



Title	ROLE OF PILI IN CORYNEBACTERIUM RENALE PYELONEPHRITIS IN MICE
Author(s)	FUKUOKA, Takashi
Citation	Japanese Journal of Veterinary Research, 35(2), 124-124
Issue Date	1987-04-30
Doc URL	http://hdl.handle.net/2115/3041
Type	bulletin (article)
File Information	KJ00002374483.pdf



[Instructions for use](#)

ROLE OF PILI IN *CORYNEBACTERIUM RENALE*
PYELONEPHRITIS IN MICE

Takashi FUKUOKA

Department of Hygiene and Microbiology
Faculty of Veterinary Medicine
Hokkaido University, Sapporo 060, Japan

The role of pili in *Corynebacterium renale* pyelonephritis was investigated in mice by inoculating into the bladder piliated (P^+) or nonpiliated clone (P^-) of the bacteria (strain No. 115).

No significant differences in the mortality, the number of mice having the bacteria in the urine, bladder and kidneys, and the number of bacteria recovered were observed between the mice inoculated with P^+ and P^- bacteria. But the number of mice with serum antibody response against the injected bacteria was significantly higher in those inoculated with P^+ than with P^- bacteria.

The presence of pili in the kidneys of mice inoculated with P^+ bacteria was confirmed by the indirect immunofluorescent antibody test, detection of anti-pili antibody in serum by ELISA, and identification of the recovered bacteria's colonies by the slide agglutination test with anti-pili antiserum. Remarkable increase in the proportion of nonpiliated bacteria was observed in the urine, bladder and kidneys of mice which died after inoculation with 10^8 P^+ bacteria.