

# Relationship between Waste with Ectoparasites and Endoparasites (Nematodes and Cestodes) in Rats

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## Original Research Article

### Relationship between Waste with Ectoparasites and Endoparasites (Nematodes and Cestodes) in Rats

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## Relationship between Waste with Ectoparasites and Endoparasites (Nematodes and Cestodes) in Rats

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**Abstract:** Rats act as a reservoir for various diseases that can be transmitted to humans such as Murine typhus, PES, helminthiasis, and leptospirosis. Therefore, the presence of these mice plays an important role in the epidemiology of disease transmission, because in addition to being a host mouse also acts as a reservoir for several diseases. The zoonotic disease originating from mice is caused by the presence of ectoparasites and endoparasites that live in mice. This study aims to determine the relationship between the presence of waste with ectoparasites and endoparasites in mice. This research is a quantitative study with a cross-sectional design. Data obtained by observing the type of rat, identification of ectoparasites and endoparasites, calculation of success traps, univariate analysis using Chi-square test to determine the relationship between the presence of waste with ectoparasites and endoparasites in mice. The results showed that of the 37 rats caught, 78% were *Rattus norvegicus*, 15% *Suncus murinus*, and 7% *Mus musculus*. This study found 68% of rats infected with *Xenopsylla cheopis* ectoparasite type and 81% infected with endoparasites type from subclass nematode and Cestoda which are zoonotic which can increase the risk of infection in humans. From the test results, it was found that there is a relationship between the presence of waste with endoparasites (nematode and Cestoda) and there is no relationship between the presence of waste with ectoparasites in mice. Therefore, it is necessary to control the mouse regularly.

**Keywords:** Rats, Trash, Zoonosis, Ectoparasites, Endoparasites.