

The First Record of a Species of Clausiidae (Copepoda: Cyclopoida) from Japanese Waters, with the Proposal of a New Genus

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A new genus and species of clausiid copepod (Cyclopoida), *Oshoroclausia shibazakii* n. g. n. sp., is described based on a single female collected subtidally in Oshoro Bay, on the western coast of Hokkaido, the Sea of Japan. *Oshoroclausia* is characterized by the following feature of female: elongate body lacking distinct segmentation from first pedigerous to the anal somite, 2-segmented antenna with two terminal claws, and legs 1 to 4 bearing 2-segmented rami. This is the first record of a clausiid copepod from Japanese waters.

Key Words: Clausiidae, symbiotic copepod, polychaete, Hokkaido, Sea of Japan, *Oshoroclausia shibazakii* n. g. n. sp.

Introduction

The Clausiidae (Cyclopoida) is one of the copepod families exclusively associated with polychaete hosts (Kim *et al.* 2013). Giesbrecht (1895) established the family to include three genera, *Clausia*, *Rhodinicola*, and *Seridium*. In their revision, Wilson and Illg (1955) included *Clausia*, *Mesnilia*, *Seridium*, and *Teredicola* in the family. Subsequently, *Pontoclausia*, *Pseudoclausia*, *Indoclausia*, *Stockia*, *Megaclausia*, *Synaptiphilus*, *Presynaptiphilus*, and *Likroclausia* were added to the family (Băcescu and Pór 1959; Bocquet and Stock 1960, 1963; Sebastian and Pillai 1974; O'Reilly 1995; Ho and Kim 2003). Bresciani (1964) redescribed *Rhodinicola* and recognized *Seridium* as its junior synonym. Boxshall and Halsey (2004) also reviewed and re-diagnosed the Clausiidae, excluding *Synaptiphilus*, *Presynaptiphilus*, *Stockia*, and *Teredicola* from the family. Since that revision of the family concept, *Spionicola*, *Boreoclausia*, *Sheaderia*, and *Vivgottoia* have been added (Björnberg and Radashevsky 2009; Kim *et al.* 2013). Thus, 12 genera are currently accepted as members of the family.

In this paper, a new species of clausiid is described on the basis of a single female collected on a sandy bottom in Oshoro Bay on the Sea of Japan coast of Hokkaido. A new monotypic genus is established to accommodate the new species.

Materials and Methods

Sediment samples were taken from the sediment surface layer (less than 5 cm thick) in the subtidal zone using a hand-dredge net (mesh 1 mm). After filtering the sediment samples through a fine mesh (100 µm) net, copepods were picked out under a stereomicroscope and then fixed in 70% ethanol. The present clausiid was subsequently soaked in lactophenol for about half a day, dissected, and examined using a modified version of the wooden slide method of Humes and Gooding (1964). Drawings were made with the aid of a drawing tube. The copepod body parts were measured using an ocular micrometer and measurements are given in micrometres (µm). The body length was measured from the rostral area to the anal somite including the caudal rami. The type specimen is deposited in the crustacean collection of the National Museum of Nature and Science, Tsukuba (NSMT), Japan.

Genus *Oshoroclausia* n. g

Diagnosis of adult female. Body elongate, cylindrical, comprising cephalothorax and indistinctly segmented post-cephalothoracic trunk. Cephalothorax with projecting rostral area bearing pair of sensory elements. Segmentation of second to fifth pedigers, genital complex, and 3-segmented abdomen indistinct. Genital complex with paired lateral lobes. Caudal rami divergent, fused to anal somite at base, bearing six caudal setae.