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DEVELOPMENT AND PROLIFERATION OF *TAENIA CRASSICEPS*
IN INTERMEDIATE AND DEFINITIVE HOSTS

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Cysticerci, which can reproduce asexually by exogenous budding, was isolated from a vole (*Microtus montebelli*) in Nagano Prefecture, Japan, in 1985. Adult tapeworms, which were obtained from experimentally infected dogs, were identified as *Taenia crassiceps*. The development of *T. crassiceps* in dogs can be summarized as follows. Strobilation and initial differentiation of the reproductive anlage on day 7 postinoculation (PI), appearance of testes on day 9, ovaries on day 10 and lateral branches of the uterus on day 15 were noted. Mature eggs were observed on day 28 PI. The prepatent period was between 27–31 days. After day 15 PI, most of the worms were recovered from the middle third of the small intestine. The number of shed proglottids per day per worm was 1, and the number of shed eggs per day per worm was about 15,000.

The susceptibility of mice, mongolian gerbils and three species of voles to the larval form of *T. crassiceps* was also studied. Low infection rate was observed in mice infected orally with eggs of *T. crassiceps*. Although higher infection rates were observed in gerbils and *Clethrionomys rufocanus bedfordiae* as compared with those in mice, a very low percentage of eggs developed into cysticerci. However, a higher percentage of the oncospheres, which were injected subcutaneously, developed into cysticerci in *C. rufocanus bedfordiae*. Asexual reproduction of *T. crassiceps* cysticerci was observed in all gerbils, *C. rufocanus bedfordiae*, *Apodemus argenteus hokkaido* and *A. speciosus ainu*, which were infected intraperitoneally with cysticerci. However, such asexual reproduction was observed in only 2 of the 6 mice and in none of the 4 rats so infected. Reproductive capacity of *T. crassiceps* as compared to other taeniids was discussed.