



## *Squalius kottelati*, a new cyprinid species (Teleostei: Cyprinidae) from Orontes River, Turkey

DAVUT TURAN<sup>1,2</sup>, B. TOGAY YILMAZ<sup>1</sup> & CÜNEYT KAYA<sup>1</sup>

<sup>1</sup>Rize University, Faculty of Fisheries and Aquatic Sciences, 53100 Rize, Turkey

<sup>2</sup>Corresponding author. E-mail: dvturan@yahoo.com

### Abstract

*Squalius kottelati*, new species, is described from the Orontes, Ceyhan and Seyhan rivers in Turkey. It belongs to the *S. lepidus* group, characterized by a projecting lower jaw. It is distinguished from the other species of the genus *Squalius* in Turkey and adjacent basins by having a conspicuous broad, dark stripe on the upper part of the flank, from the head to the end of the caudal peduncle (vs. absent or very faintly marked, except *S. lepidus*). It differs from *S. lepidus* by having a longer head (28.3–30.9, vs. 25.3–27.3 % SL), fewer lateral-line scales (45–47, vs. 48–49) and fewer gill rakers on the first gill arch (9–10, vs. 11–13). It differs from *S. anatolicus* by having more scales in the lateral line (45–47, mode 46 vs. 43–45, mode 44); a longer caudal fin (length of upper lobe 20.3–22.5, vs. 15.8–19.0 % SL).

**Key words:** Turkey, Cyprinidae, *Squalius kottelati*, taxonomy, Orontes, Ceyhan, Seyhan

### Introduction

The genus *Squalius* comprises a number of medium-sized fishes widely distributed in Europe and West Asia. The species of *Squalius* were for long placed in *Leuciscus*, until morphological and molecular data showed that *Leuciscus* as earlier understood was paraphyletic (e.g., Zardoya & Doadrio, 1999; Bogutskaya, 1994). Although species of *Squalius* are present in almost every stream in Anatolia, the species-level taxonomy of the genus is still not fully settled (Stoumboudi, *et al.* 2006). Only a few populations have been described in sufficient detail in Anatolia and neighboring basins. A few species have been described from Anatolia but most have later been relegated to the synonymy of *S. cephalus*, a ‘species’ at some time considered to be distributed throughout Europe (see overview of the western Anatolian species in Stoumboudi *et al.*, 2006). In the past 40 years, authors who studied the aquatic fauna of southern Europe have shown that the *Squalius* of the Mediterranean basin are much more diverse than reported in the classical (northern European) literature; they clearly constitute a number of very distinctive lineages (see, e.g., Doadrio & Carmona, 2006, for the Iberian Peninsula; Bianco & Recchia, 1983, for Italy; Bianco & Knezevic, 1987 and Bogutskaya & Zupancic, 1999, for Appennine and Balkan Peninsula; Kottelat & Economidis, 2006, for Greece; and in general by Kottelat & Freyhof, 2007). Recent molecular data (Durand *et al.*, 2000) support these morphological observations and show a number of distinct lineages within the ‘*S. cephalus*’ of earlier authors. For the sake of convenience, in the following discussion we will call these species the *S. cephalus* group.

Besides the *S. cephalus* group, there are a few species in *Squalius* that have always been considered as distinct and whose distinctness has been accepted by all authors. One of these is *S. lepidus*. This species has been reported from the Tigris, Euphrates, Kueik, Orontes and Beysehir drainages (Bogutskaya 1994, 1997). It is distinguished from the species of the *S. cephalus* group by its elongated and pointed head and its projecting lower jaw; greater number of cephalic pores (see below); and the posteriorly expanded lateral portions of its parietals (Bogutskaya, 1994: 617). Bogutskaya (1997) described the populations from Lake Beysehir basin as