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**AN EPIDEMIOLOGICAL SURVEY ON THE PREVALENCE
OF MINK VIRUS ENTERITIS IN HOKKAIDO**

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An infectious diarrhea in mink occurred on a mink ranch in the northern part of Hokkaido in 1978. In the same area in 1979, a disease with similar symptoms occurred on other mink ranches. The purpose of the present study was to isolate and characterize the causative agent of this disease and to conduct an epidemiological survey of the disease. The results are summarized as follows.

1) A virus was isolated from the kidneys of the affected mink. According to morphological, physicochemical, and serological tests, the virus was identified as mink enteritis virus (MEV). The survey on antibodies to MEV was performed by using sera from minks on the ranch where the disease was first recognized in 1978. The percentage of positive minks for antibody was much higher in those reared in houses with severe outbreak than in those with mild incidence. One to two weeks after the vaccination against mink virus enteritis, the number of deaths decreased significantly. From these results, the isolated virus was deduced to be the causative agent of this infectious diarrhea.

2) Minks and specific pathogen-free cats were inoculated with MEV. Total leucocyte counts decreased significantly in the cats. Anorexia and slight diarrhea developed 11-16 days after inoculation, and antibodies to MEV were detected on the 7th or 14th day after inoculation. In the case of minks, no clinical symptoms were observed, but antibodies to MEV were detected in all of the minks 2 weeks after inoculation.

3) An attempt to isolate MEV from a crow and 6 rats on the mink ranches where the disease had occurred resulted in failure. However, the virus was successfully isolated from the spleen and the intestine of a kitten from the mink ranch. Antibodies to MEV were detected in the sera of 4 kittens but not in that of the 2 crows and 6 rats. These results suggested the possible role of cats as a carrier of the disease.