



A new species of prickleback *Ernogrammus zhirmunskii* (Acanthopterygii: Perciformes: Stichaeidae) from the Sea of Japan, Russia

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Abstract

A new stichaeid fish, *Ernogrammus zhirmunskii* is described on the basis of the specimens collected in Peter the Great Bay, the Sea of Japan. This new species differs from its congeners *E. hexagrammus* and *E. walkeri* in having seven body sensory canals in total number including one short canal in the middle of belly and unique combination in number of the anal fin rays with one short rigid spine posteriormost (I 28–30 I). In coloration the fish has one narrow white stripe between two wide black ones on the base of pelvic fin, and one dark blotch on the dorsal fin anteriorly.

Key words: Stichaeidae, new fish species, the Sea of Japan

Introduction

Some specimens of the fish identified later as *Eumesogrammus* sp. were collected in 1997 during the joint Japan–Russia ichthyological expedition in Peter the Great Bay, in the Far Eastern Marine Biosphere Reserve water area (Yabe *et al.* 2000). In the following years, the senior author repeatedly observed and collected this fish in the previously found habitat.

Our specimens have some basic characters of fishes of two closely related genera of Stichaeidae, namely, *Ernogrammus* Jordan & Evermann 1898, and *Eumesogrammus* Gill 1864. Fishes of both genera have four longitudinal lateral canals on each side of the body but slightly differ from one another in their form and length. In addition, *Eumesogrammus praecisus* (Krøyer 1837) has 2–3 short spines in the anal fin posteriorly. Thus, analyzing all morphological characteristics and biology of the collected specimens we have concluded that our specimens have some characters different from the already known species of genus *Ernogrammus*. The present paper is devoted to the description of this new species.

Material and methods

Fish specimens were collected in July, 2008 in Peter the Great Bay, in a small bay on the northern coast of Bol'shoy Pelis Island at 42°40.39' N, 131°27.68' E. The fish were collected underwater by the senior author with SCUBA, using rotenone and a hand net. Immediately after the collection the fish were photographed (camera Panasonic Lumix DMC-FZ30) and fixed with 5 % formaldehyde solution. In the laboratory the fish were radiographed with Faxitron MX-20 and Softex CMB-2, and their morphometric characters were measured and calculated. Measurements were made on the left side of specimens with calipers and recorded to the nearest 0.1 mm. Counts of vertical-fin rays, vertebrae, and other osteological observations were based on radiographs. Osteological terminology follows Shinohara (1994).

Abbreviations used in the text are as follows: SL—standard length, H—body depth, c—head length, hc—head depth, hcd—caudal peduncle depth, aD—predorsal length, aA—preanal length, aP—prepectoral length, aV—pre-