Copyright © 2011 · Magnolia Press

Article



Salmo tigridis, a new species of trout from the Tigris River, Turkey (Teleostei: Salmonidae)

DAVUT TURAN¹, MAURICE KOTTELAT² & YUSUF BEKTAŞ¹

¹Rize University, Faculty of Fisheries and Aquatic Sciences, 53100 Rize, Turkey. E-mail: dvtturan@yahoo.com ²Case postale 57, 2952 Cornol, Switzerland (permanent address), and Raffles Museum of Biodiversity Research, National University of Singapore, Kent Ridge, Singapore 119260 ²Corresponding author. E-mail: mkottelat@dplanet.ch

Abstract

Salmo tigridis, new species, from the Tigris River drainage, Turkey, is distinguished from the other species of *Salmo* in Turkey and adjacent basins by having a greater number of scale rows between the end of the adipose-fin base and lateral line (19–20, vs. 12–17); a greater number of scale rows between dorsal-fin origin and lateral line (32–35, vs. 23–32); and a deeper and stouter caudal peduncle (its depth 11.5–12.6 % SL, vs. 9.3–11.5, except in *S. cf. macrostigma*).

Key words: Salmo tigridis, new species, Turkey

Introduction

Salmo trutta Linnaeus has long been considered to be a species widely distributed throughout Europe and reaching southwards to the Atlas Range (Morocco, Algeria) and eastwards to the upper Amu-Darya drainage in Afghanistan. Over the years a great number of nominal subspecies of *S. trutta* or distinct species have been described. For long, the theory prevailed that all these taxa can only belong to a single very variable "species" and that "classical" taxonomy cannot cope with this species. In recent years, new taxonomic procedures, new concepts and renewed interest in the taxonomy of European freshwater fishes has shed a new light on trout taxonomy. In parallel, the results of molecular studies have shown that *S. trutta* sensu lato is made of a number of distinct lineages (see, e.g., Bernatchez, 2001; Sušnik *et al.*, 2005; Bardakçı *et al.*, 2006).

Salmo taxonomy has been summarized in Kottelat (1997). Some of the North African species are discussed by Delling & Doadrio (2005) and some of the Balkan ones by Delling (2003, 2010), which show that the situation is not that hopeless. Kottelat & Freyhof (2007) summarized the available data for the European taxa and tentatively recognised 29 species, noting that the status of several of the populations and nominal species is still not clear. Their analysis was based on morphological, molecular, and natural-history data. Recently Turan *et al.* (2010) discussed the identity of the trouts from the rivers of northern Anatolia draining into the Black Sea. They showed that in the Coruh River and adjacent drainages the sympatric resident and migratory trouts represent two species, distinguished by morphological and molecular characters: *S. rizeensis* and *S. coruhensis*.

The other nominal species of trouts reported from Turkey are *S. abanticus* Tortonese from Lake Abant (a valid species discussed in Turan *et al.*, 2010), *S. caspius* from the Kura River drainage, *S. platycephalus* Behnke from the upper part of Seyhan drainage, and *S. macrostigma* Duméril from the streams flowing to the Mediterranean. The real *S. macrostigma* is restricted to Algeria (Kottelat, 1997; Delling & Doadrio, 2005). The other peri-Mediterranean populations referred to as *S. macrostigma* belong to several species (e.g. *S. cettii* Rafinesque Schmaltz in Italy, and *S. farioides* Karaman in the eastern Adriatic drainages), but for many of them there is no available name, including for the Turkish ones. Hereunder we call these Turkish populations *S. cf. macrostigma*. Their identity will be discussed in a forthcoming study.

In the basin of the Persian Gulf, trouts have been reported only from the Tigris drainage, either as *S. trutta* or *S. t. macrostigma* (Battalgil, 1941; Tortonese, 1955; Kelle, 1978; Schöffmann, 2005; Sušnik *et al.*, 2005; Bardakçı *et*