



Title	COMPARISON OF SURFACE HYDROPHOBICITY OF PILIATED AND NON-PILIATED CLONES OF CORYNEBACTERIUM RENALE AND CORYNEBACTERIUM PILOSUM AND DNA HOMOLOGY STUDY OF PROBABLE NEW SPECIES OF GENUS CORYNEBACTERIUM ISOLATED FROM THE URINARY TRACT OF PIGS
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COMPARISON OF SURFACE HYDROPHOBICITY OF PILIATED AND
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CORYNEBACTERIUM PILOSUM AND DNA HOMOLOGY STUDY OF
PROBABLE NEW SPECIES OF GENUS *CORYNEBACTERIUM*
ISOLATED FROM THE URINARY TRACT OF HOGS

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Piliated (P^+) and non-piliated (P^-) clones of *Corynebacterium renale* and *C. pilosum* were similar in hydrophobicity as measured by hydrophobic interaction chromatography, bacterial adherence to hydrocarbons and the salt aggregation test. Therefore, the previously reported adherence of P^+ clone to various cells, which is more effective than that of P^- clone of these bacteria, may be uncorrelated with the degree of hydrophobicity of both clones of these bacteria. Hydrophobicity of P^+ and P^- clones of these bacteria was found to be high when measured by hydrophobic interaction chromatography and bacterial adherence to hydrocarbons but low when measured by the salt aggregation test.

The DNA relatedness of two strains, 5-R14 and 68-29, of a probable new species of genus *Corynebacterium* isolated from the urinary tract of hogs, to other known species of genus *Corynebacterium*, which are parasitic on or pathogenic to humans and other animals, was assessed by analysis of DNA-DNA homo- and hetero-duplexes with the endonuclease S1. The two strains showed 0% DNA relatedness to other known species of genus *Corynebacterium*. Level of DNA relatedness between strains 5-R14 and 68-29 was low (20 and 37%). The data obtained indicated that the two strains of swine origin may be new species of genus *Corynebacterium*.