

### Seasonal helminth species of laboratory mice (icr strain)

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(poster)

#### Summary

Mice and rats are the most common laboratory animals used in research centers worldwide. Helminth infestation can have an effect on the laboratory animals by inducing physiological and immunological alterations in the hosts and also interfere with research in a number of ways despite the lack of clinical signs usually associated with infection. Therefore, the objective of this one year study (from December, 2018 to November, 2019) was to investigate the seasonal gastrointestinal helminths species in laboratory mice. Eighteen icr strain laboratory mice (nine males and nine females) were housed in six cages (containing three animals each) under favourable condition. Faecal samples of study animals were collected once a month throughout the year. Faecal floatation method and Graham taping method were performed to detect parasite eggs. Identification of parasite eggs was done according to Flynn's parasites of laboratory animals. The overall occurrence of helminth in study animals throughout the year was 97%. Three helminth species including *Syphacia obvelata* (6.5%), *Aspicularis tetraptera* (45.4%) and *Hymenolepis (Rodentolepis) nana* (48.1%) were observed. The occurrence of helminthiasis (*A. tetraptera*, 73.3%/ *H. nana*, 64.1%) was higher during raining season than summer (*A. tetraptera*, 9.8%/ *H. nana*, 8.4%) and winter (*A. tetraptera*, 16.9%/ *H. nana*, 27.5 %). However, occurrence of *S. obvelata* (51.1%) was highest in summer when compared to rainy (25.5%) and winter seasons (23.4%).