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Identification of cockroaches as mechanical vector for parasitic infections and infestations in Kkuantan, Malaysia (Article) (Open Access)

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Abstract

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Background and Objective: Cockroaches are considered as obnoxious household pest due to its nature that can feed on almost everything. It is believed that cockroaches are the mechanical vectors for many kinds of parasites. As this nocturnal insect moves indiscriminately from places to places, the ability to crawl into every nook and crevices can cause it to pick up various pathogen and parasites that can be transmitted to human. The present study aimed to identify the parasites carried by cockroaches from two food stalls and two restaurants in Indera Mahkota, Kuantan. Materials and Methods: The cockroaches caught from the species of Periplaneta americana. The cockroach samples were collected using plastic traps and sticky traps. The samples were processed by using normal saline solution to obtain parasites. Normal saline solution with the freshly killed cockroaches were shaken vigorously and observed under light microscope to identify the presence of parasites. Results: The identification of cockroaches showed that the most parasites found were mites. Other parasites found including Strongyloides eggs, Strongyloides larvae and Ascaris eggs. There was no protozoan cyst found in all cockroach samples in the present study. The numbers of parasites carried from the cockroaches caught from the stalls were higher compared to the number of parasite from cockroaches caught from the restaurant. Low hygienic level at the stalls facilitates the cockroach infestation at the stall compared than the restaurant. Conclusion: Hence, cockroaches serve as carrier for endoparasites and ectoparasites. The findings from the present study suggested that appropriate preventive measures such as maintaining cleanliness of the stalls and restaurants can prevent the infestation of the cockroaches. © 2018 Afzan Mat Yusof.

SciVal Topic Prominence

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