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

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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