



Title	CHARACTERIZATION OF THREE STRAINS OF TAENIA TAENIAEFORMIS, ONE ISOLATED FROM CLETHRIONOMYS RUFOCANUS BEDFORDIAE AND THE OTHER TWO FROM RATTUS NORVEGICUS
Author(s)	IWAKI, Takashi
Citation	Japanese Journal of Veterinary Research, 36(2), 156-156
Issue Date	1988-05-20
Doc URL	http://hdl.handle.net/2115/3100
Type	bulletin (article)
File Information	KJ00002377084.pdf



[Instructions for use](#)

CHARACTERIZATION OF THREE STRAINS OF *TAENIA TAENIAEFORMIS*,
ONE ISOLATED FROM *CLETHRIONOMYS RUFOCANUS BEDFORDIAE*
AND THE OTHER TWO FROM *RATTUS NORVEGICUS*

Takashi IWAKI

*Department of Parasitology,
Faculty of Veterinary Medicine,
Hokkaido University, Sapporo 060, Japan*

The biology of 3 strains of *Taenia taeniaeformis* isolated from *Clethrionomys rufocanus bedfordiae* in Abuta, Hokkaido, Japan (Crb strain), and from brown rats, *Rattus norvegicus*, in Sapporo, Hokkaido, Japan (Rn strain) and in Kuala Lumpur, Malaysia (MRn strain) was studied.

Infectivity in various rodents of the 3 strains was compared. The Rn and MRn strains were infective to Wistar rats and ICR mice, but not to *C. r. bedfordiae*, and more cysts were recovered from the rats than from the mice. The Crb strain was infective to *C. r. bedfordiae* but not to rats or mice. Retarded growth of the metacestodes was observed in *Apodemus speciosus ainu* and *A. argenteus*. All 3 strains failed to infect Mongolian gerbils. Therefore, *C. r. bedfordiae* can serve as a suitable intermediate host for the Crb strain, and the rat for the Rn and MRn strains.

The growth of the metacestodes of the 3 strains in their respective suitable intermediate hosts was studied. The increase in the size of the metacestodes and the capsule size of the Crb strain was faster than that of the other 2 strains. This increase was observed for the Crb strain even after day 30 postinfection, but not for the other 2 strains.

The morphological characters of the 3 strains were in agreement with the data on *T. taeniaeformis* published by other workers. However, morphological differences, such as the length and shape of the small hooks, the number and distribution of the testes, and the position of the posterior end of the cirrus sac, were observed between the Crb strain and the other 2 strains.