICATION OF HELMINTH AND PROTOZOA PARASITES ON EXTERNAL SURFACE OF COCKROACHES COLLECTED FROM RESIDENTIAL AREAS IN SENAWANG, NEGERI SEMBILAN

Cockroaches are common pests which live in close contact with humans. It is believed that cockroaches are parasitic vectors of helminth and protozoa parasites that can infest humans or animals. However, the record of parasites on cockroaches available is very limited. This study aimed to identify helminth and protozoa parasites on external surface of cockroaches collected from residential areas in Senawang, Negeri Sembilan. A total of 41 cockroaches were collected from three households randomly selected in Senawang, Negeri Sembilan. Cockroaches were caught in kitchens and toilets using modified plastic bottles. An overall percentage of parasites presence on cockroach samples of 39.02 % was recorded. Cockroaches caught in kitchens carried more parasites (50.00 %) compared to those from toilets (26.32 %) in which the percentage represents helminth parasites since there was no protozoa parasites found on external surface of cockroach in this study. Four genera of parasites were identified on cockroaches. The identification of cockroaches showed that the most genera of parasites found on cockroaches were *Strongyloides* (19.51 %), followed by *Ascaris* (14.63 %), *Schistosoma* (2.44 %) and *Dipylidium* (2.44 %). The diversity and richness of parasites were higher on cockroaches collected in kitchens (1.121 and 1.251 respectively) than those collected in toilets (0.673 and 0.621 respectively). Meanwhile, the evenness of parasites was higher on cockroaches collected in toilets (0.9801) than those collected in kitchens (0.7669). These findings confirmed the ability of cockroaches as parasitic vectors. Hence, increasing the sanitation level of the area can help in preventing cockroach infestation. This research can be continued to the next step by using Polymerase Chain Reaction (PCR) and agar plate culture method.