

Taxonomic Studies on Marine Ciliated Protozoa in China: Progress, Tasks and Problems

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Taxonomy of marine ciliated protozoa in China, its history, and up to date progress are concisely reviewed. The results, as part of a big on-going project, are mainly from the investigations carried out in the last decade for those dominant one-cell organisms from various biotopes along the coast of China seas. This research concerns the following subjects: ① Morphology and classification of over 160 free-living forms belonging to 11 orders, including 2 new families (*Pseudotrachelocercidae*, *Pseudoamphisiellidae*), 7 new genera (*Hemigastrostyla*, *Amphileptiscus*, *Novistrombidium*, *Pseudotrachelocerca*, *Metaurostylopsis*, *Pseudoamphisiella*, *Zoothamnopsis*), more than 20 new species, several new combinations and synonyms. About half of those species treated are newly recorded in this area; ② Descriptions of ca. 70 facultative parasitic or ecto- and endocommensal ciliates, which are mostly attached on or within the cultivated animal hosts (shrimps, fishes and molluscs). Among these, at least 17 species are new, and most of the rest were first recorded in China; ③ Ultrastructure of some "lower" forms, and; ④ Morphogenetic/stomatogenetic studies and phylogeny of about 24 genera/species from 4 different orders. Difficulties and tasks confronted today by taxonomists, both in China and abroad, are briefly discussed. However, a great opportunity remains for faunistic studies, due to the taxonomic gaps all through those marine habitats among this geographic area.