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Article



## *Lethenteron ninae*, a new nonparasitic lamprey species from the north-eastern Black Sea basin (Petromyzontiformes: Petromyzontidae)

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## Abstract

Lethenteron ninae **sp. n.**, a nonparasitic lamprey, is described from rivers of western Transcaucasia in Russia and Abkhazia. It is distinguished from the other species of Lampetrinae in Europe and west Asia (Black Sea basin) by the combination of the following character states: adults with a dark blotch near the apex of the second dorsal fin; exolaterals absent; posterials either absent or more commonly present in a single incomplete row of 3–7 teeth (a toothless gap in the middle); transverse lingual lamina with 9–15 unicuspid teeth, the median one markedly enlarged; supraoral lamina with two unicuspid teeth separated by a toothless bridge; 1–2 rows of anterials, usually 2; first row of anterials with 5–7 unicuspid teeth; oral fimbriae, 69–99; trunk myomeres in both ammocoetes and adults, 56–62; and in ammocoetes, trunk not mottled and tongue precursor bulb clearly triangular, with a wide base and a pointed apex bearing few cirri.

Key words: Lethenteron ninae, new species, taxonomy, morphology, Transcaucasia, Black Sea basin

## Introduction

Lampetra Bonnaterre, 1788 (seven species; anadromous and freshwater; North Atlantic Ocean basin in Europe and North Atlantic and North Pacific ocean basins in North America; parasitic and nonparasitic), Eudontomyzon Regan, 1911 (at least four species; freshwater; Baltic, Black and Mediterranean Sea basins in Europe and western Transcaucasia, and the Northwest Pacific Ocean basin of China and North Korea in Asia; parasitic and nonparasitic) and Lethenteron Creaser & Hubbs, 1922 (at least six species; anadromous and freshwater; Arctic Ocean basin, Northwest Pacific Ocean basin south to Japan, Northeast Pacific Ocean basin in Alaska, Northwest Atlantic Ocean basin in North America, and the Adriatic Sea basin; parasitic and nonparasitic) are morphologically the closest genera within the lamprey subfamily Lampetrinae sensu Nelson (2006). This subfamily is characterized by having tuberculated or papillose velar tentacles, 60–70 trunk myomeres in most species, and unpigmented lateral-line neuromasts in many of the species (Gill et al. 2003) and contains, besides the three genera mentioned above, *Caspiomyzon* Berg, 1906 (one species; anadromous; Caspian Sea basin; parasitic), Tetrapleurodon Creaser & Hubbs, 1922 (two species; freshwater; Santiago River basin of southern Mexico; nonparasitic and parasitic), and Entosphenus Gill, 1862 (seven species; anadromous and freshwater; North Pacific Ocean basin in North America and Asia; parasitic and nonparasitic). Eudontomyzon is distinct in having labial teeth present on all fields of the oral disc (rarely absent on the posterior field in E. mariae). In Lampetra, labial teeth are present only on the anterior field (except in the enigmatic North American L. aepyptera (Abbott, 1860) where they are also present on the exolateral and posterior fields). Lethenteron is distinguishable by the presence of a single, either complete or