

Revision of the Amphisiellidae Jankowski, 1979 (Ciliophora, Hypotricha)

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The Amphisiellidae are a moderately large group of hypotrichs (= stichotrichs). Most of the 8 genera (*Amphisiella*, *Uroleptoides*, *Lamtostyla*, *Amphisiellides*, *Nudiamphisiella*, *Afroamphisiella*, *Paramphisiella*, *Hemiamphisiella*) currently assigned have been established within the last 3 decades. The supposed apomorphy of the group is the amphisiellid median cirral row, a more or less long and usually continuous row made of the cirri originating from the 2 (V, VI) or 3 (IV–VI) rightmost anlagen. The portions of the row can be easily homologized with cirral groups (frontoterminal cirri, postoral ventral cirri) of the oxytrichids (Berger 1999; Monographiae biol. 78: 1–1080). However, amphisiellids lack a dorsal kinety fragmentation and a dorsomarginal row. Whether these features have never evolved or were lost in the amphisiellids is difficult to derive from the morphology alone. Thus, molecular data of some representatives have to be ascertained to get a more detailed idea of the evolution of the amphisiellids. *Uroleptoides* (with the terrestrial type species *U. kihni*) was synonymized with *Amphisiella* (with the marine type species *A. marioni*) by Jankowski (1979; Trudy zool. Inst. 86: 48–85) because both taxa have basically the same cirral pattern. However, a detailed analysis shows that *Amphisiella*, as currently defined, forms two distinct groups, namely (i) saltwater species, which have 6 or more dorsal kineties, prominent transverse cirri, and distinct pretransverse ventral cirri; and (ii) terrestrial species, which have 4 or less dorsal kineties, inconspicuous transverse cirri, and pretransverse ventral cirri are likely absent. Thus, *Uroleptoides* is reactivated for the terrestrial species. However, to guarantee nomenclatural stability *Uroleptoides* is preliminarily classified as subgenus so that the species names have not to be changed again. The financial support of the project by the Austrian Academy of Sciences (APART; Austrian Programme for Advanced Research and Technology; Project 10940) is greatly acknowledged.