A new subspecies of *Capros longispinatus* from the basal Upper Oligocene of the Caucasus (Teleostei: Perciformes: Caproidae)

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Capros longispinatus kelasuriensis subsp. n. is described from the Upper Subhorizon of Morozkina Balka (basal part of the Upper Oligocene) of Abkhazia. It precedes stratigraphically the nominotypical subspecies and differs from the latter chiefly in the much shorter dorsal-fin spines.

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The boarfishes (family Caproidae) are a distinctive group of percoid fishes represented by two species of Capros Lacepede, 1802 in the Caucasian Oligocene. One of them, Capros radobojanus (Kramberger, 1882), is known from the upper part of Lower Oligocene (Lower Subhorizon of Morozkina Balka), and the second, C. longispinatus Daniltshenko, 1960, is known from the Upper Oligocene. Previously, C. longispinatus was reported only from the Riki Horizon (lower part of the Kalmykian Regiostage, belonging, according to Popov et al. (1993, 2002), to the upper part of the Upper Oligocene) (Daniltshenko, 1960, 1980). Newly discovered specimens from the basal part of the Upper Oligocene (Upper Subhorizon of Morozkina Balka) represent the same species, but differ in some respects from the previously known specimens from the Riki layers and can be separated as a new subspecies, which is described in the present paper.

Capros longispinatus kelasuriensis subsp. n. (Fig. 1)

Holotype. Nearly complete skeleton, PIN, no. 5030/1, Abkhazia, right bank of Kelasuri River near Verkhnee Kelasuri Village, Upper Subhorizon of Morozkina Balka, basal part of the Upper Oligocene (Chattian).

Paratypes. Six nearly complete and incomplete skeletons from the type locality, PIN, nos 5030/2-7.

Description. Body deep and rounded; its greatest depth, contained nearly 1.1 times in length of vertebral column, much exceeds length of head. Caudal peduncle low; its least depth contained 5.3 times in length of vertebral column. Caudal peduncle length 1.2 times in its least depth. Head deep, nearly equal in length to longest dorsal-fin spine, with elongated snout and rather large or-

bit. Snout as long as horizontal diameter of orbit, or slightly shorter. Diameter of orbit nearly one-third of head length. Dorsal profile of head very steep behind snout. Supraoccipital creast very long (1.8 times in head length) and high, originating at level of mid-orbit and ending posteriorly as a spine. Dorsal margin of supraoccipital crest nearly straight, posterior margin concave. Mouth small and upwardly directed. Premaxillary with very long ascending process. Maxillary moderately expanded, rounded posteriorly, ending slightly behind anterior rim of orbit. Dentary low and slightly inclined downward at symphysis, but noticeably deepened in caudal direction. Articular small. Jaw teeth small and conical. Parasphenoid straight in lateral view. Six branchiostegal rays. Preopercle with equidimensional branches and smooth posterior margin. Opercle triangular, with deep notch on posterior border.

Vertebrae 22 or 23 in number, of which 12-13 caudal (usually 23 and 13, respectively); 3.5 to 4 vertebrae in caudal peduncle. Caudal vertebrae without postzygapophyses. Neural spine of first abdominal vertebra inclined and apparently fused with neurocranium. Neural spines of second to sixth abdominal vertebrae, as well as last caudal ones, slightly inclined posteriorly; neural spines of remaining vertebrae vertically oriented. Ribs short and slim, half as long as distance between vertebral column and ventral contour of body, nine pairs in number. Last three or four pairs of ribs sitting on short parapophyses. No supraneurals, epineurals and epipleurals.

Dorsal fin originating above posterior border of opercle; its spinous and soft portions equal in length. Nine thick dorsal-fin spines. First dorsal

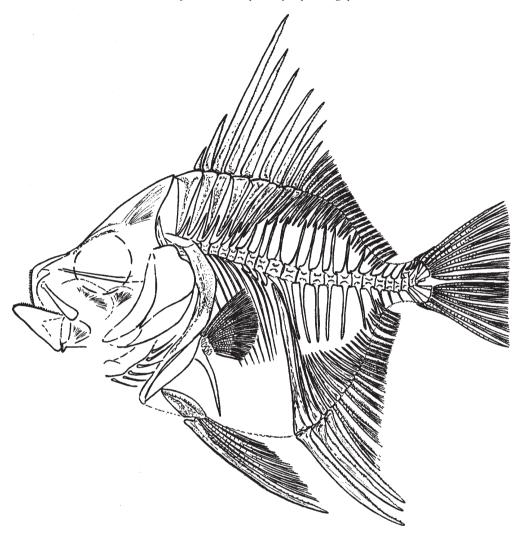


Fig. 1. Capros longispinatus kelasuriensis subsp. n., reconctruction of skeleton, basing on specimens of the type series.

spine very short, one-third as long as second dorsal spine. Second dorsal spine 3.6 times in length of third (longest) dorsal-fin spine. Subsequent dorsal spines gradually decreasing in length. Longest dorsal-fin spine 1.41-1.45 times in greatest depth of body. Pterygiophores of anterior dorsal spines more or less expanded; first dorsal pterygiophore inserted between first and second neural spines, reaches vertebral column, and bears well-developed, anteriorly directed spine-like process. Soft dorsal-fin rays 20-22 in number. Anal fin with three spines and 20 soft rays. First anal-fin spine the longest. Pectoral fins rounded, with approximately 15 rays. Pelvic fins inserted slightly behind the level of pectoral-fin origin, with one long spine and five soft rays. All finspines bear numerous spinules on their entire surfaces; vertical fin soft-rays with brush-like spinulation on their posterior margins. Caudal fin rounded, nearly twice as long as caudal peduncle, with 14 principal rays. Caudal skeleton with five hypurals, autogenous parhypural, and three epurals. Neural spine of second preural vertebra reduced.

Scales poorly preserved, but small (much smaller than length of vertebra) and bearing spinules on posterior border.

Size and measurements. Reaching maximum known standard length of 6 cm. Selected measurements of holotype (in percents of greatest body depth): head length, 68.9; first predorsal distance, 68.9; second predorsal distance, 106.7; length of

first to ninth dorsal-fin spines, 6.7, 20.0, 71.0 (69.0-71.1 for all specimens examined), 57.8, 42.2, 40.0 (40.0-41.2 for all specimens examined), 37.8, and 22.2, respectively; spinous dorsal-fin base length, 44.8; soft dorsal-fin base length, 51.7; caudal-fin length, 34.5; length of abdominal part of vertebral column, 48.3; length of caudal part of vertebral column. 62.1.

Etymology. Named after the type locality, Kelasuri River.

Comparison. The caproid from Kelasuri agrees with C. longispinatus in the following combination of characters: very high and pointed supraoccipital creast, rather deep opercular notch, long caudal peduncle, long pelvic-fin spine, third dorsal-fin spine the longest, first anal-fin spine the longest, modally 13 caudal vertebrae, similar fin spines and rays counts. These characters suggest that the Kelasuri form belongs to the same species. However, it differs from the typical C. longispinatus, as well as from all other congeners, in much shorter dorsal-fin spines and more anteriorly originating supraoccipital crest. In the new subspecies, the longest dorsal-fin spine is shorter than greatest depth of body (same or longer in other species). Moreover, the nominotypical subspecies of C. longispinatus has the third dorsal spine nearly 1.5 times as long as the greatest depth of body. The supraoccipital crest is originating in C. l. kelasuriensis at the level of mid-orbit (vs.

on the level of posterior orbital border or behind it in all other species of *Capros*). In addition, the new subspecies is intermediate in greatest depth of body between *C. radobojanus* and *C. l. long-ispinatus* (nearly 145% of head length vs. 108-115% and 160-170%, respectively). These differences and earlier stratigraphic range suggest separate subspecific status of the Kelasuri boarfish. *C. l. kelasuriensis* differs from *C. l. long-ispinatus* also in the infrequent presence of 12 caudal vertebrae (constantly 13 in the nominotypical form).

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