Two new sphyrapodid species (Crustacea: Tanaidacea: Apseudomorpha) from southwestern Japan

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Abstract

Two new species, Kudinopasternakia balanorostrata and Pseudosphyrapus quintolongus are described from Japan. Kudinopasternakia balanorostrata is characterized by an acorn-shaped rostrum. It most closely resembles K. siegi (Viskup & Heard, 1989), but can be distinguished by the shape of the rostrum, the number of setae on article 2 of the mandibular palp, and the setation on the outer lobe of the fixed endite of the maxilla. Pseudosphyrapus quintolongus is characterized by an unusually large lateral process on pleonite 5, which distinguishes it from all other species in the genus. Keys to species of Kudinopasternakia and Pseudosphyrapus are given.

Key words: Tanaidacea, Sphyrapodidae, Kudinopasternakia balanorostrata n. sp., Pseudosphyrapus quintolongus n. sp., Japan

Introduction

The apseudomorph tanaidacean family Sphyrapodidae includes two subfamilies, six genera, and 16 species; members of the family have been reported from around all continents except Antarctica and South America and range in depth from coastal areas (1–2 m depth) to continental slopes (3716 m depth) (Băcescu 1981; Sieg 1983; 1986; Kudinova-Pasternak 1984, 1985; Guțu 1989; Viskup & Heard 1989; Guțu & Iliffe 1998; Bamber 2000; Guțu & Heard 2002; Larsen 2005). There are few records of sphyrapodids from the northwestern Pacific; these are limited to specimens that Kudinova-Pasternak (1984) identified as Pseudosphyrapus serratus (G.O. Sars, 1882), from three localities in the Sea of Japan.

During research cruises of the TR/V Toyoshio-maru, Hiroshima University, along the Pacific coast of Kyushu Island and the East China Sea coasts of the Nansei Islands, Japan, in 2005 and 2006, Professor S. Ohtsuka and colleagues collected three specimens of sphyrapodid tanaidaceans. These turned out to represent two undescribed species of the genera Kudinopasternakia Guțu, 1991 and Pseudosphyrapus Guțu, 1980. This paper describes and illustrates these two new species, and presents keys to species of both genera.

Material and methods

A female of Kudinopasternakia balanorostrata n. sp. was collected from 646–709 m depth north of Kuroshima Island by sledge trawl in 2006. A male of Pseudosphyrapus quintolongus n. sp. was collected from 386 m depth west of Okinawa Island, and a female of the same species from 521 m depth east of Toi Cape, by beam trawl in 2005. These specimens were fixed in 70% EtOH and preserved in 99% EtOH.

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