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HELMINTH FAUNA AND ECOLOGICAL ANALYSIS
OF THE ABOMASAL HELMINTH COMMUNITY
IN HOKKAIDO SIKA DEER *CERVUS NIPPON YESOENSIS*
FROM THE ASHORO DISTRICT, HOKKAIDO

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Helminth fauna of 50 Hokkaido Sika deer *Cervus nippon yesoensis*, 21 males and 29 females, was examined. The animals were collected between March 13 and 18, 1991 in the Ashoro district, Hokkaido. Ten species of endoparasites and three species of ectoparasites were obtained, namely: *Dicrocoelium dendriticum* RUDOLPHI, 1819, Anoplocephalidae gen. sp., *Gongylonema* sp., *Spiculopteragia yamashitai* OHBAYASHI, 1966, *Rinadia japonica* OHBAYASHI, 1966, *Ostertagia ostertagi* STILES, 1892, *Mecistocirrus* sp., *Capillaria bovis* SCHNYDER, 1906, *Nematodirus helvetianus* MAY, 1920, *Trichuris* sp., *Haemaphysalis japonica* WARBURTON, 1908, *Solenopotes* sp., Trichodectidae gen. sp.

Age resistance to parasitic infection was observed only for *D. dendriticum* and no significant difference in the incidence was seen between the sexes in the host.

Intensity of *S. yamashitai* and *R. japonica* infection followed Poisson's and negative binomial distribution, respectively. A multivariate analytical method, Quantification I, was used to analyze the factors which were thought to be responsible for these distributions. Five parameters; host sex, age, nutritive conditions, habitat and the number of endoparasite species collected were statistically analyzed. Although no definitive factor was found among the 5 parameters, the intensity of infection was observed to be slightly different between age and sex. This is thought to be due to the difference in social behavior or sexual maturation of the host.

It is concluded that further study of host ecology with respect to seasonal changes and geographical distribution of helminths of Hokkaido Sika deer, followed by analysis of the helminth population, is warranted.