

## A new species of *Pseudophoxinus* (Teleostei: Cyprinidae) from Southwestern Anatolia, Turkey

F. GÜLER EKMEKÇİ<sup>1,5</sup>, M. ALTUĞ ATALAY<sup>2</sup>, BARAN YOĞURTÇUOĞLU<sup>1</sup>,  
DAVUT TURAN<sup>3</sup> & FAHRETTİN KÜÇÜK<sup>4</sup>

<sup>1</sup>Department of Biology, Faculty of Sciences, Hacettepe University, Beytepe Campus, 06800 Ankara, Turkey.

E-mail: fgekmekeci@gmail.com; yokbaran@gmail.com

<sup>2</sup>Republic of Turkey Ministry of Food, Agriculture and Livestock, General Directorate of Fisheries and Aquaculture, Eskişehir Yolu 9. km Lodzi, Ankara, Turkey. E-mail:aatalay72@gmail.com

<sup>3</sup>Recep Tayyip Erdoğan University, Faculty of Fisheries and Aquatic Sciences, 53100 Rize, Turkey. E-mail: dvtturan@yahoo.com

<sup>4</sup>Süleyman Demirel University, Faculty of Fisheries and Aquatic Sciences, 32260 Isparta, Turkey. E-mail:fkucuk59@gmail.com

<sup>5</sup>Corresponding author. E-mail: fgekmekeci@gmail.com

### Abstract

*Pseudophoxinus mehmeti*, new cyprinid species from the Alanköy basin in south-western Turkey, is distinguished from all species of *Pseudophoxinus* in adjacent regions by the combination of the following characters: body slender, its length 1.3–1.5 times its depth; caudal peduncle length 1.6–2.0 times its depth; mouth almost superior, with the tip of the mouth-cleft approximately level with the middle of the pupil; snout with a pointed tip, its length markedly greater than eye diameter; lateral line not complete, with 30–50 perforated scales and 48–60+2 scale rows in lateral series; 11½–13½ scale rows between lateral line and dorsal-fin origin, 3½–5½ scale rows between lateral line and anal-fin origin; dorsal-fin with 6½–7½ branched rays; anal-fin with 6½–7½ branched rays; a distinct black epidermal stripe from eye to caudal-fin base in preserved individuals.

**Key words:** Western Anatolia, cyprinidae, taxonomy, *Pseudophoxinus mehmeti*

### Introduction

Recent studies have shown that *Pseudophoxinus* is comprised of two well-separated phylogenetic lineages, one formed by the species in Turkey and the Levant, the other by those in Anatolia (Perea *et. al.* 2010). While this separation can be seen clearly in the molecular data (Cyt. b gene), it is evidently not supported by known synapomorphies (Küçük *et al.* 2012). According to Hrbek *et al.* (2004) and Küçük *et al.* (2012), Central and south-western Anatolia are a center of diversification for the genus *Pseudophoxinus*. There are five species in Central Anatolia: *P. anatolicus*, *P. battalgilae*, *P. crassus*, *P. elizavetae*, *P. hittitorum*. On the other hand *P. alii*, *P. antalyae*, *P. burduricus*, *P. evliyae*, *P. egridiri*, *P. maeandri*, *P. maeandricus* and *P. ninae* are distributed in south-western Anatolia.

The first record of the *Pseudophoxinus* for south-western Anatolia was given as *Pararhodeus maeandri* by Ladiges (1960). Bogutskaya (1992) stated that this species was distributed in the Upper Büyük Menderes basin and Söğüt, Salda, Bahçeözü and Burdur lake tributaries. In addition, Bogutskaya (1992) mentioned that the *P. maeandri* populations from the Upper Büyük Menderes basin (Lake Işıklı and Düden Spring near Dinar) differed morphologically from the remaining populations by having larger scales and a shorter lateral line, fewer scales in lateral series and fewer gill rakers on the first branchial arch, as well as fewer vertebrae. Freyhof & Özuluğ (2009) identified populations of Kırkpınar (Korkuteli) as a new species, *P. evliyae*, and the populations of Lake Salda and the Lake Burdur basin as *P. ninae*. Küçük *et al.* (2013) demonstrated that *P. maeandri* is distributed in Upper Büyük Menderes basin and *P. ninae* in Onaç Stream and Kestel marshes. They also described *P. burduricus* from the Lake Salda basin and the Lake Burdur basin (Düger and Sazak springs, Lake Karataş and Değirmendere).