



***Petroleuciscus esfahani*, a new species of fish from central Iran (Actinopterygii: Cyprinidae)**

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Abstract

A new species, *Petroleuciscus esfahani*, is described from central Iran in the Zayandeh River basin. It is distinguished from other members of the genus by a combination of characters including a mode of 8½ dorsal-fin branched rays, modally 10–11½ anal-fin branched rays, small scales numbering 44–54 in the total pored lateral line, a modal pharyngeal-tooth formula 2.5–4.2, and total vertebrae usually 40–42. It appears to be morphologically closest to *Petroleuciscus gaderanus* (Günther, 1899) that we tentatively consider as a synonym of *P. ulanus* (Günther, 1899) of the Lake Orumiyeh basin in northwestern Iran.

Key words: *Petroleuciscus*, Cyprinidae, freshwater fish, new species, Iran

Introduction

The cyprinid genus *Petroleuciscus* Bogutskaya, 2002 has two species in Iran, namely *Petroleuciscus ulanus* (Günther, 1899) endemic to the Lake Orumiyeh basin in northwestern Iran and *P. persidis* (Coad, 1981) of the endorheic Kor River and the exorheic Persian Gulf basin of Hormozgan Province in southern Iran (Coad, 1995, 2009). *Petroleuciscus gaderanus* (Günther, 1899) is an endemic taxon of the Lake Orumiyeh basin tentatively considered a synonym of *P. ulanus*. A third geographically close species is *P. kurui* (Bogutskaya, 1995) of the upper Tigris River basin in southeastern Turkey. There are three more species in the genus, *P. squaliusculus* (Kessler, 1872) (Syr Darya drainage, Kazakhstan, Kyrgyzstan and Tadjikistan), *P. smyrnaeus* (Boulenger, 1896) (western Turkey), and *P. borysthenticus* (Kessler, 1859) (type species of the genus, a circum-Pontic species).

This paper describes a new species of *Petroleuciscus* from central Iran in the Zayandeh River basin, an endorheic drainage which terminates in the Gav Khuni salt waste.

Material and methods

Counts and measurements follow Hubbs and Lagler (1958). Measurements are to the nearest 0.1 mm. Standard length (SL) is measured from the tip of the snout to the end of the hypural complex. Head length (HL) and interorbital width are measured to their bony margins. Fin-ray counts separate unbranched and branched rays. The last two branched rays articulated on a single pterygiophore in the dorsal and anal fins are noted as “1½”. All statistical calculations were done without the “½”. The lateral-line scale count includes pored scales, from the first one just behind the supracleithrum to the posteriormost one at the posterior margin of the hypurals, excluding 1 or 2 scales located on the bases of the caudal-fin rays; the total number of lateral-line scales is also given. Osteological characters were examined from radiographs and from preparations cleared and stained with alizarin red S. Two openings at the margins of adjacent bones give one pore in the cephalic sensory canal system.