



An integrative study on a large group of molluscs combines the application of both morphological and molecular methods on the traditional Flabellinidae and related groups, with species ranging from the North Pole to the tip of southern America. This study of aeolid nudibranchs with branched digestive glands harbouring sequestered cnidarian nematocysts previously classified as *Flabellina* led to the reclassification of other genera of aeolid nudibranchs. Arctic, temperate, and tropical members of the traditional Flabellinidae and related genera were examined to elucidate the evolutionary history of the aeolids and propose three new families, 17 new genera, 13 new species, and two new subspecies. To address relationships and disparity, a new family system for aeolids is proposed. The results of the study indicate that the branches of the traditional Flabellinidae family tree are discontinuous with Facelinidae, Aeolidiidae, and the traditional Tergipedidae, all inserted between Flabellinidae nodes.

Diagnoses are provided for all aeolidacean families and two new non-flabellinid families (Abronidae fam. n. and Murmaniidae fam. n.) are established to accommodate molecular and morphological diversity within traditional tergipedids. In addition, Coryphellidae and Paracoryphellidae are restored and traditional Flabellinidae is considerably restricted. The distinctiveness of the recently described family Unidentiidae is confirmed and several species complexes among all the ex-Flabellinidae lineages are recognised using both morphological and molecular data.

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POLYPHYLY OF THE TRADITIONAL FAMILY FLABELLINIDAE AFFECTS A MAJOR GROUP OF NUDIBRANCHIA: AEOLIDACEAN TAXONOMIC REASSESSMENT WITH DESCRIPTIONS OF SEVERAL NEW FAMILIES, GENERA, AND SPECIES (MOLLUSCA, GASTROPODA)

BY TATIANA KORSHUNOVA, ALEXANDER MARTYNOV, TORKILD BAKKEN, JUSSI EVERTSEN, KARIN FLETCHER, I WAYAN MUDIANTA, HIROSHI SAITO, KENNET LUNDIN, MICHAEL SCHRÖDL, BERNARD PICTON



Fjordia chriskauzei Korshunova et al., sp. n.

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Terry Erwin
Smithsonian Institution
PO Box 37012, MRC 187, Rm. CE-723
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U.S.A.
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Managing Editor

Lyubomir Penev
Institute of Biodiversity and Ecosystem Research
Bulgarian Academy of Sciences
Yurii Gagarin Street 2
1113 Sofia, Bulgaria
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Editorial Office

Pensoft Publishers
Prof. Georgi Zlatarski 12, 1700 Sofia, Bulgaria. Tel. +359-2-8704281, Fax +359-2-8704282
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