Comment on a Proposal of Farmer et al. to Conserve the Specific Epithet *tarda* over the Specific Epithet *anguillimortiferum* in the Name of the Organism Known as *Edwardsiella tarda*

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We express opposition to a proposal of Farmer et al. to conserve the specific epithet *tarda* over the specific epithet *anguillimortiferum* in the scientific name *Edwardsiella tarda* Ewing and McWhorter 1965. Farmer et al. justified their proposal by citing Principle 1 of the *International Code of Nomenclature of Bacteria and Viruses* 1958 (11) in the interest of stability in nomenclature and to avoid confusion in the literature. If one clings to the avoidance of a passing confusion, however, changes in classification and protection of priority of names cannot be realized. *Paracolobactrum anguillimortiferum* Hoshina 1962, which is the senior synonym of *Edwardsiella tarda* Ewing and McWhorter 1965, was validly published based on the *Bacteriological Code* 1958, although it was not published in the *International Bulletin of Bacterial Nomenclature and Taxonomy* and no type strain was designated. Therefore, the priority of the specific epithet *anguillimortiferum* over the epithet *tarda* in the name *Edwardsiella tarda* should be protected by Principle 6 and Rule 23 of the *Bacteriological Code*, 1976 Revision.

In 1975 Sakazaki and Tamura (17) pointed out that *Edwardsiella tarda* Ewing and McWhorter 1965 (5) is a later synonym of *Paracolobactrum anguillimortiferum* Hoshina 1962 (13) and that the specific epithet *anguillimortiferum* would have priority over the epithet *tarda*. They proposed the name *Edwardsiella anguillimortifera* to replace the name *Edwardsiella tarda*. However, this was opposed by Farmer et al. (6), who proposed that the specific epithet *tarda* be conserved over the epithet *anguillimortiferum*.

Farmer et al. emphasized that the name *Edwardsiella tarda* was published in the *International Bulletin of Bacteriological Nomenclature and Taxonomy*, whereas the name *Paracolobactrum anguillimortiferum* was published in the *Japanese Bulletin of Scientific Fisheries*, which is, they stated, "a journal unlikely to reach working bacteriologists." They also indicated that *Paracolobactrum anguillimortiferum* does not appear in the *Index Bergeyana*

(4). It should be mentioned, however, that at that time the *Bacteriological Code* (11) had not prescribed that new names and combinations be published in the *International Bulletin of Bacteriological Nomenclature and Taxonomy*. The *Japanese Bulletin of Scientific Fisheries*, in which a description of *Paracolobactrum anguillimortiferum* was published in English, may not reach all medical bacteriologists, but this does not invalidate the publication of Hoshina. The *Index Bergeyana* omitted not only the name *Paracolobactrum anguillimortiferum*, but also many legitimate names of bacteria, as indicated by Hatt and Zvirbulis (7) and Zvirbulis and Hatt (19, 20).

Farmer et al. suggested that, since the name *Edwardsiella tarda* was validly published 10 years ago, it has gained world-wide acceptance by bacteriologists. They also suggested that acceptance of the specific epithet *anguillimortiferum* would violate the intent of Principle 1 of the *International Code of Nomenclature of Bacteria and Viruses* 1958 (11) to avoid confusion in the literature. In reply, we cite some examples in recent nomenclature. Specific epithets of *Leptospira icterohaemorrhagiae* Inada, Ido, Hoki, Kaneko, and Ito 1916 (9), *Acinetobacter anitratus* (Schaub and Hauber) Brisou and Prévot 1954 (3), and *Vibrio comma* (Schroeter) Blanchard 1906 (2) had gained world-wide acceptance over 30 or more years. However, *Leptospira interrogans* (Stimson) Wenyon 1926 (18), *Acinetobacter calcoaceticus* (Beijerinck) Baumann, Doudoroff, and Stanier 1968 (1), and *Vibrio cholerae* Pacini 1854 (16) have been justified for those organisms, respectively, by the priority and legitimacy of their specific epithets (10, 13, 14), although those names have seldom been used for the such organisms.

Farmer et al. cited Opinion 18 (12), as an example for assurance of their proposal, in which the Judicial Commission of the International Committee on Bacteriological Nomenclature conserved *typhi* over *typhosa* as the specific epithet for the typhoid bacillus to minimize confusion in the literature, despite the fact *typhosa*

had priority over *typhi*. However, the fame and importance in medical bacteriology may be different for *Salmonella typhi* and for *Edwardsiella*. As far as we have determined, no more than 20 papers dealing with the organism *Edwardsiella tarda* have been published within the last 10 years. If the specific epithet *tarda* is replaced by the epithet *anguillimortiferum*, confusion in the literature will be minimized.

The *Bacteriological Code* is aimed at fixity of names and at avoiding confusion, but it sometimes creates it. Names may change because of a change in classification and in application of a legitimate, retroactive name. In such instances, a passing confusion in the literature may be inevitable. If avoidance of such confusion is stressed, changes in classification and protection of priority in nomenclature cannot be realized.

In the points of view mentioned above, we suggest that the priority of the specific epithet *anguillimortiferum* over the epithet *tarda* in the name *Edwardsiella tarda* should be protected by Principle 6 and Rule 23 of the *International Code of Nomenclature of Bacteria, 1976 Revision* (15).

REPRINT REQUESTS

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