Conservation of *Rhodococcus equi* (Magnusson 1923) Goodfellow and Alderson 1977 and rejection of *Corynebacterium hoagii* (Morse 1912) Eberson 1918

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A recent review of the nomenclatural history of *Rhodococcus equi* and its heterotypic synonyms reveals a situation in which the strict application of the Rules of the *International Code of Nomenclature of Prokaryotes* have resulted in the renaming of this known zoonotic pathogen, which may be reasonably viewed as a perilous name. This situation can be remedied only by the Judicial Commission rendering an opinion to conserve the name *Rhodococcus equi* and to reject its earlier heterotypic synonym, *Corynebacterium hoagii*.

Tindall (2014) recently reviewed the historical record of the nomenclature of *Rhodococcus equi* and its synonyms. This organism has been of interest for more than a century because of its pathogenicity to humans and horses. Although a significant body of literature exists, it is difficult to traverse because this organism is referred to by different names that are based on different methodologies and taxonomic views held by different communities of practice at different points in time. This organism has also been the subject of a number of discussions and implicit taxonomic revisions in which the organism has also been the subject of a number of assertions of synonymy. For a new name to be legitimate, subsequent rearrangements are affected by the published combination must be re-established.

Such a change is likely to elicit strong objections from the communities that will be affected and some are likely to argue that this mandatory change contravenes General Consideration 1 of the Code which states: The study of prokaryotes can be furthered by a precise system of nomenclature accepted by the majority of bacteriologists (scientists involved in their study) of all nations. They may also argue that the rules of priority and legitimacy should be ignored, as the resulting names are disagreeable or other names are preferred, but Rule 54 prevents the replacement of a legitimate and validly published name for such reasons. There is, however, a more compelling argument against the use of *hoagii*. Strict application of the rules of the Code will result in the application of an unfamiliar epithet to a well-known pathogen, which could have unintended and potentially dangerous consequences. However, to fix *equi* as the correct and legitimate epithet in all future combinations, two actions are required by the Judicial Commission.

Rule 23a Note 4 grants the Judicial Commission the authority to make exceptions to the rule of priority by providing mechanisms to reject and to conserve names that may be considered problematic. Rule 55a sets forth five grounds for rejection of a name: ambiguity of the name; doubtfulness as to the correct application of the name; confusing names that are based on mixed cultures; perplexing names for which application is known but cause uncertainty; and perilous names whose application may be considered problematic. Rule 55b establishes the concept of conservation of a name, as well as its scope. While conservation of a name overcomes priority in a given circumscription, position and rank, it does not apply to subsequent divisions or reunions of taxa. Names and epithets with priority must be re-established.

If the epithet *equi* is to be fixed for this organism in all subsequent transfers, the Judicial Commission must conserve the name *Rhodococcus equi* and place *Corynebacterium hoagii*...
on the list of rejected names. There is a clear justification for doing so in that *Rhodococcus equi* is a known zoonotic pathogen for which *Corynebacterium hoagii* is an acknowledged heterotypic synonym that has priority. The former name is currently in widespread use whereas the latter name appears to have fallen into disuse. Strict application of the rule of priority results in a name that is not only perplexing but also perilous. The prudent course of action is for the Judicial Commission to take the necessary course of action to properly address this lingering problem in a reasonable manner that is within the scope of their remit.

### REFERENCES


