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**SITE OF REPLICATION OF INFLUENZA VIRUS
A/BUDGERIGAR/HOKKAIDO/1/77
(HAV 4 NAV 1) IN BUDGERIGARS**

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Budgerigars were experimentally infected with a budgerigar-originated influenza virus A/budgerigar/Hokkaido/1/77 (Hav 4 Nav 1), in an attempt to clarify the site of replication of the virus in budgerigars. The results are summarized as follows.

1) In intranasally inoculated budgerigars the rate of the virus recovery was high in the pharynx-larynx, trachea, lung and esophagus, and was low in the proventriculus, duodenum, ileum, liver and kidney. The virus was not recovered from the large intestine, gizzard, cloaca, pancreas, spleen, heart or brain.

2) Virus titer examined in two of the intranasally inoculated birds, was high in the pharynx, larynx, trachea, lung and esophagus. A considerable amount of the virus was found in the proventriculus. The virus was detected only in a small amount in the ileum, and was not recovered from the gizzard, duodenum, large intestine or cloaca.

3) Recovery of the virus from the tracheal swabs of the intranasally inoculated birds was positive at the rate of 8/8 on the 4th post inoculation (p.i.) day, 7/8 on the 7th p.i. day and 2/8 on the 14th p.i. day.

4) In 4 birds inoculated into the crop, the virus was not recovered from the esophagus, but was recovered only from the trachea of a bird which was examined on the 4th p.i. day.

5) In 4 birds inoculated into the rectum, the virus was recovered only from the ileum of a bird which was examined on the 7th p.i. day.

6) Clinical signs such as ruffled feathers and diarrhea were observed only in the birds caged in a room at a relatively low temperature. On the other hand, clinical signs were not observed in any of the birds caged in the same room at a moderate temperature.

7) Serum HI antibody was not detected in any of the inoculated birds except for one inoculated intranasally and examined on the 30th p.i. day.

8) Reinfection was successful in 3 of the 4 birds which were reinoculated intranasally on the 35th p.i. day. The virus was recovered from the tracheal swabs for the 4 days after the reinoculation.