Proposal To Change the Genus Designation *Serpula* to *Serpulina* gen. nov. Containing the Species *Serpulina hyodysenteriae* comb. nov. and *Serpulina innocens* comb. nov.

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The bacterial genus *Serpula* Stanton et al. 1991 is illegitimate due to the existence of a fungal genus *Serpula* Pers. ex S. F. Gray. Consequently, a new genus designation, *Serpulina*, is proposed for this spirochete genus. *Serpula hyodysenteriae*, the type species, and *Serpula innocens* Stanton et al. 1991, therefore, become *Serpulina hyodysenteriae* comb. nov. and *Serpulina innocens* comb. nov.

My colleagues and I have proposed a reclassification of the intestinal anaerobic spirochetes *Treponema hyodysenteriae* and *Treponema innocens* (21). This proposal was based on results of DNA-DNA reassociation experiments, sodium dodecyl sulfate-polyacrylamide gel electrophoresis of cell proteins, and 16S rRNA sequence analyses. Our results and the results of previous investigators (16, 17) indicated that *T. hyodysenteriae* and *T. innocens* are related to one another but are related only distantly to *T. pallidum*, type species of the genus *Treponema*, and to other spirochetes. Consequently, we proposed that the species *T. hyodysenteriae* and *T. innocens* be transferred to a new genus, *Serpula* gen. nov.

Recently, I learned that the name *Serpula* has been used to designate a genus of fungi belonging to the Class *Basidiomycetes* (1, 5, 18). Species of this genus are associated with rotting wood and include *S. lacrymans*, which causes dry rot of lumber in buildings (2, 5). According to Rule 51b of the *International Code of Nomenclature of Bacteria* (13), a bacterial name is illegitimate if it is a junior homonym (a name published later) of a taxon of bacteria, fungi, algae, protozoa, or viruses. Due to the prior use of the name *Serpula* for a fungal genus, the name *Serpula* for a bacterium is illegitimate and should be rejected.

Serpula translated from the Latin means "little snake." When viewed by phase-contrast microscopy, *S. hyodysenteriae* cells have a snakelike appearance (22). In recognition of this morphology, I propose that the bacterial genus name *Serpula* be replaced by *Serpulina* (ser.pu.li'.na) gen. nov. (L.n. *serpula*, little snake; L. suffix *-ina* belonging to; N.L. fem. n. *Serpulina* belonging to the class of little snakes, snakelike). *Serpula hyodysenteriae* and *Serpula innocens* would be transferred to the new genus as *Serpulina hyodysenteriae* comb. nov. and *Serpulina innocens* comb. nov. The type species would be *S. hyodysenteriae*, with strain B78 (= ATCC 27164) as the type strain. The genus description for these intestinal spirochetes is the same as the description for *Serpula*, and the species descriptions are the same as those for *S. hyodysenteriae* and *S. innocens* (21).

There is no indication that the name *Serpulina* has been used previously to designate taxa of bacteria (4, 7, 10, 20), protozoa (11, 14), algae (8, 12, 19), fungi (1, 2, 9, 18), or viruses (3, 6, 7, 15, 23). Computer searches of titles, key words, and abstracts of publication data bases (Agricola, 1970 to 1991; BIOSIS, 1969 to 1991; Zoological Record, 1978 to 1991; Commonwealth Agriculture Bureau Annotated Bibliography (CAB) Abstracts, 1972 to 1991; SciSearch, 1974 to 1991; Life Sciences Collection, 1978 to 1991; Medline, 1966

to 1991; Excerpta Medica Base, 1974 to 1991; and Chemical Abstracts Search, 1967 to 1991) have not revealed any prior use of the designation *Serpulina*.

I am grateful to Bruce Paster and Warren Thomas for bringing the existence of the fungal genus *Serpula* to my attention and to John G. Holt and Larry Wayne for opinions regarding the *International Code of Bacterial Nomenclature*. Janice Eifling conducted the computer searches of scientific literature. In selecting the designation *Serpulina*, the scholarly and sympathetic advice of Thomas O. MacAdoo, Department of Foreign Languages and Literatures, Virginia Polytechnic Institute and State University, Blacksburg, Va., is greatly appreciated.

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