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**DEOXYRIBONUCLEIC ACID BASE COMPOSITIONS
OF THE THREE TYPES OF *CORYNEBACTERIUM RENALE***

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Corynebacterium renale is a Gram-positive organism causing pyelonephritis in cattle. The organisms were classified into 3 types by precipitin reaction in gels using the antigens extracted with deoxycholate (YANAGAWA et al., 1967). This paper describes a study of the base compositions of deoxyribonucleic acids (DNAs) extracted from each type of *C. renale* determined by the paperchromatographic analysis.

The DNAs were isolated and purified by the modified method of phenol deproteinization, combining the method of MARMUR (1961). Purine and pyrimidine bases were estimated after hydrolysis and paperchromatographic separation. Purified DNAs were hydrolysed in 6N-HCl. The bases were then separated chromatographically, eluted in 0.1N-HCl and applied to the spectrophotometer. During the course of the hydrolysis about 7% of total adenine was destroyed.

Thus the molar contents of guanine plus cytosine (G+C) of 6 strains of *C. renale* including 2 strains from each type were calculated as percentages of total bases in the DNAs.

The data obtained were as follows:

Type I	No. 9	54.0±0.0
	Fs 113-63	55.4±0.6
Type II	No. 35	57.9±0.7
	No. 45	56.9±0.3
Type III	No. 42	52.6±1.0
	No. 43	53.8±1.3

The DNA base compositions of *C. renale*, expressed as GC%, were ranged from 52.6 to 57.9 and were different among 3 types which were distinguishable phenotypically.