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Morphologic and molecular characterization of seven species of the remarkably diverse and widely distributed metopid genus *Urostomides* Jankowski, 1964 (Armophorea, Ciliophora)

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Abstract

The free-living ciliates of the order Metopida Jankowski, 1980 are pivotal players in the microbial food web of the sulfuretum, acting as hosts to prokaryotic endo- and ectosymbionts. They are also of interest in the study of the function and evolution of their mitochondrion-related organelle, the hydrogenosome. The taxonomy and phylogeny of this group remains confused, due, in large part, to the fact that most of its taxa have not been characterized by modern methods including molecular sequencing. In this report we provide morphologic and molecular characterization of seven taxa from the poorly-known resurrected genus *Urostomides* obtained in the course of broad geographic sampling. Foissner (2016) established the family Apometopidae to include *Apometopus* (a junior synonym of *Urostomides*) and *Cirranter* Jankowski, 1964.