Confusing Irregularities in the Nomenclature of Some *Rhodococcus* Species

L. I. SLY,^{1*} M. D. MUTIMER,² AND J. B. WOOLCOCK²

Department of Microbiology¹ and Department of Veterinary Pathology and Public Health,² University of Queensland, St. Lucia, Brisbane, Australia 4067

We draw attention to the fact that there are some confusing irregularities in the authority citations for some species of *Rhodococcus* on the Approved Lists of Bacterial Names and also in the designation of the type strains of the objective synonyms *Rhodococcus equi* and *Corynebacterium equi*.

We draw attention to the fact that there are some confusing irregularities in the authority citations for some species of *Rhodococcus* on the Approved Lists of Bacterial Names (7). In 1977 Goodfellow and Alderson (3) proposed the new combinations *Rhodococcus corallinus*, *Rhodococcus equi*, *Rhodococcus erythropolis*, *Rhodococcus ruber*, and *Rhodococcus rubropertinctus*, and, according to the Approved Lists, these new combinations were validated in 1979 by inclusion on Validation List no. 2 (4). However, only the new combination *R. erythropolis* appeared on this validation list; therefore, the other combinations were not validated before the publication of the Approved Lists. In accordance with Rule 27 of the *International Code of Nomenclature of Bacteria* (5), these combinations must date from their valid publication in the *International Journal of Systematic Bacteriology*, which was in 1980 (7). Therefore, the correct authority citations for these combinations that were omitted from Validation List no. 2 (4) are *Rhodococcus corallinus* (Bergey, Harrison, Breed, Hammer and Huntoon 1923) Goodfellow and Alderson 1980 (7), *Rhodococcus equi* (Magnusson 1923) Goodfellow and Alderson 1980 (7), *Rhodococcus ruber* (Kruse 1896) Goodfellow and Alderson 1980 (7), and *Rhodococcus rubropertinctus* (Hefferan 1904) Goodfellow and Alderson 1980 (7), and the Approved Lists (7) become the validating publication for these combinations.

Recently, however, Mordarski et al. (6) found that strains of *R. corallinus* (including the type strain) and *R. rubropertinctus* belong to a single deoxyribonucleic acid homology group. Therefore, *R. corallinus* should be regarded as a later subjective synonym of *R. rubropertinctus*.

A further matter causing confusion is the designation of the type strains for the objective synonyms *Corynebacterium equi* and *R. equi*

(Table 1). As expected, both strain ATCC 6939^T (type strain) and strain ATCC 25729^T (type strain) originated from the nomenclatural type strain deposited in the National Collection of Type Cultures as strain NCTC 1621^T (type strain) and were later deposited at different times in the American Type Culture Collection via different historical routes.

However, the most recent *Catalogue of Strains* published by the American Type Culture Collection (2) omits *C. equi* and lists strain ATCC 6939^T as the type strain of *R. equi* instead of strain ATCC 25729^T, which is not listed as a separate entry.

It is confusing to have different strain designations for the type strains of objective synonyms, and although it is contrary to the Approved Lists, it seems advisable to designate strain ATCC 6939^T as the type strain of both *C. equi* and *R. equi*.

The purpose of this note is to draw the attention of workers in the often-insulated areas of *Corynebacterium* and *Rhodococcus* taxonomy and identification to the relationships of the designated type strains to the original deposited type strain. Workers in this field are urged to cross-reference these strains in future publications to avoid further confusion in the literature.

TABLE 1. Designated type strains of the objective synonyms *C. equi* and *R. equi*

Objective synonym	Type strain ^a	History before deposit in ATCC ^a	Reference
<i>C. equi</i>	ATCC 6939	NCTC 1621 ^T (from H. Magnusson)	1
<i>R. equi</i>	ATCC 25729	R. E. Gordon (from NCTC 1621 ^T)	3

^a ATCC, American Type Culture Collection, Rockville, Md.; NCTC, National Collection of Type Cultures, London, England.

LITERATURE CITED

1. **American Type Culture Collection.** 180. Catalogue of strains I, 14th ed. American Type Culture Collection, Rockville, Md.
2. **American Type Culture Collection.** 1982. Catalogue of strains I, 15th ed. American Type Culture Collection, Rockville, Md.
3. **Goodfellow, M., and G. Alderson.** 1977. The actinomycete genus *Rhodococcus*: a home for the 'rhodochrous' complex. *J. Gen. Microbiol.* **100**:99–122.
4. **International Committee on Systematic Bacteriology.** 1979. Validation of the publication of new names and new combinations previously effectively published outside the IJSB. List no. 2. *Int. J. Syst. Bacteriol.* **29**:79–80.
5. **Lapage, S. P., P. H. A. Sneath, E. F. Lessel, V. B. D. Skerman, H. P. R. Seeliger, and W. A. Clark (ed.).** 1975. International code of nomenclature of bacteria. 1975 Revision. American Society for Microbiology, Washington, D.C.
6. **Mordarski, M., M. Goodfellow, I. Kaszan, A. Tkacz, G. Pulverer, and K. P. Schaal.** 1980. Deoxyribonucleic acid reassociation in the classification of the genus *Rhodococcus* Zopf 1891 (Approved Lists, 1980). *Int. J. Syst. Bacteriol.* **30**:521–527.
7. **Skerman, V. B. D., V. McGowan, and P. H. A. Sneath (ed.).** 1980. Approved lists of bacterial names. *Int. J. Syst. Bacteriol.* **30**:225–420.