Proposal That *Spirochaeta stenostrepta* Zuelzer Replace *Spirochaeta plicatilis* Ehrenberg as the Type Species of the Genus *Spirochaeta* Ehrenberg

Request for an Opinion

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It is proposed that *Spirochaeta stenostrepta* Zuelzer replace *Spirochaeta plicatilis* Ehrenberg as the type species of the genus *Spirochaeta* Ehrenberg.

The Approved Lists of Bacterial Names were published recently under the editorship of Skerman et al. on behalf of the Ad Hoc Committee of the Judicial Commission of the International Committee on Systematic Bacteriology (11). The editors of the Lists pointed out that type strains were not available for some of the names of the species included on the Lists. However, in some instances these names were retained on the Lists to preserve the status of genera "... which contained well described species for which representative strains were available for all but the Type Species of the genus itself" (11). The hope was expressed by the editors that "... early action will be taken to request the Judicial Commission to conserve these genera with new Type Species" (11).

A type species that has been retained on the Approved Lists, and for which representative strains are not available, is *Spirochaeta plicatilis* Ehrenberg. This bacterium was originally described and named in 1835 (7), and it has been observed by various authors in H₂S-containing mud (1, 13). In spite of its early description, *S. plicatilis* has never been isolated in pure culture. A bacterium that was identified as *S. plicatilis* was isolated by Dyar (6), but later this organism was shown to be a species of *Saprospira* (10, 12).

In accordance with the above-mentioned suggestion made by the editors of the Approved Lists, I propose that *S. plicatilis* Ehrenberg no longer be recognized as the type species of the genus *Spirochaeta* inasmuch as representative strains of this species are not available. In place of *S. plicatilis* Ehrenberg, I recommend that *Spirochaeta stenostrepta* Zuelzer be assigned the status of type species. Among all species of *Spirochaeta* for which representative strains are available (2, 4, 11), *S. stenostrepta* Zuelzer is chronologically the first to have been validly named and described (13).

Strains of *S. stenostrepta* have been isolated and studied extensively (3, 5, 8, 9). A description

of this species has been published in *Bergey's Manual of Determinative Bacteriology* (2), and a culture of the type strain has been deposited with the American Type Culture Collection (ATCC) under the number 25083.

In summary, it is respectfully requested that the Judicial Commission issue an opinion recognizing *Spirochaeta stenostrepta* Zuelzer as the new type species of the genus *Spirochaeta* Ehrenberg. The type strain of *S. stenostrepta* is ATCC 25083. A description of this strain has been published (2).

REPRINT REQUESTS

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