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To cite this article: Fahrettin Küçük , Davut Turan , Cemalettin Şahin & İskender Gülle (2009) *Capoeta mauricii* n. sp., a new species of cyprinid fish from Lake Beyşehir, Turkey, *Zoology in the Middle East*, 47:1, 71-82, DOI: [10.1080/09397140.2009.10638349](https://doi.org/10.1080/09397140.2009.10638349)

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Published online: 28 Feb 2013.



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Capoeta mauricii n. sp., a new species of cyprinid fish from Lake Beyşehir, Turkey

(Osteichthyes: Cyprinidae)

Fahrettin Küçük, Davut Turan, Cemalettin Şahin, İskender Gülle

Abstract: *Capoeta mauricii* n. sp. is described from the Lake Beyşehir drainage, in Central Anatolia, Turkey. It is distinguished from other Anatolian *Capoeta* by having the lips somewhat fleshy and lower lip with developed lateral lobes; a few irregular small black spots on the dorsal and lateral body, dorsal and caudal fins in individuals approximately smaller than 170 mm SL, and body, head and fins plain and without black spots in larger individuals (SL >200 mm); 80-87 total lateral line scales, 18-22 scales between dorsal fin origin and lateral line, 11-14 scales between the anal-fin origin and the lateral line, 16-18 gill rakers on outer side of first gill arch, and small black spots on head, body, and fins.

Key words. *Capoeta mauricii*, *Capoeta*, new species, Lake Beyşehir.

Introduction

Turkey appears to have one of the most diverse and species-rich freshwater ichthyofaunas in the Western Palaearctic. Nowhere else in Western Asia or in Europe is there such a high amount of local endemic species. However, this high fish diversity is still linked with a high number of unresolved taxonomic problems. From the perspective of modern conservation concepts, taxonomic problems are a major stumbling block. Following the IUCN criteria for red listing (SMITH & DARWALL 2006), a significant part of Turkey's highly endemic fish fauna must actually be listed as Data Deficient because of unresolved taxonomic problems. These problems should not simply be vaguely addressed and then ignored, because there is an urgent need to resolve them by accumulating data from field surveys and from modern taxonomic studies.

The western Palaearctic genus *Capoeta* Valenciennes, 1842 is an excellent example of this problem. The species diversity of *Capoeta* was last revised by KARAMAN (1969). While textbooks such as GELDIAY & BALIK (2007) recorded 7 species in *Capoeta* (plus five subspecies) from Turkey, ÖZULUĞ & FREYHOF (2008) recorded 17 species from this area. In the last years, five new *Capoeta* species have been described from Turkey (TURAN et al. 2006a-b; TURAN et al. 2008, ÖZULUĞ & FREYHOF 2008). Turkey is clearly the centre of diversity of this genus which comprises about 23 species.

One of the well known Anatolian endemic species is *C. pestai* (Pietschmann, 1933), originally described from Lake Eğirdir by PIETSCHMANN (1933: 21) where it was a commercial species until 1961 (BALIK et al. 2006). KARAMAN (1969) also recorded it from Lake Beyşehir where it was also very abundant until 1984 (BALIK 1997). This species is of special concern for the conservation of the Turkish freshwater fish fauna as it is listed as Critically Endangered by SMITH & DARWALL (2006) and KÜÇÜK (2006). SMITH & DARWALL (2006)

reported that *C. pestai* is now absent from the Lake Eğirdir drainage as a result of overfishing and the introduction of *Sander lucioperca* (Linnaeus, 1758) in 1955, and that it occurs only in one small pond near Lake Beyşehir with a population size estimated at less than 50 mature individuals. However, KÜÇÜK et al. (2007) found this species in a tributary near Çayköy, where it enters the lake in low numbers. KÜÇÜK et al. (2007) also found it in two southern tributaries of Lake Beyşehir (Sariöz, Bakaran), where it is still abundant. It was recently found at Eflatun Pınarı and Sarıçay, two other tributaries to Lake Beyşehir, by M. ÖZULUĞ and J. FREYHOF (pers. comm.).

A careful re-examination of *C. pestai* from both lake basins has now revealed that actually two species are involved. The species from the Lake Beyşehir basin is described here as a new species and the conservation status of both species is updated.

Material and methods

Fish were caught by pulsed DC electrofishing equipment. Measurements were made with a digital caliper (0.1 mm accuracy). Counts and measurements follow KOTTELAT & FREYHOF (2007). Standard length (SL) is measured from the tip of the upper lip to the end of the hypural complex. The length of the caudal peduncle is measured from behind the base of the last anal-fin ray to the end of the hypural complex, at mid-height of the caudal-fin base. Gill rakers are counted on the first gill arch. The lateral line scale count includes the scales on the base of the caudal fin, including unpierced scales on the caudal-fin base. Vertebrae counts were obtained from radiographs, and include the four weberian vertebrae and the hypural complex. Abdominal vertebrae are counted from the first weberian vertebra. The first caudal vertebra is that with its haemal spine posterior to the pterygiophore of the anteriormost anal ray. The caudal vertebrae count includes the hypural complex. The last two branched dorsal and anal rays articulating on a single pterygiophore are counted as "1½". Numbers in parentheses after a count indicate the number of specimens from which this count was made.

We follow the Evolutionary Species Concept. See MAYDEN (2002) for a discussion and hierarchy of this concept.

Abbreviations. SL, standard length; FFR, Rize University Zoology Museum of the Faculty of Fisheries, Turkey; IUSHM, Istanbul University, Science Faculty, Hydrobiology Museum, İstanbul, Turkey; SCFK-SDU, Süleyman Demirel University, Faculty of Fisheries, Turkey.

Comparison material (all from Turkey): *Capoeta trutta* (Heckel, 1843), FFR 568, 12 specimens, 171-258 mm SL; Batman Prov.: Batman Stream at Batman, Tigris River drainage. – *Capoeta barroisi* (Lortet, 1894), FFR 269, 6 specimens, 90-145 mm SL; Antakya Prov.: Büyükkavak Stream, Orontes River drainage; leg. F. G. EKMEKÇİ, 13.xi.1994. FFR 569, 5 specimens, 150-195 mm SL; Antakya Prov.: Lake Kırkhan-Gölbasi, Orontes River drainage; leg. D. TURAN Z. BOSTANCI, 18.vii.2005. FFR 559, 3 specimens, 150-195 mm SL; Antakya Prov.: Arfin Stream, Orontes River drainage; leg. D. TURAN Z. BOSTANCI, 18.vii.2005. FFR 765, 9 specimens, 123-180 mm SL; Antakya Prov.: Orontes River; leg. F. G. EKMEKÇİ, 18.ix.2005. – *Capoeta pestai* (Pietschmann, 1933), SCFK-SDU/0250, 6 specimens, 105-165 mm SL; Isparta prov.: Çayköy stream, drainage of Eğirdir; leg. F. KÜÇÜK & İ. GÜLLE, 10.ix.2006. SCFK-SDU/0260, 5 specimens, 245.5-275.5 mm SL; Isparta prov.: Lake Eğirdir; leg. F. KÜÇÜK, 18.xi. 2006. – IUSHM 36500-129, 20, 70-218 mm SL; Isparta prov.: Çayköy Stream (37°50.25'N 30°51.05'E) Lake Eğirdir drainage; leg. M. ÖZULUĞ, J. FREYHOF, 27.vi.2006. *Capoeta erhami* Turan, Kottelat & Ekmekçi, 2008, FFR 767, 8 specimens, 120-156 mm SL; Kahramanmaraş Prov.: Ceyhan River; Menzelet Dam Lake drainage, Geçit Stream on the road from Kahramanmaraş to Andırın; leg. D. TURAN, G. BOSTANCI & Z. Ş. G. KIRANKAYA, 5.vi.2005. FFR 769, 12 specimens, 133-172 mm

Table 1. Morphometry of *Capoeta pestai* and *C. mauricii* (numbers in parentheses: mean).

	<i>C. pestai</i>	<i>C. mauricii</i> n. sp.	
	Lake Eğirdir n=15	Lake Beyşehir n=19	Holotype
Standard length (mm) SL	105-218	109-234	138
In percentages of standard length			
Head length	25.0-29.0 (26.9)	24.8-28.4 (26.8)	26.1
Body depth of dorsal-fin origin	21.7-26.0 (23.8)	24.1-27.1 (25.8)	24.6
Predorsal length	52.7-56.0 (54.5)	51.8-54.8 (53.2)	53.0
Prepelvic length	53.5-57.3 (55.1)	53.4-57.3 (54.9)	54.5
Preanal length	74.8-78.0 (76.4)	74.4-79.0 (76.4)	77.4
Dist. from pectoral-fin origin to anal fin	50.1-53.4 (51.8)	48.8-54.3 (51.1)	53.1
Dist. from pectoral-fin origin to pelvic fin	26.7-32.0 (30.2)	28.4-31.8 (29.5)	30.2
Dist. from pelvic-fin origin to anal fin	19.7-23.0 (21.5)	20.6-24.5 (22.0)	23.4
Dorsal-fin height	15.6-23.2 (20.4)	18.3-23.2 (20.7)	19.8
Anal-fin length	14.3-21.6 (17.7)	12.9-22.5 (16.1)	15.3
Pectoral-fin length	16.3-20.7 (18.8)	16.3-18.8 (17.4)	17.4
Pelvic-fin length	13.3-16.7 (15.1)	13.7-15.2 (14.6)	14.8
Upper caudal-fin lobe	18.7-24.6 (22.1)	19.5-23.8 (21.6)	20.8
Length of caudal peduncle	15.9-18.3 (17.1)	17.4-19.8 (18.3)	19.8
Depth of caudal peduncle	9.3-10.6 (10.0)	10.0-11.2 (10.5)	10.7
In percentages of head length			
Snout length	34.0-38.8 (36.8)	35.2-37.4 (36.4)	36.9
Eye diameter	13.2-19.9 (16.5)	14.0-17.6 (15.8)	15.4
Interorbital distance	30.2-34.6 (32.1)	31.7-35.3 (33.3)	34.8
Head width ₁ (at ant. margin of eyes)	34.7-42.3 (38.3)	34.8-40.6 (38.4)	39.2
Head width ₂ (at post. margin of eyes)	44.5-56.3 (50.8)	49.7-52.7 (51.6)	52.5
Head width ₃ (at operculum)	53.6-64.6 (58.3)	54.9-62.8 (58.1)	58.1
Head depth ₁ (at interorbital region)	44.4-48.8 (46.9)	43.7-48.6 (46.2)	47.0
Head depth ₂ (at occiput)	62.1-71.3 (66.4)	63.1-68.0 (65.0)	65.8
Snout width (at nostrils)	30.2-37.7 (33.8)	32.0-35.9 (34.0)	33.3
Snout depth (at nostrils)	30.1-37.1 (33.3)	29.2-33.7 (31.4)	33.1
Distance between barbel	24.7-31.0 (26.8)	22.7-27.7 (25.6)	26.2
Length of barbels	13.4-19.3 (15.7)	11.8-14.9 (13.4)	14.4
In percentages of postorbital distance			
Snout length	1.30-1.41 (1.36)	1.45-1.56 (1.50)	1.53

SL; Kahramanmaraş Prov.: Ceyhan River drainage, Aksu Stream, on road from Kahramanmaraş to Adana; leg. D. TURAN, G. BOSTANCI & Z. Ş. G. KIRANKAYA, 5.vi.2005. FRR 770, 4 specimens, 133-172 mm SL; Adıyaman Prov.: Ceyhan River drainage; Çelik Stream at Çelik village; leg. D. TURAN, G. BOSTANCI & Z. Ş. G. KIRANKAYA, 5.vi. 2005.
The data for *C. turani* Özüluğ & Freyhof, 2008 were obtained from ÖZULUĞ & FREYHOF (2008).

Capoeta mauricii n. sp. (Figs 1–2)

Capoeta pestai; Karaman, 1969: 37 (Lake Beyşehir).

Capoeta pestai; Geldiay & Balık, 2007: 370 (Lake Beyşehir).

Capoeta pestai; Küçük, Turna, Demir, 2007: 18 (Sarıöz Stream near Beyşehir).

Holotype. FFR 3800, SL 138 mm, ♂, Sarıöz Stream, 1 km west of Beyşehir, Lake Beyşehir drainage, Konya province, Turkey; leg. D. TURAN, C. ŞAHİN, R. BUYURUCU, S. ENGIN, G.

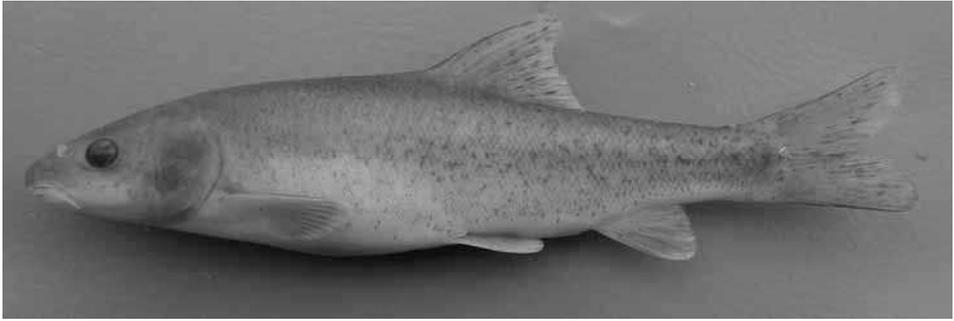


Fig. 1. *Capoeta mauricii*, n. sp., holotype, FFR 3800, 138 mm SL, male; Turkey: Sariöz Stream, drainage of Lake Beyşehir.

DALGIÇ, 6.vi.2007. Deposited in Zoology Museum of the Faculty of Fisheries, Rize University, Turkey.

Paratypes. FFR 3801, 14 specimens (9 ♂, 5 ♀), 114-238 mm SL; same data as holotype. Deposited in Zoology Museum of the Faculty of Fisheries, Rize University, Turkey.

Additional material. SCFK-SDU/0261, 7 specimens (4 ♂, 2 ♀, 1 immature) 60-261 mm SL; Konya Province: Sariöz Stream, 1 km west of Beyşehir, Lake Beyşehir drainage; leg. F. KÜÇÜK, İ. GÜLLE, O. DEMİR, 11.xi.2006. – SCFK-SDU/258, 6 specimens 93-163 mm SL; Turkey: Konya Province: Bakaran stream, Derebucak, 40 km south of Lake Beyşehir, leg. F. KÜÇÜK, İ. GÜLLE, 12.xii.2006. – IUSHM 37960-278, 4, 78-233 mm SL; Konya Province: Sariöz Stream at İsaköy Village (37°44.9' 08"N 31°46.8' 18"S), M. ÖZULUĞ, J. FREYHOF, 14. vi. 2006.

Diagnosis. *Capoeta mauricii* is distinguished from all other species of *Capoeta* in Turkey by the combination of the following characters: a few irregular small black spots on the dorsal and lateral body, and dorsal and caudal fins in individuals approximately smaller than 170 mm SL, without black spots on head, body and fins in individuals larger than 200 mm SL; dorsal head profile with no marked discontinuity between head and trunk; the lips somewhat fleshy and lower lip with developed lateral lobes; the last simple dorsal-ray strongly ossified in juveniles (up to 150 mm SL), weakly ossified in specimens larger than approximately 200 mm SL; anal fin fleshy and outer margin convex anteriorly, straight or slightly convex posteriorly in female, slightly rounded in male; post orbital distance 1.45-1.56 times snout length; 80-87 lateral line scales; 18-22 scales between dorsal fin origin and lateral line; 11-14 scales between the anal-fin origin and the lateral line; 16-18 gill rakers on outer side of first gill arch.

Description. The general appearance is shown in Figs. 1-2; morphometric and meristic data are given in Tables 1-2. Dorsal head profile straight or slightly convex, with no marked discontinuity between head and body, ventral profile less arched than dorsal profile. Predorsal body profile convex, with a scaled predorsal keel in males. Mouth small, arched, protacanth; lower lip with small lateral lobes; maxillary barbel present, short, reaching vertical of posterior margin of nostril.

Dorsal fin with 4 simple and 8½ branched rays in both sexes; outer margin concave; dorsal-fin origin slightly in front of vertical through pelvic-fin origin; last simple dorsal-fin ray strongly ossified in individuals smaller than approximately 150 mm SL, less ossified in

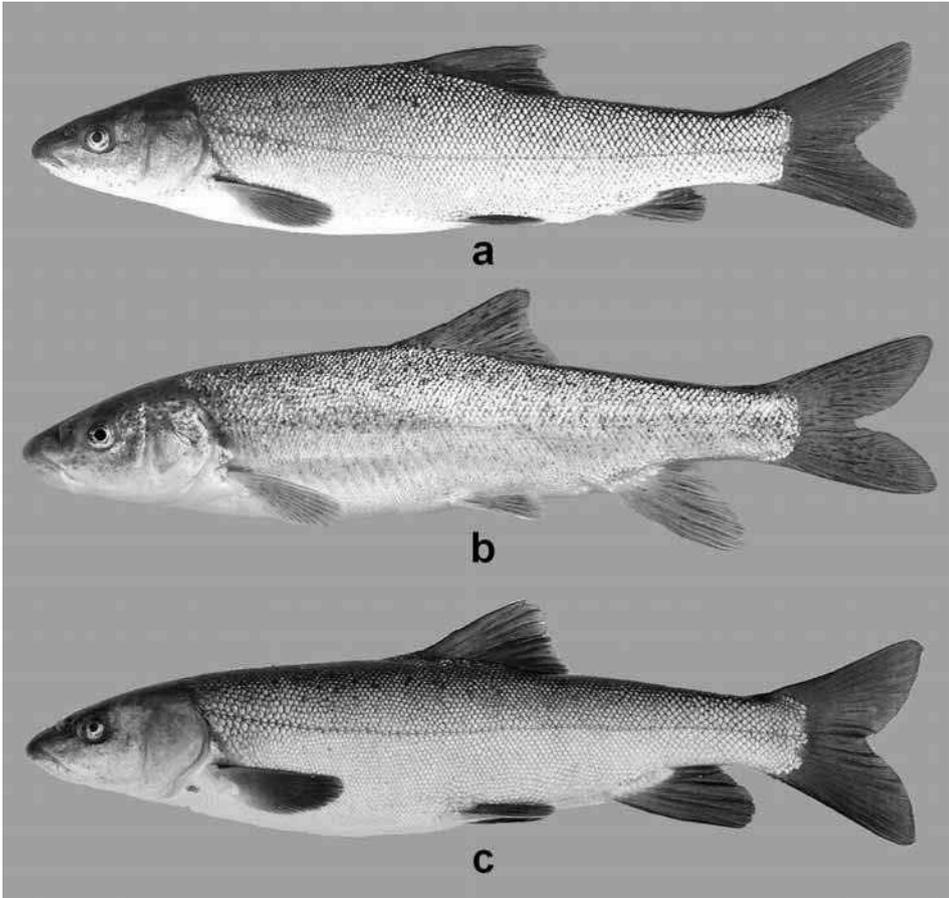


Fig. 2. a. *Capoeta mauricii*, SCFK-SDU/0261, 202 mm SL, ♂, Sariöz Stream. b. SCFK-SDU/0258, 163 mm SL, ♀, Bakaran Stream. c. SCFK-SDU/0261, 253 mm SL, ♀, Sariöz Stream.

larger individuals. Last simple dorsal-fin ray serrated for approximately $3/4$ length of its posterior margin in individuals smaller than 150 mm SL, approximately $2/3$ in male and $1/2$ in female individuals larger than approximately 200 mm SL. Pectoral fin with 1 simple and 15-17 branched rays, outer margin slightly convex. Pelvic fin with 1 simple and 8 branched rays, outer margin straight or slightly rounded. Anal fin with 3 simple and $5\frac{1}{2}$ branched rays. Caudal fin deeply forked, its lobes slightly rounded. Lateral line with 80 (3), 81 (1), 82 (2), 83 (5), 84 (4), 85 (2), 86 (2) and 87 (1) scales; 18 (2), 19 (9), 20 (4), 21 (2) and 22 (2) scale rows between lateral line and dorsal-fin origin; 11 (3), 12 (6), 13 (7) and 14 (3) scales between lateral line and anal-fin origin. Gill rakers $5+11$ (6), $6+11$ (9), $6+12$ (4) = 16-18 on outer side of first gill arch. 44 total vertebrae; 25 abdominal vertebrae, 19 caudal vertebrae.

Sexual dimorphism. Males with a few tubercles on snout. Outer margin of anal fin slightly rounded in males, convex anteriorly and straight or slightly convex posteriorly in females,

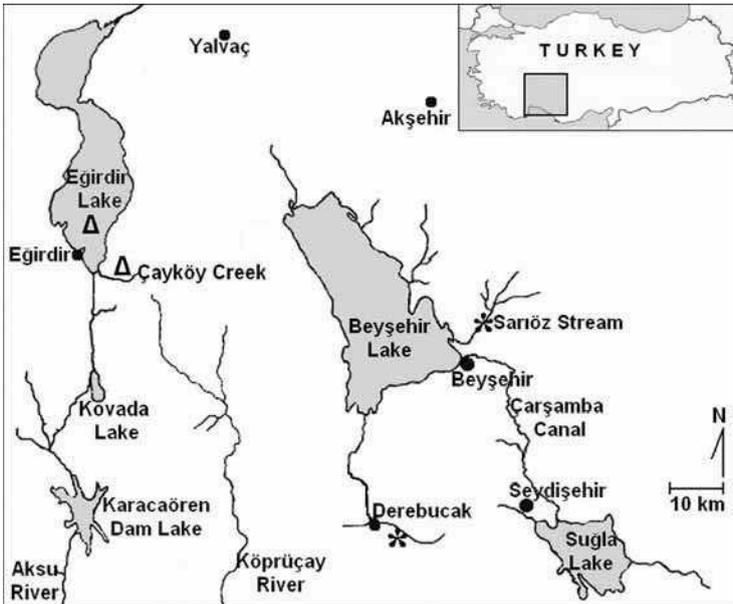


Fig. 3. Distribution of *Capoeta pestai* and *C. mauricii* n.sp. in Turkey: *C. pestai* (Δ), *C. mauricii* (*).

Table 2. Frequency distribution of meristic features of *Capoeta pestai* and *C. mauricii* n.sp.

Lateral line scales

	N	78	79	80	81	82	83	84	85	86	87	88	89	90	91	X
<i>C. pestai</i>	15	1	-	1	-	-	-	1	-	4	-	3	1	2	2	86.7
<i>C. mauricii</i> n. sp.	19			3	1	2	3	5	2	2	1	-	-	-	-	83.2

Transverse line scales: above lateral line

	N	16	17	18	19	20	21	22	X
<i>C. pestai</i>	15	2	2	5	6	-	-	-	18.0
<i>C. mauricii</i> n. sp.	19	-	-	2	9	4	2	2	19.4

Transverse line scales: below lateral line

	N	9	10	11	12	13	14	X
<i>C. pestai</i>	15	4	3	5	4	-	-	10.6
<i>C. mauricii</i> n. sp.	19	-	-	3	6	7	3	12.5

Gill rakers

	N	15	16	17	18	19	X
<i>C. pestai</i>	15	-	2	11	2	-	17.0
<i>C. mauricii</i> n. sp.	19	-	6	9	4	-	16.9

Branched dorsal rays

	N	8	9	X
<i>C. pestai</i>	15	15	-	8.0
<i>C. mauricii</i> n. sp.	15	19	-	8.0

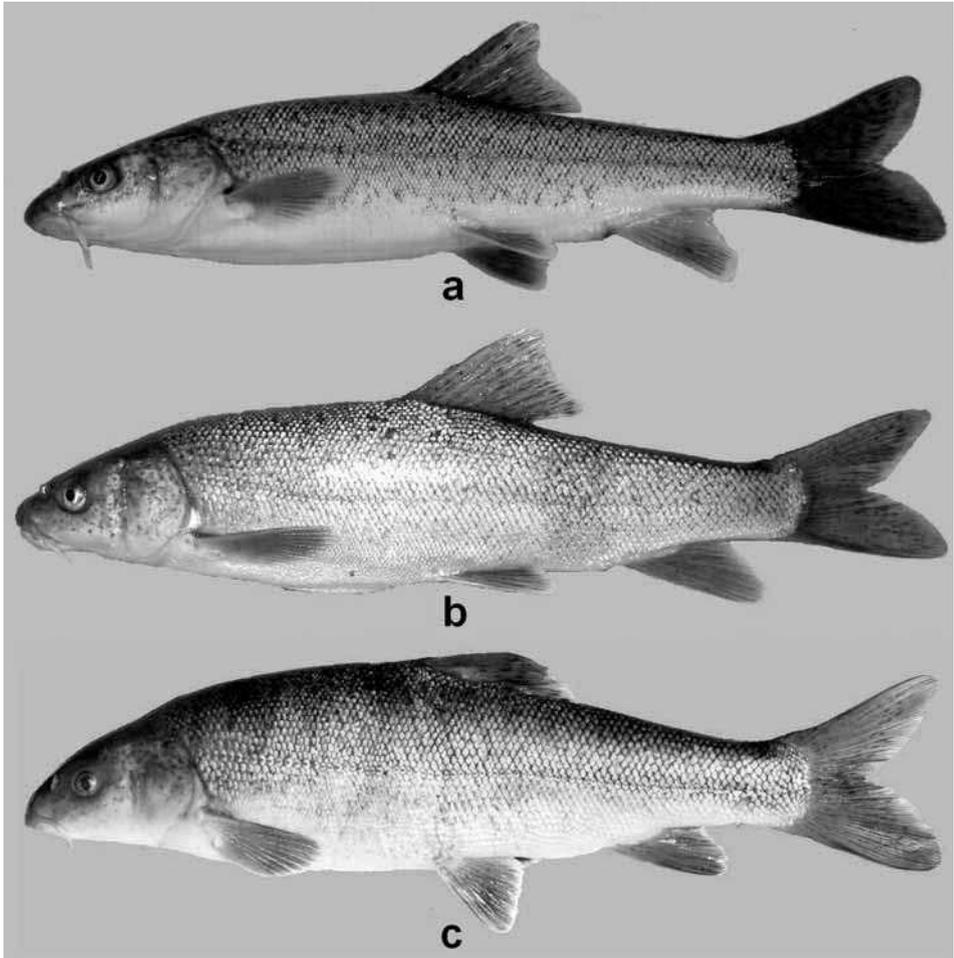


Fig. 4. *Capoeta pestai*. a. SCFK-SDU/0250, 126 mm SL, ♀, Çayköy Stream, drainage of Lake Eğirdir. b. SCFK-SDU/0250, 173 mm SL, ♀, Çayköy Stream, drainage of Lake Eğirdir. c. SCFK-SDU/0260, 261 mm, ♀, Lake Eğirdir.

not reaching base of caudal-fin base in male, almost reaching in females.

Colour. In life: dorsal and lateral head and body silvery or yellow, back pale yellowish brown or grey, ventral head and body whitish in juveniles, dorsal and lateral head and body yellowish-brown, back dark yellowish-brown, ventral head and body yellow in adults. A few irregular small black spots on the dorsal and lateral body, and dorsal and caudal fins in specimens smaller than approximately 170 mm SL (Figs 1, 2b), body plain and without black spot on fins in specimens larger than approximately 200 mm SL (Fig. 2a, 2c). Preserved specimens dark brown on dorsal and lateral body, yellowish on ventral body. Dorsal, caudal and anal fins greyish, pectoral and pelvic fins yellowish. A few irregular small black

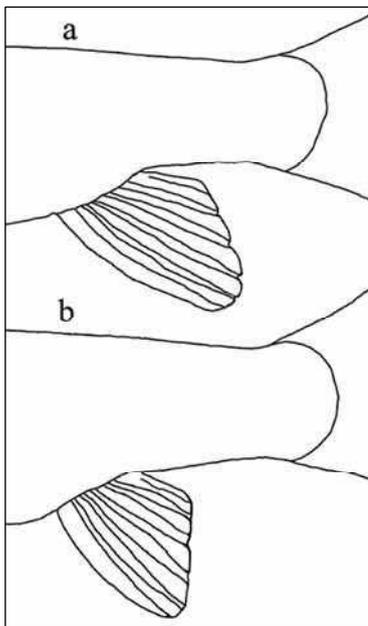


Fig. 5. a. *Capoeta mauricii*, SCFK-SDU/0261, 242 mm SL, ♀, Sariöz Stream; b. *C. pestai*, SCFK-SDU/0260, 224 mm, ♀, Lake Eğirdir.

spots on the dorsal half of body, and back of head, extending downwards to cheek, caudal and anal fins in specimens smaller than approximately 170 mm SL, body plain in specimens larger than approximately 200 mm SL.

Habitat and conservation status. *Capoeta mauricii* is currently known from the streams draining to the southern part of Lake Beyşehir basin (streams Sariöz, Bakaran, Eflatun Pınarı, Sarıçay, [Fig. 3]). It prefers slow-flowing water bodies. Other species present were: *Chondrostoma beysehirense* Bogutskaya, 1997, *Squalius anatolicus* Bogutskaya, 1997, *Gobio microlepidotus* Battalgil, 1942, *Tinca tinca* (Linnaeus, 1758), *Cobitis bilseli* Battalgil, 1942, and *Oxynoemacheilus eregliensis* (Banarescu & Nalbant, 1978).

Etymology. The species is named for Maurice KOTTELAT for his contribution to knowledge of the fish fauna of Europe and Asia.

Discussion

Capoeta mauricii is most similar to *C. pestai* (Pietschmann) in general body shape. It is distinguished from *C. pestai* by the colour pattern of the body and fins. In *C. mauricii*, the head is plain brown in adult individuals larger than about 130 mm SL (vs. with numerous black spots on the top of head, on cheek and operculum). In individuals of *C. mauricii* smaller than about 170 mm SL, there are a few black spots on the body (Figs 1, 2b) (vs. numerous in *C. pestai* [Fig. 4a]). In individuals of *C. mauricii* larger than about 200 mm SL, the body is plain, lacking any black spots (Fig. 2a, 2c) (vs. very few black spots on the back

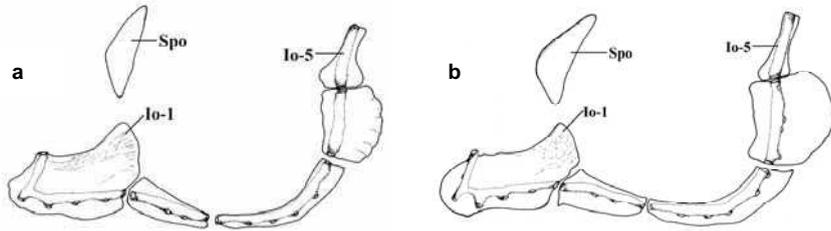


Fig. 6. Left infraorbitales (Iop) and supraorbitale (Spo): a. *Capoeta mauricii* n. sp. (SCFK-SDU/0261) ♀, 195 mm SL, Sarıöz Stream, drainage of Lake Beyşehir; b. *C. pestai* (SCFK-SDU/0250) ♀, 161 mm SL, Çayköy Stream, drainage of Lake Eğirdir.

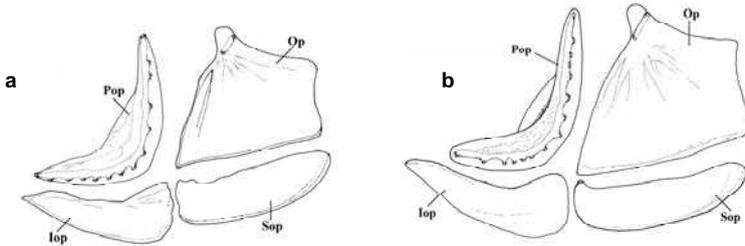


Fig. 7. Left opercular bones (Iop: interoperculum, Op: operculum, Pop: Preoperculum, Sop: suboperculum): a. *Capoeta mauricii* n. sp. (SCFK-SDU/0261) ♀, 195 mm SL, Sarıöz Stream, drainage of Lake Beyşehir; b. *C. pestai* (SCFK-SDU/0250) ♀, 161 mm SL, Çayköy Stream, drainage of Lake Eğirdir.

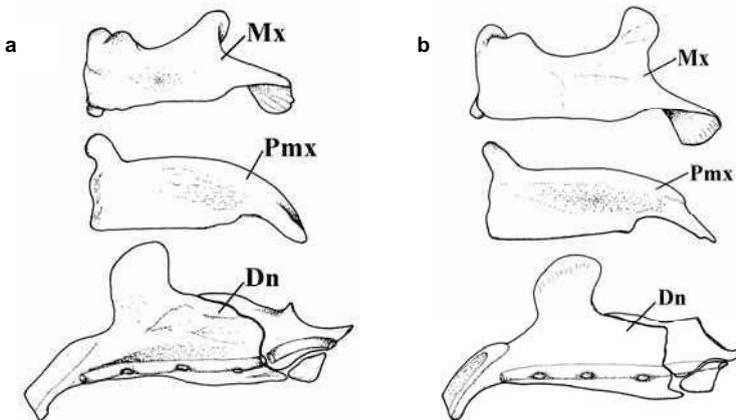


Fig. 8. Left jaws bones (Mx: maxilla, Prx: premaxilla, Dn: dentary): a. *Capoeta mauricii* n. sp. (SCFK-SDU/0261) ♀, 195 mm SL, Sarıöz Stream, drainage of Lake Beyşehir. b. *C. pestai* (SCFK-SDU/0250) ♀, 161 mm SL, Çayköy Stream, drainage of Lake Eğirdir.

in individuals between 170 and 230 mm SL [Fig. 4b] and numerous black spots on the back and lateral body in larger individuals [Fig. 4c]). *Capoeta mauricii* can also be distinguished from *C. pestai* by the shape of the anal fin in females. In *C. mauricii* the outer margin of the anal fin is rounded anteriorly and straight or slightly convex posteriorly (Fig. 5a), while in *C. pestai* the outer margin of the anal fin is slightly rounded anteriorly and straight or slightly concave posteriorly (Fig. 5b). In females of *Capoeta mauricii*, the anal fin length increases with size (Fig. 2b, c), while in females of *C. pestai* the anal fin length increases with size up to 220 mm SL and does not increase or very slightly increases in larger females (Figs 4b, c). Females of *C. mauricii* also have more fleshy anal fins than females of *C. pestai*. *Capoeta mauricii* further differs from *C. pestai* by an elevated predorsal keel in males (vs. slightly developed in individuals smaller than 170 mm SL and absent in larger individuals). Furthermore, the postorbital distance is 1.4-1.6 times in the snout length in *C. mauricii* (vs. 1.3-1.4), the dorsal profile is continuous between head and body (vs. dorsal profile slightly discontinuous), and *C. mauricii* usually has more transverse scales than *C. pestai* (scales between dorsal-fin origin and lateral line: 18-22, vs. 16-19; scales between anal-fin origin and lateral line: 11-14, vs. 9-12).

Capoeta mauricii further differs from *C. pestai* by the shape of the infraorbital bones, operculum and jaw bones. In *Capoeta mauricii*, the first infraorbital is short and wide, the third and fourth infraorbitals are narrow, the lower part of the fifth infraorbital is widened (Fig. 6a), the preoperculum is wide (Fig. 7a), the anterior part of the dentary is slightly long and the ascending dorsal process of the maxilla short (Fig. 8a); on the other hand, in *C. pestai* the first infraorbital is longer and narrower, the third and fourth infraorbitals are wider, the fifth infraorbital is thinner (Fig. 6b), the preoperculum is narrower (Fig. 7b), the anterior part of the dentary is slightly shorter and the ascending dorsal process of the maxilla is longer (Fig. 8b).

Capoeta mauricii is distinguished from species of the *Capoeta trutta* species-group (i.e. *Capoeta trutta* (Heckel), *C. barroisi* (Lortet), *C. erhani* Turan, Kottelat & Ekmekçi, and *C. turani* Özüluğ & Freyhof) by the fleshy lips and the lower lip with developed lateral lobes (vs. the lips covered with a horny sheath and the lower lip with a sharp edge), the lower lip markedly arched (vs. straight or slightly arched), a weakly ossified last simple dorsal fin ray in specimens larger than approximately 200 mm SL (vs. a strongly or moderately ossified last simple dorsal fin ray), and the predorsal midline covered with scales (vs. naked).

C. mauricii is distinguished from all other Anatolian species of the genus by having a strong ligament between the base of the last simple and the first branched rays (vs. thin and weak ligament), the lower lip fleshy and with lateral lobes (vs. without lateral lobes and covered with a horny sheath and with sharp edge in all other *Capoeta* except *C. sieboldii* (Seindachner, 1864)), the lower lip arched in both sexes (vs. straight in female), 80-86 total scales in lateral line (vs. 52-80 in *C. ekmekciae* Turan, Kottelat, Kirankaya & Engin, 2006, *C. sieboldii*, *C. bergamae* (Karaman, 1969), *C. capoeta* (Guldenstaedt, 1772), *C. angorae* (Hankó, 1925), *C. damascina* (Valenciennes, 1842), *C. anatalyensis* (Battalgil, 1943), *C. tinca* (Heckel, 1843), *C. baliki* Turan, Kottelat, Ekmekçi & Imamoglu, 2006, *C. banarescui* Turan, Kottelat, Ekmekçi & Imamoglu, 2006 [data from KARMAN 1969, TURAN et al. 2006a-b]), more scales between dorsal-fin origin and lateral line (18-22, vs. 10-17 [data from KARMAN 1969, TURAN et al. 2006a-b]), more scales between anal-fin origin and lateral line (11-14, vs. 8-11 [data from KARMAN 1969, TURAN et al. 2006a-b]). *C. mauricii* also differs from *antalyensis*, *C. baliki*, *C. banarescui* and *C. tinca* by having one pair of barbels (vs. two pairs).

Capoeta pestai and *C. mauricii* are superficially also similar to species of *Luciobarbus* Heckel, 1843 by having fleshy lips, a long and pointed head and a similar general shape. Both species are distinguished from all species of *Luciobarbus* in Anatolia by one pair of barbels (vs. two), the shape of lower lip (lower lip with two-lobes, vs. lower lip with three-lobes or lower lip with a swollen pad between the two lateral lobes) and lips not papillated (vs. lips with papillae).

Acknowledgements. We are pleased to thank Maurice KOTTELAT and Jörg FREYHOF for their comments, Müfit ÖZULUĞ for providing the loan of *C. pestai* from Lake Eğirdir basin and *C. mauricii* from Lake Beyşehir basin, R. BUYURUCU, S. ENGIN and G. DALGIÇ for their assistance in the field, and İ. İ. TURNA for preparing the line drawings.

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