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**APOGASTROSTYLA RIGESCENS (KAHL, 1932) NOV. GEN., NOV. COMB.‡
(CILIOPHORA: HYPOTRICHIA): MORPHOLOGY, NOTES ON CELL
DIVISION, SSU RRNA GENE SEQUENCE DATA, AND NEOTYPIFICATION**

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Abstract

The morphology, the infraciliature, some ontogenetic stages, and the SSU rRNA gene sequence of the little-known marine 18-cirri hypotrich *Tachysoma rigescens* (Kahl, 1932) Borror, 1972 [basonym *Oxytricha (Tachysoma) rigescens*], isolated from mariculture waters near Qingdao, China, were investigated. The species is characterised, inter alia, by narrowly spaced, small, colourless cortical granules and several ring-shaped structures in the cytoplasm. The caudal cirri and the simple dorsal kinety pattern (3 bipolar kineties) obviously taken over from the ground pattern of the Hypotricha, the composition of the adoral zone of the proter from new and parental membranelles, as well as the presence of two 'extra' cirri behind the rear end of the right marginal row strongly suggest a misclassification in *Tachysoma*. The SSU rRNA gene sequence data indicate that *T. rigescens* branches off very early in the Hypotricha tree, which supports the hypothesis that the 18-cirri pattern occurred probably already in the last common ancestor of the Hypotricha. A detailed survey of the early branching 18-cirri hypotrichs and similar taxa reveals that for *T. rigescens* a new genus has to be established, *Apogastrostyla* nov. gen.‡, because there are, inter alia, important differences in the dorsal infraciliature. Besides the type species, *A. rigescens* nov. comb.‡, which seems to be confined to the northern hemisphere, a second marine species, *A. szaboi* nov. comb.‡ (basonym *Hemigastrostyla szaboi*) can be included. Since no type material of *A. rigescens*‡ is available and the type locality is not known the Chinese population is fixed as neotype. Funded by the Austrian Science Fund (FWF; Project P20569-B17; H. Berger), the Natural Science Foundation of China (project numbers: 30870264, 40906065); and the Center of Excellence in Biodiversity, King Saud University (111 Project [No. B08049]). ‡ This name is disclaimed for nomenclatural purposes (ICZN 1999, Article 8.3).

Key words: cell division, infraciliature, ontogenesis, phylogeny, Spirotricha, taxonomy