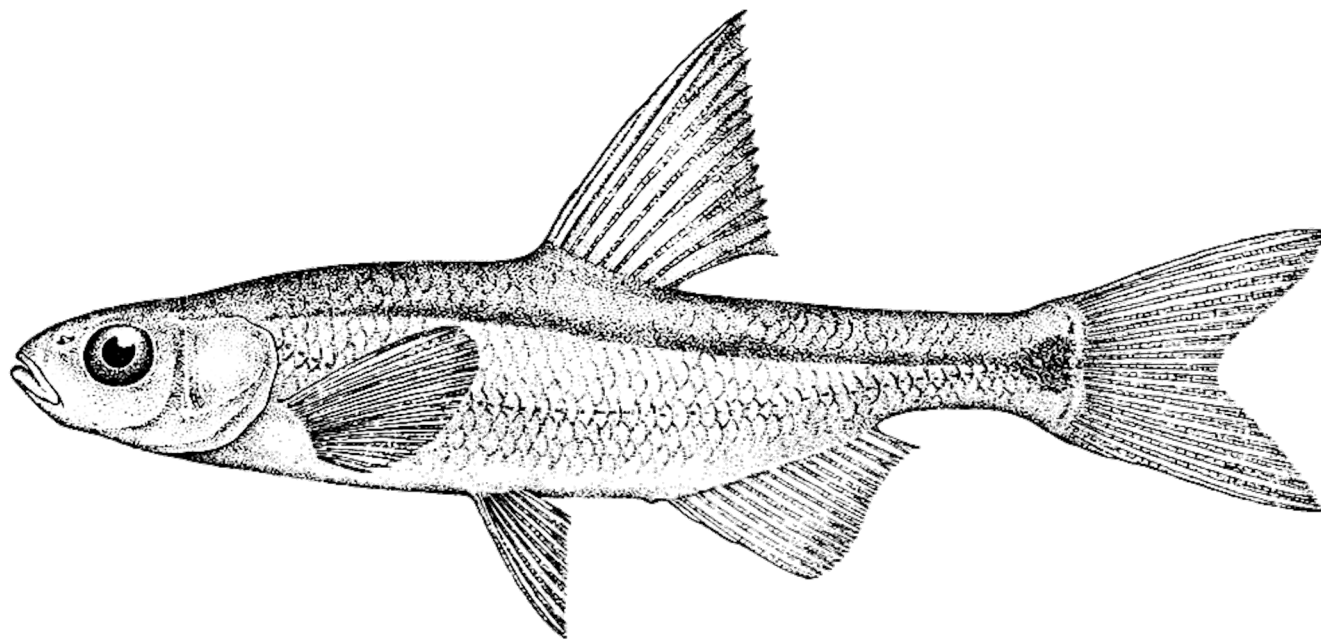


Order CYPRINIFORMES

European Minnows

Family **LEUCISCIDAE**

Subfamily **LEUCISCINAE** Bonaparte 1835



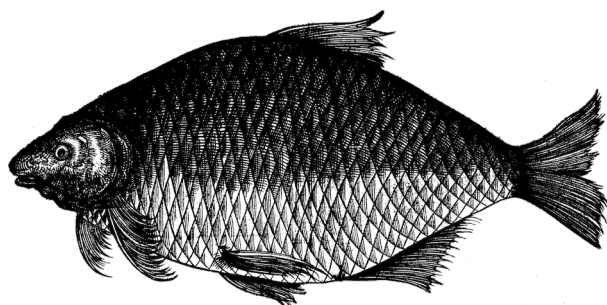
Acanthobrama hadiyahensis, holotype, female, 64.5 mm SL. Illustration by C. H. Douglas. From: Coad, B. W., H. F. Alkahem and R. J. Behnke. 1983. *Acanthobrama hadiyahensis*, a new species of cyprinid fish from Saudi Arabia. National Museums of Natural Sciences, Publications in Natural Sciences No. 2: i-v + 1-6.

Abramis

Cuvier 1816

abramis (Gr. ἀβραμῖς), ancient name for a bream or mullet

***Abramis brama* (Linnaeus 1758)** derived from *abramis* (Gr. ἀβραμῖς), ancient name for a bream or mullet



Possibly first-published semi-realistic (pectoral and ventral fins exaggerated) image of *Abramis brama*. From: Albert V, Duke of Bavaria (ed.). 1553. Bairische Landtordnung. Ingolstadt: Weissenhorn. Landtordnung (state orders) were published in Germany and Austria in the dominions of the individual dukes and princes so that the subjects were informed in words and pictures of what was permitted and what was not. An important topic was hunting and fishing. Here, among other things, it was regulated when which fish could be caught (compliance with the closed season) and how big they had to be. Only the most important fishes and crayfishes were publicly presented in this way, *A. brama* ("Brachsen") being one of them. (Image and explanation courtesy of Holger Funk.)

Acanthobrama

Heckel 1843

acantho-, from *ákantha* (Gr. ἄκανθα), thorn, referring to thickened, spine-like, last unbranched dorsal-fin ray; *brama*, derived from derived from *abramis* (Gr. ἀβραμῖς), ancient name for a bream or mullet, i.e., a "spiny bream"

***Acanthobrama centisquama* Heckel 1843** *centum* (L.), hundred; *squama*

(L.), scale, referring to 100 scales on lateral line of holotype (ranges from 90–100 on specimens examined since then)

***Acanthobrama hadiyahensis* Coad, Alkahem & Behnke 1983** *-ensis* (L.), suffix denoting place: Wadi Hadiyah, near Hadiyah, Saudi Arabia, type locality

***Acanthobrama lissneri* Tortonese 1952** in honor of the late Helmut Lissner (1895–1951), Polish-born Israeli ichthyologist, a "keen ichthyologist who greatly furthered the investigations on the fishes of Lake Tiberias" (or Sea of Galilee), Israel, type locality

***Acanthobrama marmid* Heckel 1843** Arabic vernacular for this species

***Acanthobrama microlepis* (De Filippi 1863)** *micro-*, from *mikrós* (Gr. μικρός), small; *lepis* (Gr. λεπίς), scale, "Squamae exiguae," with 82 along the lateral line

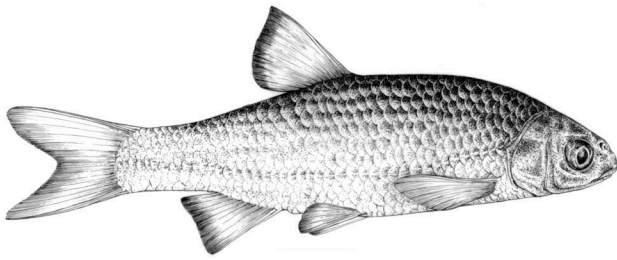
***Acanthobrama orontis* Heckel 1843** *-is*, Latin genitive singular of: Orontes, river basin in Turkey, where Lake Antioch (or Amik), type locality, is situated

***Acanthobrama persidis* (Coad 1981)** *-is*, genitive singular of: *persis* (Gr. περσῖς), meaning strictly a province of Persia or Iran, now known as Fars, where it occurs

***Acanthobrama telavivensis* Goren, Fishelson & Trewavas 1973** *-ensis*, Latin suffix denoting place: Tel Aviv, Israel, near type locality at Yarkon Springs

***Acanthobrama thisbeae* Freyhof & Özüluğ 2014** of Thisbe, who was in love with Pyramus in Ovid's *Metamorphoses*; Pyramus is the ancient Greek and Latin name for the Ceyhan River, Adana Province, Turkey, type locality

***Acanthobrama tricolor* (Lortet 1883)** *tri-* (L.), three, of three colors,



Achondrostoma occidentale, holotype, 72.5 mm SL. From: Robalo, J. I., V. C. Almada, C. Sousa Santos, M. I. Moreira and I. Doadrio. 2005. New species of the genus *Chondrostoma* Agassiz, 1832 (Actynopteri [sic], Cyprinidae) from western Portugal. *Graellsia, Revista de Zoología, Museo Nacional de Ciencias Naturales, Madrid* 61 (1): 19–29.

referring to “remarkable” (translation) coloration in life: reddish-brown above lateral line, pearly whitish-pink below, the fins a silvery yellow

***Acanthobrama urmianus* (Günther 1899) -anus** (L.), belonging to: Urmi River, Iran, one of the type localities

Achondrostoma

Robalo, Almada, Levy & Doadrio 2007

ἀ-, Greek privative, i.e., without; *chón-dros* (Gr. χόνδρος), gristle or cartilage; *stóma* (Gr. στόμα), mouth, referring to absence of horny plate on mouth as seen in *Chondrostoma*

***Achondrostoma arcasii* (Steindachner 1866)** in honor of Spanish zoologist Laureano Pérez Arcas (1824–1894), University of Madrid, who shared specimens with Steindachner

***Achondrostoma asturicense* Doadrio, Casal-López & Perea 2023 -ense**, Latin suffix denoting place: Astura, name given to the Esla River (Duero River basin, Spain, where this species occurs) during the Roman Empire

***Achondrostoma garzonorum* Doadrio, Casal-López & Perea 2023 -orum** (L.), commemorative suffix, plural: in honor of the Garzón-Heydt family, especially Dra Paloma Garzón-Heydt, Jesús Garzón-Heydt and Dra Guillermina Garzón-Heydt, for their contribution to the study and conservation of rivers and fauna of the region where this species occurs

***Achondrostoma numantinum* Doadrio, Casal-López & Perea 2023 -inum** (L.), adjectival suffix: Numantian, name given to pre-Roman population inhabiting ancient Celtiberian settlement near present-day Garray village in Soria (central Spain), encompassing the area where this species occurs; the Numantians, known for their courage, decided to burn the city before surrendering to the Romans after a 13-month siege

***Achondrostoma occidentale* (Robalo, Almada, Sousa Santos, Moreira & Doadrio 2005)** Latin for western, referring to Oeste (West in English), area in Portugal where it is endemic

***Achondrostoma oligolepis* (Robalo, Doadrio, Almada & Kottelat 2005)** *oligos* (Gr. ὀλιγός), few or scanty; *lepis* (Gr. λεπίς), scale, referring to larger and therefore fewer scales compared with *A. arcasii*

***Achondrostoma salmantinum* Doadrio & Elvira 2007 -inum** (L.), adjectival suffix: Salmantia, Roman name for Salamanca, Spanish city and province inhabited by this species

Alburnoides

Jeitteles 1861

-oides, Latinized suffix adopted from *eidos* (Gr. εἶδος), form or shape: *Alburnus*, referring to original placement of *A. maculatus* in that genus

***Alburnoides bipunctatus* (Bloch 1782) bi-**, from *bis* (L.), twice; *punctatus* (L.), spotted, referring to each scale of anterior half of lateral line with a pair of black specks, each composed of minute dots

***Alburnoides coskuncelebii* Turan, Kaya, Aksu, Bayçelebi & Bektaş 2019** in honor of Kamil Çoşkunçelebi (b. 1969), Karadeniz Technical University (Turkey), a specialist in the flowering plants of Turkey and a “well-known” Turkish plant taxonomist

***Alburnoides damghani* Roudbar, Eagderi, Esmaeili, Coad & Bogutskaya 2016** of the Damghan River system at Cheshmeh Ali, Semnan Province,

Iran, type locality

***Alburnoides devolli* Bogutskaya, Zupančič & Naseka 2010** of Devoll River, upper Seman River drainage, Albania, type locality

***Alburnoides diclensis* Turan, Bektaş, Kaya & Bayçelebi 2016 -ensis**, Latin suffix denoting place: Dicle, Turkish name for Tigris River, where it is known from two streams in the river’s upper drainage

***Alburnoides economou* Barbieri, Vukić, Šanda & Zogaris 2017** in honor of Alcibiades N. Economou, Research Director, Institute of Inland Waters, Hellenic Center for Marine Research, for “significant” contributions to the biogeography and ecology of Greek fishes

***Alburnoides eichwaldii* (De Filippi 1863)** in honor of Baltic German geologist-zoologist Charles Edward von Eichwald (also known as Karl Eduard von Eichwald, 1795–1876), who had previously reported this species as a variety of *Alburnus alburnus*

***Alburnoides emineae* Turan, Kaya, Ekmekçi & Doğan 2014** in honor of Emine Turan, “beloved” mother of first author

***Alburnoides fangfangae* Bogutskaya, Zupančič & Naseka 2010** in memory of Chinese cyprinoid taxonomist Fang Fang Kullander (1962–2010), Swedish Museum of Natural History

***Alburnoides fasciatus* (Nordmann 1840)** Latin for banded, referring to double longitudinal dark black band

***Alburnoides freyhofii* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017** in honor of German ichthyologist Jörg Freyhof (b. 1964), Leibniz Institute of Freshwater Ecology and Inland Fisheries (Berlin), for his contribution to the knowledge of the fishes of the Middle East

***Alburnoides gmelini* Bogutskaya & Coad 2009** in honor of Samuel Georg Gottlieb Gmelin (1744–1774), Russian naturalist who traveled through the River Don area and the Caucasus region and along the western and southern Caspian Sea coasts (1768–1774); he was captured by Usmei-Khan, held for ransom and died in captivity (the results of his expedition were published posthumously)

***Alburnoides holciki* Coad & Bogutskaya 2012** in honor of the late Juraj Holcík (1934–2010), Czechoslovak (later Slovak) zoologist, colleague and friend, for his many contributions to ichthyology

***Alburnoides idignensis* Bogutskaya & Coad 2009 -ensis**, Latin suffix denoting place: Idigna, Sumerian name for Tigris River, referring to its occurrence in the Tigris River system of Iran

***Alburnoides kosswigi* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017** in honor of Curt Kosswig (1903–1982), the “father of ichthyology in Turkey” (where this cyprinid occurs)

***Alburnoides kubanicus* Bănărescu 1964 -icus** (L.), belonging to: Kuban River drainage, Russia, type locality

***Alburnoides kurui* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017** in honor of Turkish ichthyologist Mustafa Kuru (b. 1940), Başkent University (Ankara), for his contribution to the knowledge of the fishes of Turkey (where this cyprinid occurs) [not to be confused with *Alburnus kurui*]

***Alburnoides maculatus* (Kessler 1859)** Latin for spotted, referring to scales on sides of body with black spots that also outline lateral line

***Alburnoides manyasensis* Turan, Ekmekçi, Kaya & Güçlü 2013 -ensis**, Latin suffix denoting place: Lake Manyas basin, Turkey, type locality

***Alburnoides namaki* Bogutskaya & Coad 2009** of Namak Lake basin, Iran, where it is endemic to a qanat (underground water channel); *namak* means salt in Farsi

***Alburnoides nicolausi* Bogutskaya & Coad 2009** named after the Latin male name Nicolaus, alluding to sons of both authors, Nikolay (Bogutskaya’s eldest son) and Nicholas (Coad’s) [since species is not specifically named for both sons, emendment to the plural *nicolausorum* is probably not warranted]

***Alburnoides ohridanus* (Karaman 1928) -anus** (L.), belonging to: Lake



Alburnoides tabarestanensis, holotype, male, 68 mm SL. Photo by Hamed Mousavi-Sabet. From: Mousavi-Sabet, H., H. Anvarifar and F. Azizi. 2015. *Alburnoides tabarestanensis*, a new species of riffle minnow from the southern Caspian Sea basin in Iran (Actinopterygii: Cyprinidae). *aqua*, International Journal of Ichthyology 21 (3): 144–152.

Ohrid (Yugoslavia, now Macedonia and Albania), type locality

***Alburnoides petrubanarescui* Bogutskaya & Coad 2009** in honor of the late Romanian ichthyologist Petru Bănărescu (1921–2009), “a great freshwater ichthyologist who contributed significantly to our knowledge of fishes of Eurasia”

***Alburnoides prespensis* (Karaman 1924) -ensis**, Latin suffix denoting place: Lake Prespa and tributaries, Macedonia, type locality

***Alburnoides qanati* Coad & Bogutskaya 2009** of a qanat (underground water channel), referring to habitat in which it was found, “now fast disappearing with the use of pump wells, and in recognition of the contribution to civilization made by the Iranian people through this innovative irrigation technique”

***Alburnoides rossicus* Berg 1924 -icus** (L.), belonging to: Rossiya (Latinization of Russia in the Russian language), referring to type localities in Dnieper and Volga rivers, Russia

***Alburnoides samii* Mousavi-Sabet, Vatandoust & Doadrio 2015** in honor of Majid Samii (b. 1937), “world famous” Iranian neurosurgeon and medical scientist, who was born in Rasht, Iran, capital city of Guilan Province, where type locality (Sefidroud River) is situated

***Alburnoides smyrnae* Pellegrin 1927** of Smyrna (now known as İzmir), Turkey, near where type locality (Mélès stream) is situated

***Alburnoides strymonicus* Chichkoff 1940 -icus** (L.), belonging to: Struma (known as Strymon in ancient times) River basin, Bulgaria, Macedonia and Greece, where it is endemic

***Alburnoides tabarestanensis* Mousavi-Sabet, Anvarifar & Azizi 2015 -ensis**, Latin suffix denoting place: Tabarestan, historical name of Mazandaran Province, Iran, which includes Tajan River, type locality

***Alburnoides thessalicus* Stephanidis 1950 -icus**, belonging to: Thessaly, Greece, where Rivers Pinios and Sperchios, type localities, are situated [not to be confused with *Alburnus thessalicus*]

***Alburnoides turani* Kaya 2020** in honor of Turkish ichthyologist Davut Turan, Kaya’s supervisor for 10 years, “for all his efforts with me and for his great contribution to the knowledge of the genus *Alburnoides* and fish fauna in Turkey”

***Alburnoides tzanevi* Chichkoff 1933** in honor of Panayot Tzanev, a former assistant at the Zoological Institute of the Russian Academy of Sciences, who collected large ichthyological samples (but there is no direct indication he collected holotype of this species)

***Alburnoides varentsovi* Bogutskaya & Coad 2009** in honor of Petr Aleksandrovich Varentsov (1852–?), who lived and traveled in the Transcaspian Province of the former Russian Empire, collected holotype in 1896, and wrote a book on the geography and natural history of the area in 1907

***Alburnoides velioglui* Turan, Kaya, Ekmekçi & Doğan 2014** in honor of Turkish physician Hasan Basri Velioglu, who “eased” and contributed to the authors’ earlier and present studies through the use of radiography

Alburnus

Rafinesque 1820

presumably tautonymous (no species mentioned)
with *Cyprinus alburnus* Linnaeus 1758

***Alburnus adanensis* Battalgazi 1944 -ensis**, Latin suffix denoting place: Adana, southern Turkey, near type locality at Seyhan River (not seen since its description and probably extinct) [note: Battalgazi is same author as Battalgil; see next species]

***Alburnus akili* Battalgil 1942** in honor of Akil Muhtar Özden (1877–1949), professor of pharmacodynamics and clinical therapy at Istanbul University Medical School and internal medicine expert

***Alburnus albidus* (Costa 1838)** Latin for whitish or white, referring to silvery-white coloration

***Alburnus alburnus* (Linnaeus 1758)** Latin for whitefish, from *albus*, white (without lustre), referring to pale, silvery coloration; name also reflects the British vernacular *bleak*, a little-used synonym for pale

***Alburnus arborella* (Bonaparte 1841)** presumably a misspelling of *alborella*, Italian vernacular for this species

***Alburnus attalus* Özüluğ & Freyhof 2007** named for Attalus I (269–197 BC), who ruled Pergamon, a Hellenistic polis in contemporary Turkey, where it is endemic

***Alburnus baliki* Bogutskaya, Küçük & Ünlü 2000** in honor of Turkish ichthyologist Süleyman Balık, for contributions to the knowledge of fishes of West Anatolia and the Mediterranean region of Turkey

***Alburnus belvica* Karaman 1924** Macedonian vernacular for this species at Lake Prespa (type locality), meaning “white fish”

***Alburnus caeruleus* Heckel 1843** Latin for dark- or sky-blue, referring to blue horizontal stripe on side

***Alburnus carianorum* Freyhof, Kaya, Bayçelebi, Geiger & Turan 2019** named for the Carians, inhabitants of the ancient province of Caria in the southern Anatolian Aegean basin, where this species occurs [replacement name for *A. kurui* Mangit & Yerli 2018, which became a secondary homonym when *Leuciscus kurui* Bogutskaya 1995 was moved to *Alburnus*; proposed in 2018 but redescribed the next year with validly designated holotype, so name dates to 2019]

***Alburnus carinatus* Battalgil 1941** Latin for keeled, referring to well-developed ventral keel

***Alburnus chalcoides* (Güldenstädt 1772) -oides**, Latinized suffix adopted from *eídos* (Gr. εἶδος), form or shape: *chalkós* (Gr. χαλκός), brass or copper, alluding to Greek common name *Harengus chalcis* (copper herring), perhaps referring to copper sheen of head and opercular region of some specimens

***Alburnus danubicus* Antipa 1909 -icus** (L.), belonging to: Danube River Delta, described as a Danube variety of *A. chalcoides*

***Alburnus demiri* Özüluğ & Freyhof 2007** in honor of Turkish marine biologist Muzaffer Demir, for “great” contributions to the knowledge of Turkish benthic invertebrates and marine fishes

***Alburnus derjugini* Berg 1923** in honor of oceanographer Konstantin Mikhailovich Deryugin (1878–1938), who recognized this species as a distinct form in 1899 but did not name it

***Alburnus doriae* De Filippi 1865** in honor of Italian zoologist Giacomina Doria (1840–1913), president of the Italian Geographic Society, who led (or at least supported) expedition during which holotype was collected [although named after a man, “ae” is an acceptable way to form a genitive from a masculine noun that ends in “a”]

***Alburnus escherichii* Steindachner 1897** in honor of German physician-entomologist Karl L. Escherich (1871–1951), who collected holotype

***Alburnus filippii* Kessler 1877** patronym not identified but probably in honor of Italian physician-zoologist Filippo de Filippi (1814–1867), presumably for his work on Central Asian fishes

***Alburnus goekhani* Özüluğ, Geiger & Freyhof 2018** in honor of Staff Col. Gökhan Peker, cousin of the first author, one of 13 Turkish soldiers who died when their helicopter hit high-voltage power lines and crashed in 2017

***Alburnus hohenackeri* Kessler 1877** in honor of Swiss missionary and botanist Rudolph Hohenacker (1798–1874), who collected part of the type series

***Alburnus istanbulensis* Battalgiil 1941** *-ensis*, Latin suffix denoting place: Istanbul, Turkey, near type locality at Kâathane (Kagithane) stream, Bosphorus River drainage

***Alburnus kotschy* Steindachner 1863** in honor of Austrian botanist and explorer Theodor Kotschy (1813–1866), who collected holotype

***Alburnus kurui* (Bogutskaya 1995)** in honor of Turkish ichthyologist Mustafa Kuru (b. 1940), Başkent University (Ankara), who collected holotype [not to be confused with *Alburnoides kurui*]

***Alburnus leobergi* Freyhof & Kottelat 2007** in honor of Soviet ichthyologist Lev (also Leo) Semyonovich Berg (1876–1950), who first realized (1949) that there were different species of *Alburnus* in the Black and Azov Sea basins

***Alburnus macedonicus* Karaman 1928** *-icus* (L.), belonging to: Macedonia, where type localities (Lake Dojran and Vardar River) are situated

***Alburnus magnificus* Freyhof & Turan 2019** Latin for great, referring to its “magnificent” color in life (flank pattern of bold black, grey or brown scales on a silvery or brown background with orange or hyaline fins)

***Alburnus mandrensis* (Drensky 1943)** *-ensis*, Latin suffix denoting place: Lake Mandras drainage, Black Sea basin, Bulgaria, type locality

***Alburnus maximus* (Fatio 1882)** Latin for greatest or largest, referring to its larger size compared with *A. arborella*

***Alburnus mento* (Heckel 1837)** from *mentum* (L.), chin, referring to lower jaw considerably projecting beyond upper

***Alburnus mentoides* Kessler 1859** *-oides*, Latinized suffix adopted from *eîdos* (Gr. εἶδος), form or shape: “very close” (translation) in appearance with *A. mento*

***Alburnus neretvae* Buj, Šanda & Perea 2010** of the Neretva River drainage (Croatia, Bosnia and Herzegovina), where it is endemic

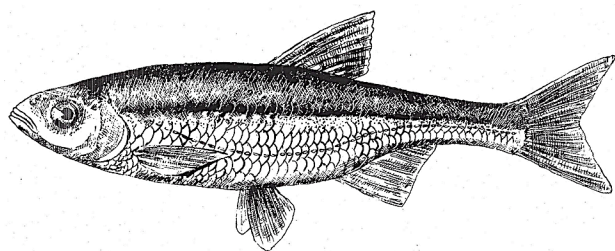
***Alburnus nicaeensis* Battalgiil 1941** *-ensis*, Latin suffix denoting place: Nicaea, ancient Greek name for what is now İznik, Turkey, referring to Lake İznik, type locality [extinct by end of 20th century due to introduction of Big-scale Sand Smelt *Atherina boyeri*]

***Alburnus oblongus* (Bulgakov 1923)** Latin for oblong (longer than broad), allusion not explained, perhaps referring to its “elongated, somewhat slender” (translation) body

***Alburnus orontis* Sauvage 1882** *-is*, Latin genitive singular of: Orontes, principal river in Syria, type locality

***Alburnus qalilus* Krupp 1992** Arabic word for few, referring to low number of lateral line scales and anal fin rays compared to congeners

***Alburnus sarmaticus* Freyhof & Kottelat 2007** *-icus* (L.), belonging to: Sarmatians, a group of tribes who inhabited southern Russia, Ukraine



Alburnus oblongus. From: Bulgakov, G. P. 1923. On the Ichthyofauna of Turkestan. Transactions of the Scientific Society of Turjestan 1: 225–238, Pl. 1.

and eastern Balkans from 5th century BC to 4th century AD, referring to its distribution in Rivers South Bug and Danube (Bulgaria, Croatia, Romania, Slovenia, Ukraine)

***Alburnus sava* Bogutskaya, Zupančič, Jelić, Diripasko & Naseka 2017** referring to the Sava River drainage, Black Sea basin (Slovenia and Croatia), where it appears to be endemic

***Alburnus schischkovi* (Drensky 1943)** in honor of Bulgarian biologist Georgi Chichkoff (also spelled Chichkov and Schischkov), who reported this species as unique in 1935 but assigned it to *Chalcalburnus chalcoides derjugini* (= *A. derjugini*) in 1935

***Alburnus scoranza* Bonaparte 1845** vernacular for this species in Lake Skadar (border of Montenegro and Albania), type locality [authorship sometimes attributed to Heckel & Kner 1857]

***Alburnus sellal* Heckel 1843** vernacular for this species in Aleppo, Syria

***Alburnus taeniatus* Kessler 1874** Latin for banded, referring to wide, straight dark band running along sides above lateral line

***Alburnus tarichi* (Güldenstädt 1814)** Georgian vernacular for this species (given in English as *tarek*)

***Alburnus timarensis* Kuru 1980** *-ensis*, Latin suffix denoting place: Yumrutepe-Timar, Turkey, where Karasu River (type locality) is situated

***Alburnus thessalicus* Stephanidis 1950** *-icus* (L.), belonging to: Thessaly, Greece, where Rivers Pinios and Sperchios, type localities, are situated [not to be confused with *Alburnoides thessalicus*]

***Alburnus ulanus* (Günther 1899)** *-anus* (L.), belonging to: Ula (town) on the Zola Chai (river), northwestern Iran, type locality

***Alburnus vistonicus* Freyhof & Kottelat 2007** *-icus*, belonging to: Lake Vistonis, Greece, only known area of occurrence

***Alburnus volviticus* Freyhof & Kottelat 2007** *-icus*, belonging to: Lake Volvi, Greece, only known extant area of occurrence (extirpated from Lake Koronia) [replacement name for *Chalcalburnus chalcoides macedonicus* Stephanidis 1971, a junior secondary homonym of *Alburnus macedonicus* Karaman 1928]

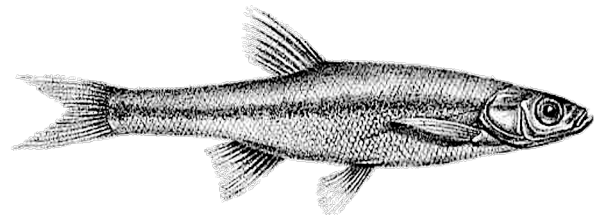
Anaocypris

Collares-Pereira 1983

Anas, Latin name of Guadiana River, Spain, type locality of *A. hispanica*; *cypris*, a small carp, a common suffix for cyprinid genera¹

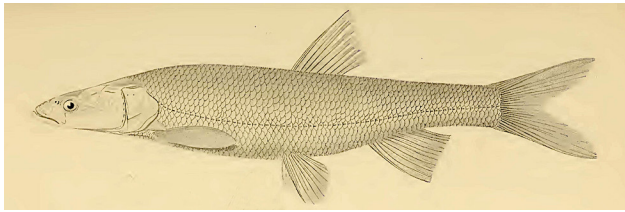
***Anaocypris hispanica* (Steindachner 1866)** *-ica* (L.), belonging to: Hispania, Roman name for Iberian Peninsula, referring to its distribution in Spain and Portugal

***Anaocypris punicus* (Pellegrin 1920)** *-icus* (L.), belonging to: Punic (i.e., Carthage in North Africa), region in modern-day Tunisia where type locality (Oued Lenjas) is situated



First-published image of *Anaocypris hispanica*. Illustration by Rud. Schönn. From: Steindachner, F. 1866. Ichthyologischer Bericht über eine nach Spanien und Portugal unternommene Reise. (Dritte Fortsetzung.) Zur Flussfischfauna des südlichen Theiles von Spanien und Portugal. Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften 54 (1. Abth.): 261–272, Pls. 1–31.

¹ Some authors believe *Cyprinus* (from the Greek κυπρίνος, *kyprinos*) is derived from Kypris, also known as Venus (or Aphrodite), the goddess of love, referring to the Common Carp's fecundity. Another explanation is that *kyprinos* is derived from *kypros* (κύπρος), a Greek word for henna, referring to the carp's bronze coloration. See: Guasparri, A. 2022. The Roman classification and nomenclature of aquatic animals: an annotated checklist (with a focus on ethnobiology). *Anthropozoologica* 57 (2): 19–100.



Aspiolucius esocinus. From: Kessler, K. F. 1874. Pisces. In: Fedtschensko's Expedition to Turkestan. Zoogeographical Researches. Izvestiia Imperatorskago Obschestva Liubitelei Estestvoznia, Antropologii i Etnografii 11: i-iv + 1-63, Pls. 1-8.

Aspiolucius

Berg 1907

Aspius (=Leuciscus), presumed genus at the time; *lucius* (L.), pike (Esocidae), i.e., an asp-like leuciscid with a pike-like shape

***Aspiolucius esocinus* (Kessler 1874)** scientific Neo-Latin for pike-like, referring to its elongate shape, similar to pikes (*Esox*, Esocidae)

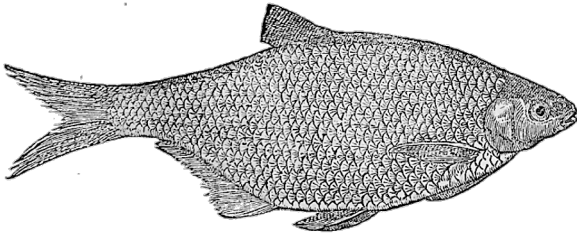
Ballerus

Heckel 1843

tautonymous with *Cyprinus ballerus* Linnaeus 1758, from *báleros* (Gr. βάλερος), ancient name first mentioned by Aristotle [treated as a junior synonym of *Abramis* by some authors]

***Ballerus ballerus* (Linnaeus 1758)** *báleros* (Gr. βάλερος), ancient name for this species, first mentioned by Aristotle

***Ballerus sapa* (Pallas 1814)** from Russian vernacular for this species, *ssapa* or *ssopa*



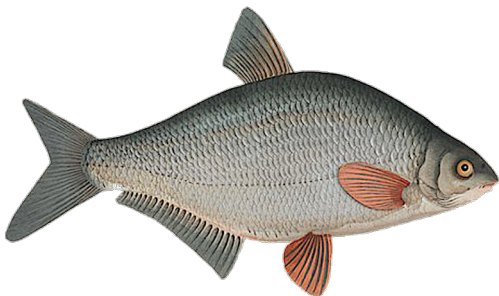
"De Bellaro," as illustrated in one of the publications from which Linnaeus based his description of *Cyprinus* (now *Ballerus*) *ballerus*. From: Rondelet, G. 1555. Libri de piscibus marinis, in quibus veræ piscium effigies expressæ sunt. Part 2. M. Bonhomme, Lugduni (Lyon). i-x (unnumbered) + 1-242 + i-ix (unnumbered). Rondelet's account of "De Bellaro" is a composite species partly based on *Abramis brama* (Ronald Fricke, pers. comm.).

Blicca

Heckel 1843

tautonymous with *Cyprinus blicca* Bloch 1782 (=B. *bjoerkna*), from the German vernacular *Blicke*

***Blicca bjoerkna* (Linnaeus 1758)** from *björkna*, Swedish vernacular for this species



Possibly first-published color image of *Blicca bjoerkna*, as *Cyprinus blicca*, a junior synonym. From: Bloch, M. E. 1782. Oeconomische Naturgeschichte der Fische Deutschlands. Berlin. v. 1: 1-128, Pls. 1-37.

Chondrostoma

Agassiz 1832

chóndros (Gr. χόνδρος), gristle or cartilage; *stóma* (Gr. στόμα), mouth, referring to presumed content of horny layer on lower lip

***Chondrostoma angorense* Elvira 1987** -ense, Latin suffix denoting place:

Angora (Ankara), capital of Turkey, country where it is endemic (name was coined by Franz Steindachner while labeling type specimens but never published) [possibly a junior synonym of *C. colchicum*]

***Chondrostoma beysehireense* Bogutskaya 1997** -ense, Latin suffix denoting place: Beysehir Lake, Turkey, type locality

***Chondrostoma ceyhanense* Küçük, Turan, Güçlü, Mutlu & Çiftci 2017** -ense, Latin suffix denoting place: Ceyhan River, Kahramanmaraş Province, Turkey, type locality

***Chondrostoma colchicum* Derjugin 1899** -icus (L.), belonging to: Colchis, ancient name for eastern coast of Black Sea in Georgia, type locality

***Chondrostoma cyri* Kessler 1877** of the Kura River (*Cyrus* in Latin), Georgia, type locality

***Chondrostoma esmaeili* Eagderi, Jouladeh-Roudbar, Birecikligil, Çiçek & Coad 2017** in honor of Iranian ichthyologist Hamid Reza Esmaeili, for "long and outstanding" contributions in biology and systematic studies of Iranian freshwater fishes

***Chondrostoma holmwoodii* (Boulenger 1896)** in honor of Frederic Holmwood (1840-1896), British Consul-General at Smyrna (now İzmir, Turkey), who collected holotype

***Chondrostoma kinzelbachi* Krupp 1985** in honor of German limnologist-parasitologist Ragnar Kinzelbach (b. 1941), who placed holotype at Krupp's disposal, for his contributions to the knowledge of Middle East zoology

***Chondrostoma knerii* Heckel 1843** patronym not identified but certainly in honor of Heckel's Vienna colleague, Austrian ichthyologist Rudolf Kner (1810-1869)

***Chondrostoma kubanicum* Berg 1914** -icum (L.), belonging to: Kuban River drainage, Black Sea basin, where it is endemic

***Chondrostoma meandreense* Elvira 1987** -ense, Latin suffix denoting place: Büyük Menderes river basin, Anatolia, where it is endemic

***Chondrostoma nasus* (Linnaeus 1758)** Latin for nose, referring to its prominent snout ("rostrum prominente")

***Chondrostoma ohridanum* Karaman 1924** -anum (L.), belonging to: Lake Ohrid drainage, Macedonia and Albania, where it is endemic

***Chondrostoma orientale* Bianco & Bănărescu 1982** Latin for eastern, being the easternmost species of the genus

***Chondrostoma oxyrhynchum* Kessler 1877** sharp-snouted, from *oxýs* (Gr. ὀξύς), sharp or pointed, and *rhýnchos* (Gr. ῥύγχος), snout, referring to its slightly prominent snout

***Chondrostoma phoxinus* Heckel 1843** referring to shape and scales similar to those of *Cyprinus* (=Phoxinus) *phoxinus* (Phoxininae)

***Chondrostoma prespense* Karaman 1924** -ense, Latin suffix denoting place: Lakes Prespa basin (Greece, Macedonia and Albania), where it is endemic

***Chondrostoma regium* (Heckel 1843)** Latin for royal, translation of *Zurri*, Arabic vernacular for this species in Mosul, Iraq

***Chondrostoma scodrense* Elvira 1987** -ense, Latin suffix denoting place: Scodra, Latin name of Lake Scutari, border of Montenegro and Albania,



Chondrostoma esmaeili, holotype, female, 136 mm SL. From: Eagderi, S., A. Jouladeh-Roudbar, S. S. Birecikligil, E. Çiçek and B. W. Coad. 2017. *Chondrostoma esmaeili*, a new cyprinid species from the Tigris basin in Iran (Teleostei: Cyprinidae). Vertebrate Zoology 67 (2): 125-132.

where it is (or was) endemic (probably extinct)

***Chondrostoma smyrnae* Küçük, Çiftçi, Güçlü & Turan 2021** of Smyrna (now known as İzmir), Turkey, where type locality (Tahtalı reservoir) is situated

***Chondrostoma soetta* Bonaparte 1840** presumably a Latinization of *savetta*, Italian vernacular for this species

***Chondrostoma toros* Küçük, Turan, Güçlü, Mutlu & Çiftçi 2017** Turkish for Taurus, referring to the Central Taurus Mountains of Turkey, where it occurs

***Chondrostoma turnai* Güçlü, Küçük, Turan, Çiftçi & Mutlu 2018** in honor of İsmail İbrahim Turna (1957–2016), Süleyman Demirel University, for his “great contribution” to hydrobiology in Turkey

***Chondrostoma vardareense* Karaman 1928** -ense, Latin suffix denoting place: Vardar River, Macedonia, type locality

***Chondrostoma variabile* Yakovlev 1870** Latin for variable, referring to “inconsistency of species characteristics, which vary more or less highly” (translation), e.g., shape of pharyngeal bone, number of pharyngeal teeth, head and body shape, position of fins, coloration, and meristic counts

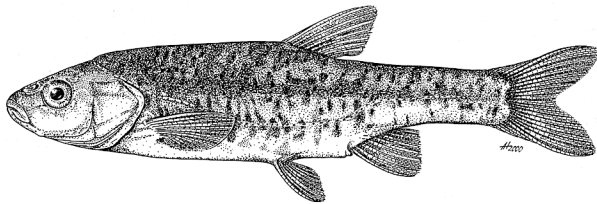
Delminichthys

Freyhof, Lieckfeldt, Bogutskaya, Pitra & Ludwig 2006
Delminium, capital of pre-Roman Dalmatia, Croatia, country where all species occur; *ichthys* (Gr. ἰχθύς), fish

***Delminichthys adpersus* (Heckel 1843)** alternative spelling of *aspersus* (L.), besprinkled, “densely studded with black dots” (translation)

***Delminichthys ghetaldii* (Steindachner 1882)** in honor of Croatian mayor and horticulturalist Francesco Ghetaldi-Gondola (1833–1899), who apparently facilitated the collection of holotype from an underground cave in Herzegovina

***Delminichthys jadovensis* (Zupančić & Bogutskaya 2002)** -ensis, Latin suffix denoting place: Jadova River at Ploča, Croatia, type locality



Delminichthys jadovensis, holotype, female, 74.6 mm SL. Illustration by Alexander M. Naseka. From: Zupančić, P. and N. G. Bogutskaya. 2002. Description of two new species, *Phoxinellus krbavensis* and *P. jadovensis*, re-description of *P. fontinalis* Karaman, 1972, and discussion of the distribution of *Phoxinellus* species (Teleostei: Cyprinidae) in Croatia and in Bosnia and Herzegovina. *Natura Croatica* 11 (4): 411–437.

***Delminichthys krbavensis* (Zupančić & Bogutskaya 2002)** -ensis, Latin suffix denoting place: Krbava, Croatia, type locality

Egirdira

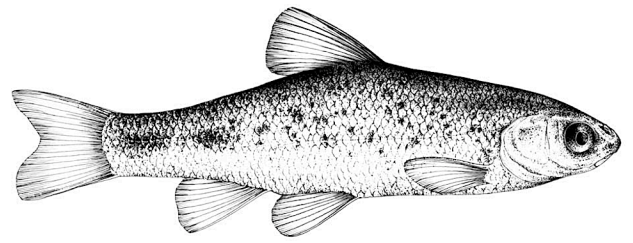
Freyhof 2022

named for Lake Eğirdir basin, Turkey, where *E. nigra* is endemic

***Egirdira nigra* (Kosswig & Geldiay 1952)** Latin for black, referring to color exhibited by males in breeding season [previously known as *Pseudophoxinus egirdiri* (Karaman 1972)]



Egirdira nigra. From: Kosswig, C. and R. Geldiay. 1952. Eğirdir Gölü Balıkları [Fishes of Lake Eğirdir]. Fish and Fisheries, Istanbul University, Faculty of Science, Hydrobiology Institute Publications 3 (1): 3–14.



Iberochondrostoma oretanum, holotype, male, 78.85 mm SL. From: Doadrio, I. and J. A. Carmona. 2003. A new species of the genus *Chondrostoma* Agassiz, 1832 (Actinopterygii, Cyprinidae) from the Iberian Peninsula. *Graellsia, Revista de Zoología, Museo Nacional de Ciencias Naturales, Madrid* 59 (1): 29–36.

Iberochondrostoma

Robalo, Almada, Levy & Doadrio 2007

Ibero-, referring to Iberian Peninsula, where this genus, formerly recognized as *Chondrostoma*, occurs

***Iberochondrostoma almakai* (Coelho, Mesquita & Collares-Pereira 2005)** in honor of Carlos Almacá (1934–2010), University of Lisbon, “for his long and outstanding contributions to the study of differentiation patterns and evolutionary processes of Euro-Mediterranean cyprinids”

***Iberochondrostoma lemmingii* (Steindachner 1866)** patronym not identified nor able to infer from available evidence (originally spelled *leminingii* by Steindachner, apparently in error)

***Iberochondrostoma lusitanicum* (Collares-Pereira 1980)** -icus (L.), belonging to: Lusitania, ancient name of Portugal, where it is endemic

***Iberochondrostoma olisiponense* (Gante, Santos & Alves 2007)** -ense, Latin suffix denoting place: Ollisipo, archaic name for Lisbon, Portugal, general vicinity where it occurs

***Iberochondrostoma oretanum* (Doadrio & Carmona 2003)** -anum (L.), belonging to: Oretania, area in south-central Spain formerly inhabited by the Oretano people, corresponding to its range

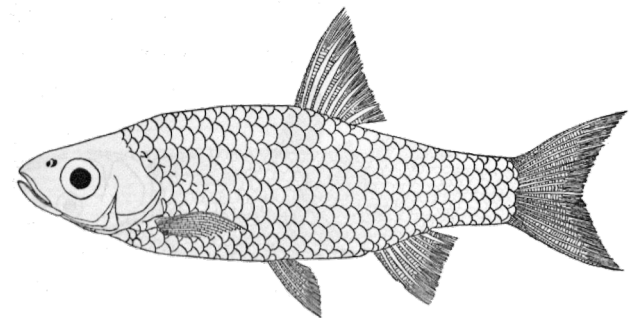
Ladigesocypris

Karaman 1972

in honor of aquarist and ichthyologist Werner Ladiges (1910–1984), director, Zoologisches Staatsinstitut und Zoologisches Museum in Hamburg, who helped Karaman with the “linguistic structure” (translation) of his manuscript, and who described two of the three species of the genus; *cypris*, common suffix for small cyprinoid genera, derived from *Cyprinus* (Common Carp)¹

***Ladigesocypris ghigii* (Gianferrari 1927)** in honor of zoologist Alessandro Ghigi (1875–1970), University of Bologna (Italy), who collected holotype

***Ladigesocypris mermere* (Ladiges 1960)** named for Mermere (Lake Marmara), Turkey, type locality



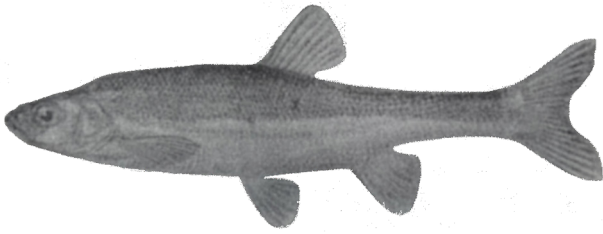
Ladigesocypris mermere. From: Ladiges, W. 1960. Süßwasserfische der Türkei, I. Teil Cyprinidae. Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut 58: 105–150.

Leucalburnus

Berg 1916

described as intermediate between the *Leuciscus* and *Alburnus*

***Leucalburnus satunini* (Berg 1910)** in honor of Russian zoologist Konstantin Alekseevich Satunin (1853–1916), who collected holotype



Possibly first-published image of *Leucalburnus satunini*. From: Berg, L. S. 1949. Freshwater fishes of the U.S.S.R. and adjacent countries. 4th. ed., vol. 2. Freshwater fishes of the U.S.S.R. and adjacent countries No. 29: 467–925. English translation appeared in Israel Program of Scientific Translation, Jerusalem, 1964, p. 1–496.

Leucaspius

Heckel & Kner 1858

combination of *Leucos* and *Aspius* (= *Leuciscus*), described as having the pharyngeal teeth morphology of the former and the lower-jaw placement (entering depression of upper jaw) of the latter

***Leucaspius delineatus* (Heckel 1843)** *de-* (L. prefix), removed; *lineatus* (L.), lined, referring to seeming absence of lateral line (just 8–12 pored scales)



Possibly first-published image of *Leucaspius delineatus*, as *Aspius owsiana*, a junior synonym. From: Czernay, A. 1851. Beobachtungen gesammelt auf Reisen im Charkowschen und den anliegenden Gouvernements in den Jahren 1848 und 1849. Bulletin de la Société Impériale des Naturalistes de Moscou 24 (1): 269–282, Pl. 7.

Leuciscus

Cuvier 1816

tautonymous with *Cyprinus leuciscus* Linnaeus 1758, from *leukiskos* (Gr. λευκίσκος), a “white mullet” (often applied to *Alburnus alburnus*), diminutive of *leukós* (λευκός), white, referring to its silvery sides

***Leuciscus aspius* (Linnaeus 1758)** Latinization of *asp*, derived from *esp* or *esping*, Swedish vernacular for this species, perhaps alluding to how its spectacular April spawning run coincides with the blooming of the asp tree, *Populus tremula*² [sometimes placed in *Aspius*, treated here as a synonym of *Leuciscus*]

***Leuciscus aspium taeniatus* (Eichwald 1831)** Latin for banded, referring to several longitudinal black bands on sides

***Leuciscus baicalensis* (Dybowski 1874)** *-ensis*, Latin suffix denoting place: Lake Baikal basin, Russia, where it is endemic

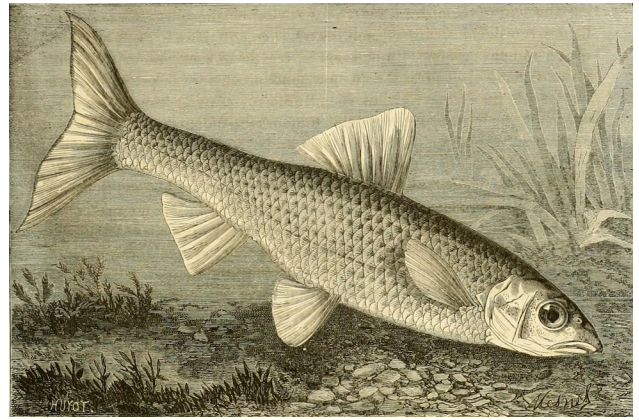
***Leuciscus bearnensis* (Blanchard 1866)** *-ensis*, Latin suffix denoting place: Béarn, France, where Lake Mariscot (type locality) is situated

***Leuciscus bergi* Kashkarov 1925** in honor of Russian ichthyologist Lev (or Leo) Semyonovich Berg (1876–1950), an “eminent scientist in general, and ichthyologist in particular” (translation)

***Leuciscus burdigalensis* Valenciennes 1844** *-ensis*, Latin suffix denoting place: Burdigala, ancient name of Bordeaux, France, area of Gironde estuary, type locality

***Leuciscus chuanchicus* (Kessler 1876)** *-icus* (L.), belonging to: Chuanchu (or Chuan Che, “Yellow”) River, Yangtze River drainage, Qinhai Province, China, type locality

***Leuciscus danilewskii* (Kessler 1877)** in honor of Nikolai Danilewski (also spelled Nikolay Danilevsky, 1822–1885), Russian naturalist, economist, ethnologist, philosopher and historian, who collected two specimens in type series



Leuciscus oxyrrhis. From: La Blanchère, H. de. 1873. Sur une Vandoise nouvelle déterminée dans les eaux du Rouergue (*Squalius oxyrrhis*, La Bl.). Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences 76 (pt. 1, no. 10): 662–665.

***Leuciscus dzungaricus* Paepke & Koch 1998** *-icus* (L.), belonging to: Dzungarian Gobi (Mongolia and China), where it occurs

***Leuciscus idus* (Linnaeus 1758)** Latinization of its Swedish vernacular *id*, possibly borrowed from the French *ide*

***Leuciscus lehmanni* Brandt 1852** in honor of Russian biologist Alexander Lehmann (1814–1842), who led 1841–1842 expedition during which holotype was collected (and during which he took ill and died on his way home)

***Leuciscus leuciscus* (Linnaeus 1758)** from *leukiskos* (Gr. λευκίσκος), a “white mullet” (often applied to *Alburnus alburnus*), diminutive of *leukós* (Gr. λευκός), white, referring to its silvery sides

***Leuciscus lindbergi* Zanin & Eremjejev 1934** in honor of ichthyologist Georgii Ustinovich Lindberg (1894–1976), Russian Academy of Sciences, who supervised the authors’ work

***Leuciscus merzbacheri* (Zugmayer 1912)** in honor of German geographer, mountaineer and explorer Gottfried Merzbacher (1843–1926), who collected holotype

***Leuciscus oxianus* (Kessler 1877)** *-anus* (L.), belonging to: Oxua River, ancient name for Amu Darya, Uzbekistan, type locality

***Leuciscus oxyrrhis* (La Blanchère 1873)** *oxýs* (Gr. ὀξύς), sharp or pointed; *rhis* (Gr. ῥίς), nose, referring to its long snout, “jutting out in a sharp point in front of mouth” (translation)

***Leuciscus schmidti* (Herzenstein 1896)** in honor of P. Schmidt, presumably Russian ichthyologist Petr Yulievich Schmidt (1872–1949), who collected holotype

***Leuciscus vorax* (Heckel 1843)** voracious, translation of Arabic name *kaschschasck*, referring to how it “consumes everything it finds” (translation) [sometimes placed in *Aspius*, treated here as a synonym of *Leuciscus*]

***Leuciscus waleckii* (Dybowski 1869)** patronym not identified but likely in honor of Dybowski’s Polish colleague, zoologist Antoni Walecki (1815–1897)

Leucos

Heckel 1843

from *leukós* (Gr. λευκός), white, allusion not explained, perhaps referring to silver-white color of *L. aula*



Leucos panosi, holotype, 166.5 mm SL. From: Bogutskaya, N. G. and K. Iliadou. *Rutilus panosi*, a new roach from western Greece (Teleostei: Cyprinidae). Zoosystematica Rossica 14 (2): 293–298.

² Sven O. Kullander, Swedish Museum of Natural History, pers. comm.

Leucos albus (Marić 2010) Latin for white, referring to silver-white color in life

Leucos aula (Bonaparte 1841) etymology not explained, possibly a Latinization of *avola*, Italian or Venetian vernacular for a bleak (*Alburnus* sp.) but perhaps historically applied to this species as well

Leucos basak (Heckel 1843) Croatian vernacular for this species

Leucos panosi (Bogutskaya & Iliadou 2006) in honor of Greek ichthyologist Panos Stavros Economidis, who recognized this species as an undescribed taxon in 1991

Leucos ylikiensis (Economidis 1991) *-ensis*, Latin suffix denoting place: Lake Yliki, Greece, type locality

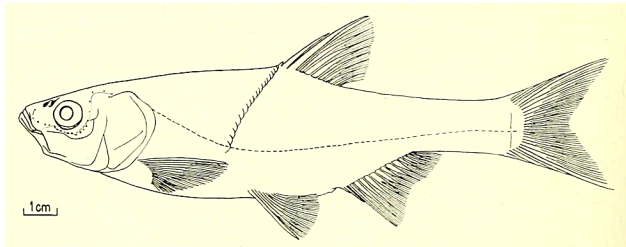
Mirogrex

Goren, Fishelson & Trewavas 1973

mirus (L.), wonderful or amazing; *grex* (L.), flock or shoal, referring to a “miraculous draught” of fishes (one of two miracles attributed to Jesus), which may have been *M. terraesanctae* or *Sarotherodon galilaeus* (Cichlidae)

Mirogrex hulensis Goren, Fishelson & Trewavas 1973 *-ensis*, Latin suffix denoting place: Lake Huleh, Israel, type locality (now extinct due to deliberate draining of lake in the 1950s)

Mirogrex terraesanctae (Steinitz 1952) of *terra* (L.), land, and *sanctus* (L.) holy, i.e., the Holy Land, referring to Lake Tiberias (or Sea of Galilee), Israel, where it is endemic



Possibly first-published full-body image of body of *Mirogrex terraesanctae* (original description illustrated only the pharyngeal teeth). From: Goren, M., L. Fishelson and E. Trewavas. 1973. The cyprinid fishes of Acanthobrama Heckel and related genera. Bulletin of the British Museum (Natural History) Zoology 24 (6): 293–315.

Notemigonus

Rafinesque 1819

nótos (Gr. νότος), back; [h]emi-, from *hémisys* (Gr. ἡμισυς), half; *gōnía* (Gr. γωνία), corner or angle, referring to obtusely angled, or carinated, back, from which it differs from the superficially similar herring genus *Clupea*

Notemigonus crysoleucas (Mitchill 1814) *chrysós* (Gr. χρυσός), golden, referring to color of eyes and gill cover and “tinge of the same along the belly”; *leukós* (Gr. λευκός), white, referring to its “shining white scales”

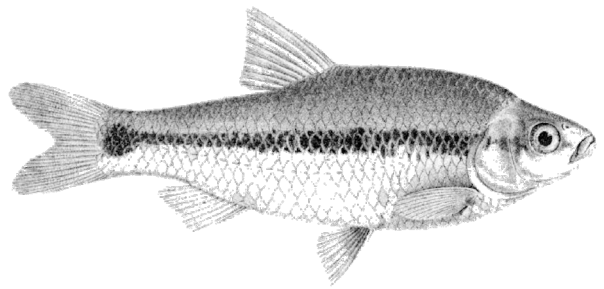


Notemigonus crysoleucas. Unpublished 1837 watercolor by Jacques Burkhardt (ca. 1808-1867), Louis Agassiz' principal artist. See <https://curiosity.lib.harvard.edu/jacques-burkhardt-scientific-drawings>

Pachychilon

Steindachner 1882

pachýs (Gr. παχύς), thick or stout; *chilon*, derived and Latinized (ει to “l”) from *cheílios*, lip, referring to thick lips, the lower extending across the symphysis as a distinctly continuous fold



Pachychilon macedonicus. Illustration by Eduard Konopicky. From: Steindachner, F. 1892. Über einige neue und seltene Fischarten aus der ichthyologischen Sammlung des K. K. Naturhistorischen Hofmuseums. Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Classe 59 (1. Abth.): 357–384, Pls. 1–6.

Pachychilon macedonicum (Steindachner 1892) *-icum* (L.), belonging to: Macedonia, historical region encompassing distribution of this species, including North Macedonia and much of Greece

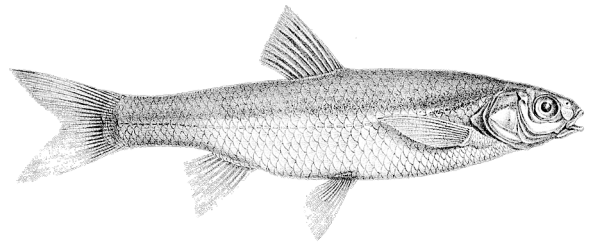
Pachychilon pictum (Heckel & Kner 1858) Latin for painted or colored, probably referring to numerous dark brown marks of various shapes and sizes on body

Parachondrostoma

Robalo, Almada, Levy & Doadrio 2007

pará (Gr. παρά), near, similar to *Chondrostoma*

Parachondrostoma arrigonis (Steindachner 1866) *-is*, Latin genitive singular of: Steindachner's “dear friend” Prof. Arrigo of Valencia (forename not given), who died of cholera in 1865 in the “prime of his years and work” (translation)



First-published image of *Parachondrostoma arrigonis*. Illustration by Rud. Schön. From: Steindachner, F. 1866. Ichthyologischer Bericht über eine nach Spanien und Portugal unternommene Reise. (Zweite Fortsetzung.) Zur Flussfischfauna des südlichen Theiles von Spanien und Portugal. Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften 54 (1. Abth.): 6–27, Pls. 1–6.

Parachondrostoma miegii (Steindachner 1866) patronym not identified, possibly in honor of Swiss-Spanish naturalist Juan Mieg (1779–1859)

Parachondrostoma toxostoma (Vallot 1837) *tóxon* (Gr. τόξον), bow; *stóma* (Gr. στόμα), mouth, referring to its curved, or crescent-shaped, mouth

Parachondrostoma turiense (Elvira 1987) *-ense*, Latin suffix denoting place: Turia River, Chulilla, Valencia, Spain, type locality

Pelasgus

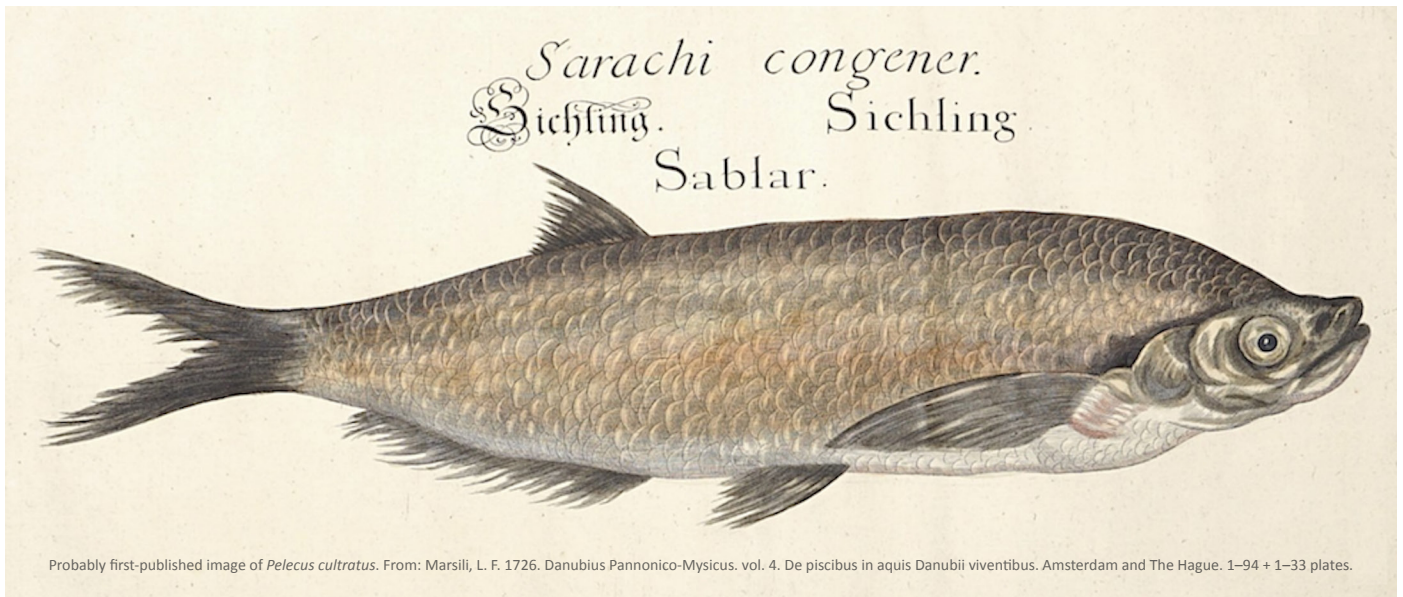
Kottelat & Freyhof 2007

based on the Pelasgians, groups of people who inhabited lands around Aegean Sea before arrival of Indo-European and proto-Greek-speaking invaders during the 2nd millennium BC, referring to distribution of all included species in the Balkan Peninsula

Pelasgus epiroticus (Steindachner 1895) *-icus* (L.), belonging to: Epirus, historical and geographical region straddling Greece and Albania (described from Albania but presently known only from Lake Pamvotis, Epirus, Greece)

Pelasgus laconicus (Kottelat & Barbieri 2004) *-icus* (L.), belonging to: Lakonias District, Greece, type locality

Pelasgus marathonicus (Vinciguerra 1921) *-icus* (L.), belonging to: Marathon, Greece, type locality

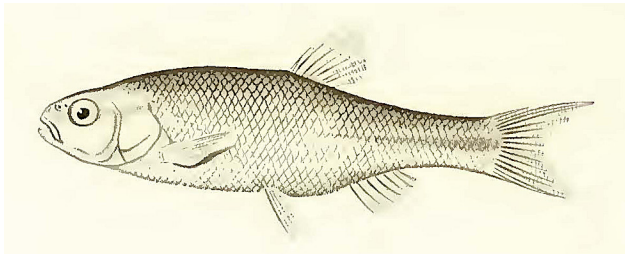


Probably first-published image of *Pelecus cultratus*. From: Marsili, L. F. 1726. Danubius Pannonico-Mysicus. vol. 4. De piscibus in aquis Danubii viventibus. Amsterdam and The Hague. 1–94 + 1–33 plates.

***Pelecus minutus* (Karaman 1924)** Latin for small, referring to smaller scales compared with presumed congeners in *Pseudophoxinus* (genus in which it was described) and/or small size (up to 53 mm SL), the latter of which may have caused Steindachner to overlook its distinctiveness in an earlier collection

***Pelecus prespensis* (Karaman 1924)** *-ensis*, Latin suffix denoting place: Lake Prespa and tributaries, Macedonia, type locality

***Pelecus stymphalicus* (Valenciennes 1844)** *-icus* (L.), belonging to: Lake Zaraco, Greece, type locality, where a mythological man-eating bird, *stymphalis*, was slain by Hercules



Pelecus stymphalicus (parts of fins smudged out in scan of original). Illustration by J. Baron. From: Cuvier, G. and A. Valenciennes. 1844. Histoire naturelle des poissons. Tome dix-septième. Suite du livre dix-huitième. Cyprinoides. v. 17: i–xxiii + 1–497 + 2 pp., Pls. 487–519. [Valenciennes authored the volume.]

***Pelecus thesproticus* (Stephanidis 1939)** *-icus* (L.), belonging to: Thesprotia District, Greece, type locality

Pelecus

Agassiz 1835

etymology not explained, probably from *pélekus* (Gr. πέλεκος), battle axe, referring to its knife-like shape

***Pelecus cultratus* (Linnaeus 1758)** Latin for knife-shaped, referring to its knife- or razor-like shape

***Pelecus cultratus kurensis* Smirnov 1943** *-ensis*, suffix Latin denoting place: Kura River basin, Caspian Sea drainage, where it is endemic

Petroleuciscus

Bogutskaya 2002

Petro, Latinization of Petr, forename of “famous freshwater ichthyologist” Petru Bănărescu (1921–2009) and of Bogutskaya’s son, Petr Naseka; *Leuciscus*, all pre-2002 species previously placed in that genus

***Petroleuciscus aphipsi* (Aleksandrov 1927)** of Aphips River above Kre-

postnaya, Kuban Basin, Russia, type locality

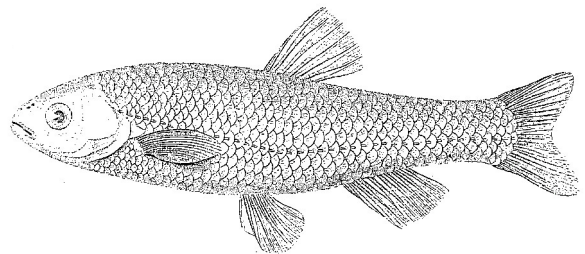
***Petroleuciscus atropatena* (Berg 1925)** of Atropatene, ancient kingdom that includes modern-day Iran, Azarbaijan and Kurdistan, referring to distribution in northwestern Iran

***Petroleuciscus borysthenicus* (Kessler 1859)** *-icus* (L.), belonging to: Borysthene, name from classical antiquity usually referring to the Dnieper River, type locality

***Petroleuciscus ninae* Turan, Kalayci, Kaya, Bektaş & Küçük 2018** in honor of Russian ichthyologist Nina G. Bogutskaya (b. 1958), for her contribution to the knowledge of the fishes of Europe and Asia

***Petroleuciscus smyrnaeus* (Boulenger 1896)** *-eus* (L.), adjectival suffix: of Smyrna (now known as İzmir), Turkey, type locality

***Petroleuciscus squaliusculus* (Kessler 1872)** diminutive of *Squalius* (genus in which it was described) or *squalus*, probably referring to small size (95–130 mm) compared with *S. squalus* (up to 600 mm)



Petroleuciscus squaliusculus. From: Kessler, K. F. 1872. Ichthyological Fauna of Turkestan. Izvestia Imperatorskago Obschestva Liubiteliei Estestvoznaniia, Antropologii i Etnografii 10 (1): 47–76, Pls. 6–12.

Phoxinellus

Heckel 1843

diminutive of *Phoxinus*, referring to similarity of size and shape of *P. alepidotus* to *Cyprinus* (=Phoxinus) *phoxinus* (Phoxininae)

***Phoxinellus alepidotus* Heckel 1843** *á-* Greek privative, i.e., without; *lepidōtós* (Gr. λεπιδωτός), scaly, referring to scaleless body except for lateral line

***Phoxinellus dalmaticus* Zupančič & Bogutskaya 2000** *-icus* (L.), belonging to: Dalmatia, region in southern Croatia where it is endemic

***Phoxinellus pseudalepidotus* Bogutskaya & Zupančič 2003** *pseudēs* (Gr. ψεύδης), false, i.e., although similar to *P. alepidotus* in body shape and scalelessness (except for lateral line), such an appearance is false



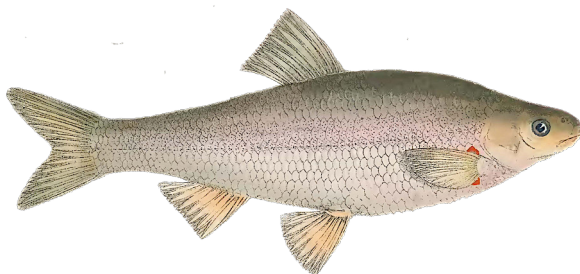
Phoxinellus dalmaticus, paratype, male, 44.8 mm SL. Photo by Primož Zupanič. From: Zupanič, P. and N. G. Bogutskaya. 2000. Description of a new species, *Phoxinellus dalmaticus* (Cyprinidae: Leuciscinae), from the Cikola River in the Krka River system, Adriatic basin (Croatia). *Natura Croatica* 9 (2): 67–81.

Protochondrostoma

Robalo, Almada, Levy & Doadrio 2007

prōtos (Gr. πρῶτος), first, referring to its basal position among group of genera that formerly comprised *Chondrostoma*

***Protochondrostoma genei* (Bonaparte 1839)** in honor of Italian zoologist Giuseppe Génè (1800–1847), director of the Royal Zoological Museum at Turin



Protochondrostoma genei. From: Bonaparte, C. L. 1839. Iconografia della fauna italiana per le quattro classi degli animali vertebrati. Tomo III. Pesci. Roma. Fasc. 24–26, puntata 121–135, 8 pls.

Pseudochondrostoma

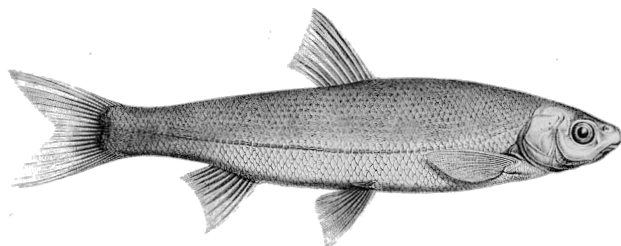
Robalo, Almada, Levy & Doadrio 2007

pseudēs (Gr. ψεύδης), false, i.e., although this genus is similar to *Chondrostoma* (as a “consequence of homoplasy in multiple traits”), such an appearance is false

***Pseudochondrostoma duriense* (Coelho 1985) -ense**, Latin suffix denoting place: Douro River basin, Portugal, type locality

***Pseudochondrostoma polylepis* (Steindachner 1864) polý** (Gr. πολύ), many; *lepis* (Gr. λεπίς), scale, presumably referring to 69–74 scales along lateral line, more than *Chondrostoma nasus*, with which this species had been confused

***Pseudochondrostoma willkommii* (Steindachner 1866)** patronym not identified but probably in honor of German botanist Heinrich Moritz Willkomm (1821–1895), who studied the flora of Spain and Portugal, where this species occurs



First-published image of *Pseudochondrostoma willkommii*. Illustration by Rud. Schön. From: Steindachner, F. 1866. Ichthyologischer Bericht über eine nach Spanien und Portugal unternommene Reise. (Dritte Fortsetzung.) Zur Flussfischfauna des südlichen Theiles von Spanien und Portugal. Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften 54 (1 Abth.): 261–272, Pls. 1–3.

Pseudophoxinus

Bleeker 1860

pseudēs (Gr. ψεύδης), false, presumably referring to similarity of *P. zeregi* to *Cyprinus* (= *Phoxinus*) *phoxinus* (Phoxininae)

***Pseudophoxinus alii* Küçük 2007** in honor of Ali, Küçük’s father



Pseudophoxinus burduricus, paratype, female, 65.82 mm SL. From: Küçük, F., I. Gülle, S. S. Güçlü, Y. Çiftçi and Ö. Erdoğan. 2013. A new *Pseudophoxinus* (Teleostei, Cyprinidae) species from southwestern Anatolia, with remarks on the distribution of the genus in western Anatolia. *ZooKeys* No. 320: 29–41.

***Pseudophoxinus anatolicus* (Hankó 1925) -icus** (L.), belonging to: Anatolia, geographic and historical term denoting westernmost protrusion of Asia (Asia Minor), where Europe and Asian meet, comprising most of Turkey, where it is endemic

***Pseudophoxinus antalyae* Bogutskaya 1992** of Antalya, Turkey, town near type locality in Stream Kirkgöz

***Pseudophoxinus battalgilae* Bogutskaya 1997** in honor of Turkish ichthyologist Fahire Battalgil (later Battalgazi, 1902–1948), “who contributed considerably to the knowledge of Turkish freshwater fishes”

***Pseudophoxinus burduricus* Küçük, Gülle, Güçlü, Çiftçi & Erdoğan 2013 -icus** (L.), belonging to: Burdur Province, Turkey, type locality

***Pseudophoxinus caralis* (Battalgil 1942)** etymology not explained, perhaps a Latinization of *karali*, Turkish for “painted with black,” referring to dark streaks along sides

***Pseudophoxinus cilicicus* Saç, Özüluğ, Geiger & Freyhof 2019 -icus** (L.), belonging to: Roman province of Cilicia, which encompassed lower reaches of Seyhan and Ceyhan rivers, Turkey, where it occurs

***Pseudophoxinus crassus* (Ladiges 1960)** Latin for thick or fat, presumably referring to its much stouter body than *P. meandricus*

***Pseudophoxinus drusensis* (Pellegrin 1933) -ensis**, Latin suffix denoting place: Jabal al-Druze, an autonomous state in the French Mandate of Syria from 1921 to 1936, where type locality (Al-Mazra’a), is situated

***Pseudophoxinus elizavetae* Bogutskaya, Küçük & Atalay 2006** in honor of physician Elizaveta Bogutskaya (b. 1981), the senior author’s daughter

***Pseudophoxinus evliyaee* Freyhof & Özüluğ 2010** in honor of Evliya Çelebi (1611–1683), the “most famous Ottoman traveler,” whose travel notes were published in the 10-volume *Seyahatname* (*Book of Travels*)

***Pseudophoxinus fahrettini* Freyhof & Özüluğ 2010** in honor of Turkish zoologist Fahrettin Küçük, Süleyman Demirel University, for his contribution to the knowledge of Central Anatolian fishes

***Pseudophoxinus firati* Bogutskaya, Küçük & Atalay 2006** of Firat Nehri (Turkish name for Euphrates River), referring to its occurrence in the Euphrates River drainage

***Pseudophoxinus handlirschi* (Pietschmann 1933)** in honor of Austrian entomologist Anton Handlirsch (1865–1935), Pietschmann’s colleague at the Naturhistorisches Museum (Vienna)

***Pseudophoxinus hasani* Krupp 1992** of Nab’ Hasan, source of Nahr Marqiya (type locality), Mediterranean coastal drainage, Syria

***Pseudophoxinus hittitorum* Freyhof & Özüluğ 2010 -orum** (L.), commemorative suffix, plural: Hittites, an ancient Anatolian culture (~1750–1180 BC), referring to a 13th-century Hittite monument built at Eflatun Pinar, Turkey, type locality

***Pseudophoxinus iconii* Küçük, Gülle & Güçlü 2016** of Iconium, ancient name of Konya Province, Central Anatolia, Turkey, where it occurs

***Pseudophoxinus kervillei* (Pellegrin 1911)** in honor of French biologist, archaeologist and photographer Henri Gadeau de Kerville (1858–1940), who collected holotype

***Pseudophoxinus libani* (Lortet 1883)** of Liban (Lebanon), where type

locality (Lake Yammouni, also spelled Yamuni, Lammouni and Yam-mouneh) is situated

***Pseudophoxinus maeandri* (Ladiges 1960)** of Menderes River headwaters, near Işıklı, Turkey, type locality [not to be confused with *P. maeandricus*]

***Pseudophoxinus maeandricus* (Ladiges 1960) -icus** (L.), belonging to: Menderes River, near Işıklı, Turkey, type locality [not to be confused with *P. maeandri*]

***Pseudophoxinus mehmeti* Ekmekçi, Atalay, Yoğurtçuoğlu, Turan & Küçük 2015** in honor of hydrological engineer Mehmet Ekmekçi, for contributions to studies in hydrological description and characterization and interpretations of drainage networks and watersheds, plus his full support as the husband of the first author

***Pseudophoxinus ninae* Freyhof & Özüluğ 2010** in honor of Russian ichthyologist Nina G. Bogutskaya (b. 1958), author of “important” papers on Anatolian *Pseudophoxinus* and other leuciscids

***Pseudophoxinus syriacus* (Lortet 1883) -icus** (L.), belonging to: Syria, where it is endemic

***Pseudophoxinus turani* Küçük & Güçlü 2014** in honor of Turkish ichthyologist Davut Turan, for his contributions to our knowledge of the fishes of Anatolia

***Pseudophoxinus zekayi* Bogutskaya, Küçük & Atalay 2006** in honor of Zekay Atalay (relationship to third author not explained)

***Pseudophoxinus zeregi* (Heckel 1843)** Syrian vernacular for this species

Rutilus

Rafinesque 1820

tautonymous with *Cyprinus rutilus*

***Rutilus atropatenus* Derjavin 1937** Latinization of Atropatene, ancient Greek name (Ατροπατηνί) for the historic Azerbaijan region in north-western Iran, and source of name of the Republic of Azerbaijan, where this species occurs

***Rutilus caspicus* (Yakovlev 1870) -icus** (L.), belonging to: Caspian Sea basin, where it occurs [treated as a synonym of *R. lacustris* by some workers]

***Rutilus frisii* (Nordmann 1840)** in honor of Scandinavian biologist Bengt Fredrik Fries (1799–1839), whose multi-volume work on Scandinavian fishes (authored with C. U. Ekström) is cited in Nordmann’s description of this species

***Rutilus heckelii* (Nordmann 1840)** in honor of Nordmann’s friend, Johann Jakob Heckel (1790–1857), curator of fishes, Naturhistorisches Museum in Vienna, for advice and assistance [treated as a synonym of *R. lacustris* by some workers]

***Rutilus kutum* (Kamensky 1901)** Russian vernacular for this species

***Rutilus lacustris* (Pallas 1814)** Latin for relating to or associated with lakes (lacustrine) referring to its occurrence in the lakes (and rivers) of Siberia and described as especially abundant in Lake Baikal

***Rutilus meidingeri* (Heckel 1851)** in honor of Carl von Meidinger (1750–1820), Austrian nobleman who illustrated this species under the name



Rutilus virgo, male in spawning coloration. From: Heckel, J. J. 1852. Über die zu den Gattungen *Idus*, *Leuciscus* und *Squalius* gehörigen Cyprinen. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe 9: 49–123, Pls. 6–13.

Cyprinus grislagine (= *Leuciscus leuciscus*) circa 1794

***Rutilus pigus* (Lacepède 1803)** Latinization of *pigo* or *picho*, Italian name for this species, dating to at least Salviani’s *Aquatilium animalium* (1558); Gessner (1560) says name derives from the German *becken* (to beat or strike) or *bicken* (to prick), referring to sharp, pointed tubercles on males during spawning season

***Rutilus rutilus* (Linnaeus 1758)** Latin for red, golden red or reddish yellow, referring to the general color of its fins

***Rutilus rutilus mariza* Drensky 1926** named for Mariza River, Bulgaria, type locality

***Rutilus sojuchbulagi* Abdurakhmanov 1950** of Sojuch-Bulag, a tributary of the Kura River, Azerbaijan, type locality

***Rutilus stoumboudae* Bianco & Ketmaier 2014** in honor of Greek ichthyologist, colleague and friend, Maria Stoumboudi, for her research on the ecology and conservation of the freshwater fishes of Greece [treated as a synonym of *R. lacustris* by some workers]

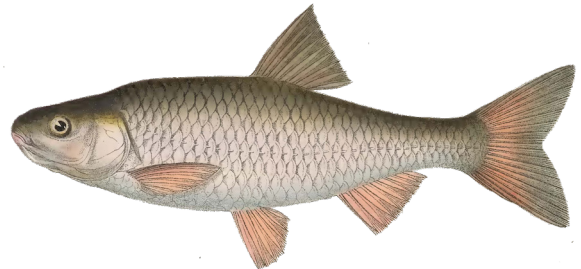
***Rutilus virgo* (Heckel 1852)** Latin for maid or maiden, probably referring to the German vernacular *Fraufisch* (womanfish)

Sarmarutilus

Bianco & Ketmaier 2014

sarma, referring to Sarma Sea, an ancient European freshwater sea, where *S. rubilio* probably had its evolutionary roots; *Rutilus*, referring to previous placement in that genus

***Sarmarutilus rubilio* (Bonaparte 1837)** presumably a diminutive of *rubella*, referring to similarity of head shape and head proportion to *Leuciscus rubella* (now considered conspecific)



Sarmarutilus rubilio. From: Bonaparte, C. L. 1837. Iconografia della fauna italiana per le quattro classi degli animali vertebrati. Tomo III. Pesci. Roma. Fasc. 19–21, puntata 94–103, 105–109, 5 pls.

Scardinius

Bonaparte 1837

probably a Latinization of *scardafa*, Roman and Italian vernacular for *S. scardafa*

***Scardinius acarnanicus* Economidis 1991 -icus** (L.), belonging to: Acarnania, region of west-central Greece that encompasses Acheleous River basin, type locality

***Scardinius dergle* Heckel & Kner 1858** vernacular for this species in Dalmatia (southern Croatia)

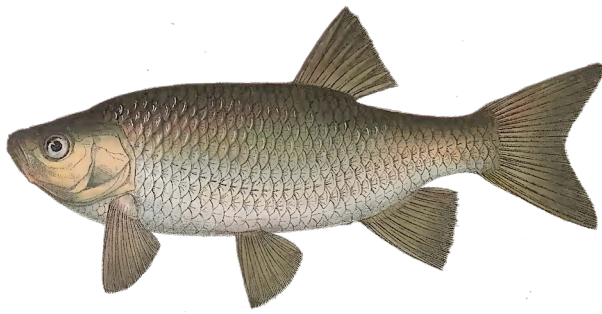
***Scardinius elmaliensis* Bogutskaya 1997 -ensis**, Latin suffix denoting place: Elmali, in Vilayet Antalya, southern Turkey, type locality

***Scardinius erythrophthalmus* (Linnaeus 1758)** red-eyed, from *erythrós* (Gr. ἐρυθρός), red, and *ophthalmós* (Gr. ὀφθαλμός), eye, referring to red fleck on iris

***Scardinius graecus* Stephanidis 1937** from *graikós* (Gr. γραικός), Greek, a fish endemic to Greece

***Scardinius hesperidicus* Bonaparte 1845 -icus** (L.), belonging to: the Hesperides, nymphs in Greek mythology who tend a blissful garden in a far western corner of the world, perhaps referring to type locality in the lakes of Piedmont in the far western corner of Italy

***Scardinius knezevici* Bianco & Kottelat 2005** in honor of the late Borivoj



Scardinius scardafa. From: Bonaparte, C. L. 1837. Iconografia della fauna italiana per le quattro classi degli animali vertebrati. Tomo III. Pesci. Roma. Fasc. 19–21, puntata 94–103, 105–109 5 pls.

Knezevic (1948–1988), Montenegrin biologist who dedicated his life to the study and conservation of the freshwater fishes of Montenegro

Scardinius plotizza Heckel & Kner 1858 local vernacular for this species, and perhaps for all species of “Weissfische” (whitefish) in Croatia and/ or Bosnia-Herzegovina

Scardinius racovitza Müller 1958 in memory of Romanian biospeologist Emil G. Racovitza (1868–1947) on the tenth anniversary of his death

Scardinius scardafa (Bonaparte 1837) Roman and Italian vernacular for this species

Squalius

Bonaparte 1837

proposed as a subgenus of *Leuciscus*, presumably named for *L. squalus* with an “i” added to avoid homonymy with the shark genus *Squalus* (in classical Latin, *squalus* refers to both a shark or dogfish and *S. squalus*); in addition, name could also be a Latinization of *squaglio*, the vernacular name of *S. squalus* in Rome and surrounding areas³

Squalius adanaensis Turan, Kottelat & Doğan 2013 *-ensis*, Latin suffix denoting place: city and eponymous province of Adana, Turkey, type locality

Squalius agdamicus Kamensky 1901 *-icus* (L.), pertaining to: near Agdam, Kuyra River basin, Azerbaijan, type locality

Squalius alburnoides (Steindachner 1866) *-oides*, Latinized suffix adopted from *eidōs* (Gr. εἶδος), form or shape: *Alburnus*, referring to similarity of elongate body shape, narrow upward-facing mouth, and strongly notched teeth

Squalius anatolicus (Bogutskaya 1997) *-icus* (L.), belonging to: Anatolia, geographic and historical term denoting westernmost protrusion of Asia (Asia Minor), where Europe and Asian meet, comprising most of Turkey, where it is endemic

Squalius aradensis (Coelho, Bogutskaya, Rodrigues & Collares-Pereira 1998) *-ensis*, Latin suffix denoting place: Arade River, Silves, Arade basin, Portugal, type locality

Squalius aristotelis Özuluğ & Freyhof 2011 named for Aristotle (384–322 BC), Greek philosopher who lived from 348–245 BC in Assos, Turkey, type locality

Squalius berak Heckel 1843 Syrian vernacular for this species

Squalius cappadocicus Özuluğ & Freyhof 2011 *-icus* (L.), belonging to: Cappadocia, region in Central Anatolia where it occurs

Squalius carinus Özuluğ & Freyhof 2011 Latin for nut-brown, referring to its dark-brown color in life

Squalius carolitertii (Doadrio 1988) Latinization of Carlos III, in honor of the Spanish king who founded in 1777 the Museo Nacional de Ciencias Naturales, Madrid (where Doadrio and holotype are located)

Squalius castellanus Doadrio, Perea & Alonso 2007 *-anus* (L.), belong-

ing to: Castille, Spanish region where it occurs

Squalius cephalus (Linnaeus 1758) from *kephalé* (Gr. κεφαλή), head, referring to its large, broad head, a name dating to *capito* of Ausonius (ca. 310–ca. 395)

Squalius cii (Richardson 1857) of Cius, ancient name of Gemelik River, northwestern Turkey, type locality

Squalius fellowesii (Günther 1868) in honor of British archaeologist Charles Fellowes (1799–1860), who presented holotype to the British Museum (Natural History)

Squalius gaditanus Doadrio & Perea 2023 *-anus* (L.), belonging to: Gades (Latin) or Gadir (Phoenician) names of Cádiz province, Spain, where this species occurs

Squalius illyricus Heckel & Kner 1858 *-icus* (L.), belonging to: Illyria, ancient name for western part of Balkan Peninsula, where type locality (Dalmatia, Croatia) is situated

Squalius irideus (Ladiges 1960) Latin for rainbow-like, referring to coloration in life, with reddish-golden sides, iridescent purple on shoulder, and silver belly

Squalius keadicus (Stephanidis 1971) *-icus* (L.), belonging to: Keadas (or Kaiadas), a chasm or precipice tributary to the Evrotas River (type locality), where ancient Spartans threw disabled and deformed babies to die

Squalius kosswigi (Karaman 1972) in honor of Turkish zoologist and geneticist Curt Kosswig (1903–1982), who collected holotype

Squalius kottelati Turan, Yilmaz & Kaya 2009 in honor of Swiss ichthyologist Maurice Kottelat (b. 1957), for his contributions to knowledge of the fishes of Europe and Asia

Squalius laietanus Doadrio, Kottelat & de Sostoa 2007 *-anus* (L.), belonging to: the Laietani, a Bronze-Age tribe inhabiting an area partly corresponding to present-day Catalonia, Spain, where this species occurs

Squalius latus Keyserling 1861 Latin for wide or broad, possibly referring to its “broad, flat face” (translation)

Squalius lepidus Heckel 1843 Latin for fine, pleasant or elegant, allusion not explained, perhaps referring to its reddish fins

Squalius lucumonis (Bianco 1983) Latinization of *Lucumone*, a person of authority to the ancient Etruscians, the type locality being the former Etruscan region of Italy

Squalius malacitanus Doadrio & Carmona 2006 *-anus* (L.), belonging to: province of Málaga (Malaca in Latin), Spain, where it occurs

Squalius microlepis Heckel 1843 *micro-*, from *mikrós* (Gr. μικρός), small; *lepis* (Gr. λεπίς), scale, referring to its small scales, 74 along lateral line

Squalius moreoticus (Stephanidis 1971) *-icus* (L.), belonging to: Morea, ancient name of Peloponnese peninsula in southern Greece, general area of type locality, Stympthalis Lake, Peloponnesus

Squalius namak Khaefi, Esmaeili, Sayyadzadeh, Geiger & Freyhof 2016 named for the Namak Lake basin, one of two basins in Iran where it occurs (the other is the Kavir basin)

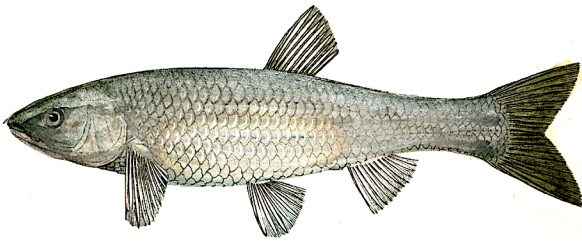
Squalius orientalis (Nordmann 1840) Latin for eastern, referring to type locality east of Europe (Abkhazia)

Squalius orpheus Kottelat & Economidis 2006 named for Orpheus, legendary Thracian musician and poet, son of Thracian river-god Oiagros and the Muse Calliope (also spelled Calliope), referring to its occurrence in Thrace, Greece

Squalius palaciosi (Doadrio 1980) in honor of Fernando Palacios Arribas, Museo Nacional de Ciencias Naturales (Marid, Spain), for his “tireless” (translation) research of Spanish vertebrates [sometimes placed in *Iberocypris*, treated here as a synonym of *Squalius*]

Squalius pamvoticus (Stephanidis 1939) *-icus* (L.), belonging to: Lake

³ Holger Funk, pers. comm.



Squalius squalus. From: Bonaparte, C. L. 1837. Iconografia della fauna italiana per le quattro classi degli animali vertebrati. Tomo III. Pesci. Roma. Fasc. 19–21, puntata 94–103, 105–109 5 pls.

Pamvotis, central Greece, type locality

***Squalius peloponensis* (Valenciennes 1844) -ensis**, Latin suffix denoting place: Peloponnese, Greece, type locality

***Squalius platyceps* Zupančič, Marić, Naseka & Bogutskaya 2010 platýs** (Gr. πλατύς), wide or broad; *-ceps* (Neo-Latin), headed, referring to its wide head (52–59% of head length)

***Squalius prespensis* (Fowler 1977) -ensis**, Latin suffix denoting place: Lake Prespa basin (Greece, Macedonia, Albania), where it is endemic

***Squalius pursakensis* (Hankó 1925) -ensis**, Latin suffix denoting place: etymology not explained nor evident, possibly referring to Pursak Su, a tributary of the Sakarya River, Turkey (species occurs in Sakarya drainage)

***Squalius pyrenaicus* (Günther 1868) -icus** (L.), belonging to: Pyrenees, mountain range separating Iberian Peninsula from rest of continental Europe, described from Mondego and Cintra (Sintra) rivers of Portugal

***Squalius recurvirostris* Özüluğ & Freyhof 2011 recurvus** (L.), curved upwards; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to upturned snout in large individuals

***Squalius ruffoi* (Bianco & Recchia 1983)** in honor of Italian naturalist Sandro Ruffo (1915–2010), former Director of Museo Civico di Storia Naturale di Verona

***Squalius semae* Turan, Kottelat & Bayçelebia 2017** in honor of Sema Turan, “beloved” wife of first author

***Squalius seyhanensis* Turan, Kottelat & Doğan 2013 -ensis**, Latin suffix denoting place: Seyhan River drainage, Turkey, where it is endemic

***Squalius spurius* Heckel 1843** Latin for false or illegitimate, allusion not explained, perhaps referring to its close similarity to *S. cephalopsis* (= *Leuciscus cephalus*)

***Squalius squalus* (Bonaparte 1837)** ancient name for this species, dating to the Roman scholar Varro (116 BC–27 BC); could also be a Latinization of *squaglio*, the vernacular name of *S. squalus* in Rome and surrounding areas³

***Squalius svallize* Heckel & Kner 1858** Croatian vernacular for this species

***Squalius tartessicus* Doadrio, Sousa-Santos & Perea 2023 -icus** (L.), belonging to: Tartessos, a culture that for about 400 years (8th–5th centuries BC) was present in the southwest of the Iberian Peninsula, where this species occurs

***Squalius tenellus* Heckel 1843** Latin for somewhat tender or delicate, allusion not explained, but here is a guess: referring to its small scales, 80 along lateral line

***Squalius torgalensis* (Coelho, Bogutskaya, Rodrigues & Collares-Pereira 1998) -ensis**, Latin suffix denoting place: Torgal River, Mira basin, Portugal, type locality

***Squalius turcicus* De Filippi 1865 -icus** (L.), belonging to: Turkey, described from River Arax (Aras Nehr), near Erzurum, Turkey

***Squalius valentinus* Doadrio & Carmona 2006** Roman name of Valencia, Spanish region where it occurs

***Squalius vardarensis* Karaman 1928 -ensis**, Latin suffix denoting place:

Vardar River drainage (Macedonia), type locality

***Squalius verepi* Turan 2022** in honor of Turkish biologist Bülent Verep (b. 1971), Recep Tayyip Erdogan University, who has “always supported” Turan throughout his research

***Squalius zрманjae* Karaman 1928** of Zrmanja River, Croatia, type locality

Telestes

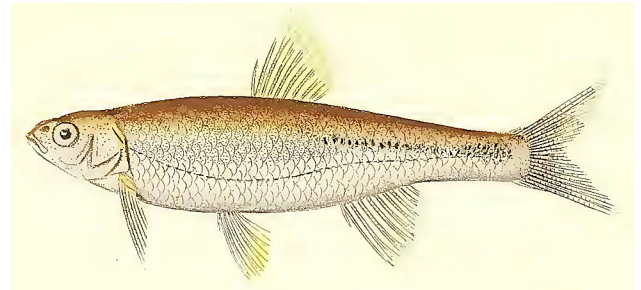
Bonaparte 1837

etymology not explained, perhaps from *teléstēs* (Gr. τελεστής), completer or finisher (if so, allusion not evident); Jordan (1877) reports the name means “perfect” derived from *téleios* (Gr. τέλειος)⁴, which can also mean “without spot or blemish,” but nothing in Bonaparte’s description supports this explanation (Telestes is also a murdered king of ancient Corinth [748 BC] and a poet of 5th-century Greece)

***Telestes alfienis* (Stephanidis 1971) -ensis**, Latin suffix denoting place: Alfios River drainage, Peloponnesus, type locality

***Telestes beoticus* (Stephanidis 1939) -icus** (L.), belonging to: Boeotia, Greece, where Lake Yliki (type locality) is situated

***Telestes comes* (Costa 1838)** Latin for companion, described as almost always occurring with (or accompanying) *Cyprinus dobula* (= *Leuciscus leuciscus*)



Telestes comes. From: Costa, O. G. 1829–53. Fauna del regno di Napoli, ossia enumerazione di tutti gli animali che abitano le diverse regioni di questo regno e le acque che le bagnano, etc. Pesci. Fauna del regno di Napoli Part 1: 511 pp. (variously paginated), 60 pls. [This plate published in 1838.]

***Telestes croaticus* (Steindachner 1866) -icus** (L.), belonging to: Croatia, where it is endemic

***Telestes dabar* Bogutskaya, Zupančič, Bogut & Naseka 2012** named for Dabarsko, or Dabar Polje, Bosnia-Herzegovina, type locality

***Telestes fontinalis* (Karaman 1972)** Latin for “of a spring or fountain,” referring to its spring habitat (also occurs in clearwater streams and enters subterranean waters during winter and droughts)

***Telestes karsticus* Marčić & Mrakovčić 2011 -icus** (L.), belonging to: karst region in Croatia, where it is endemic

***Telestes metohiensis* (Steindachner 1901) -ensis**, Latin suffix denoting place: Metohia, Dalmatia, Yugoslavia (now Croatia and Bosnia-Herzegovina), type locality

***Telestes miloradi* Bogutskaya, Zupančič, Bogut & Naseka 2012** in honor of Croatian zoologist Milorad Mrakovčić (b. 1949), University of Zagreb, for his many contributions to the study of freshwater fishes in the Adriatic basin

***Telestes montenigrinus* (Vukovic 1963) -inus** (L.), pertaining to: Montenegro, where Drina River, Moraca, type locality, is situated

***Telestes muticellus* (Bonaparte 1837)** etymology not explained, possibly a Latinization of *muticello*, Tuscan vernacular for this species in Italy

***Telestes pleurobipunctatus* (Stephanidis 1939) pleurá** (Gr. πλευρά), side; *bi-*, from *bis* (L.), twice; *punctatus* (L.), spotted, referring to a “double melanistic or melanophore dotted line” (translation) along the sides

⁴ Jordan, D. S. 1882. Report on the fishes of Ohio. Report of the Geological Survey of Ohio 4 (pt 1, sect 4): 735–1002.

***Telestes polylepis* Steindachner 1866** *polý* (Gr. πολύ), many; *lepís* (Gr. λεπίς), scale, referring to “small, extremely delicate scales” (translation), 68–71 along lateral line

***Telestes savigny* Bonaparte 1840** based on a manuscript or museum name (spelled *savignii*) coined by Valenciennes, in honor of French zoologist Marie Jules César Savigny (1777–1851), who collected holotype (spelled *savignyi* on accompanying plate) [treated as a noun in apposition, without the patronymic “i”]

***Telestes souffia* (Risso 1827)** derived from *soufie* and *soufia*, vernaculars for this species in France

***Telestes turskyi* (Heckel 1843)** in honor of Gen. Ritter von Tursky (1778–1856), governor of Dalmatia, whose support allowed Heckel to study the little-known fishes of present-day Croatia

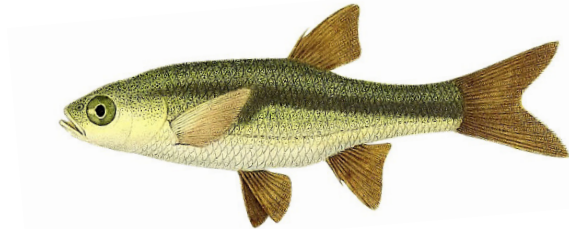
***Telestes ukliva* (Heckel 1843)** presumably Croatian vernacular for this species

Tropidophoxinellus

Stephanidis 1974

tropidos (Gr. τροπίδος), genitive of *trópis* (τρόπις), keel, referring to scaleless keel between ventral fins and vent; *Phoxinellus*, described as “very close” to that genus

***Tropidophoxinellus callensis* (Guichenot 1850)** *-ensis*, Latin suffix denoting place: La Calle, Algeria, type locality

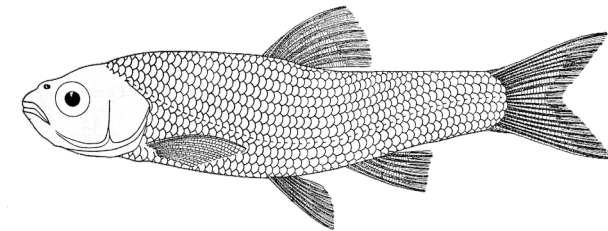


Tropidophoxinellus callensis. From: Guichenot, A. 1850. Histoire naturelle des reptiles et des poissons. Pp. i–iv + 1–144 + Atlas. In: Exploration scientifique de l'Algérie pendant les années 1840, 1841, 1842. Paris. Vol. 5. Zoologie. [Poissons are on pp. 31–138 and Poissons Pls. 1–8.]

***Tropidophoxinellus chaignoni* (Vaillant 1904)** in honor of the viscount Henri de Chaignon (1833–1917), vice president, Société d'Histoire naturelle d'Autun, who collected holotype

***Tropidophoxinellus hellenicus* (Stephanidis 1971)** from *hellenikós* (Gr. ἑλληνικός), Greek, a species endemic to Greece

***Tropidophoxinellus spartiaticus* (Schmidt-Ries 1943)** *-icus* (L.), belonging to: Sparta, prominent city-state in ancient Greece, situated on banks of the River Eurotas (also spelled Evrotas), referring to its occurrence in present-day Peloponnese



Turcichondrostoma fahirae. From: Ladiges, W. 1960. Süßwasserfische der Türkei, I. Teil Cyprinidae. Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut 58: 105–150.

Turcichondrostoma

Turan, Küçük, Güçlü & Aksu 2021

Turcia, Latin for Turkey, where *T. fahirae* is endemic, i.e., a Turkish *Chondrostoma* (previous genus)

***Turcichondrostoma fahirae* (Ladiges 1960)** in honor of Turkish zoologist Fahire Battalgazi (formerly Battalgil, 1902–1948), under whose research program holotype was collected

Vimba

Fitzinger 1873

tautonymous with *Cyprinus vimba* Linnaeus 1758, presumably derived from its Swedish vernacular, *vimma*

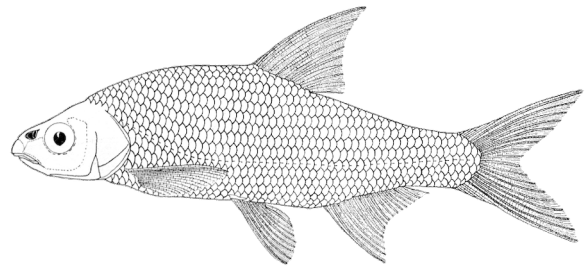
***Vimba melanops* (Heckel 1837)** *mélanos* (Gr. μέλανος), genitive of *mélas* (μέλας), black; *óps* (Gr. ὄψ), face or appearance, presumably referring to its overall dark coloration

***Vimba mirabilis* (Ladiges 1960)** Latin for extraordinary or singular, referring to its distribution in western Anatolia, far from normal distribution of its presumed congeners in *Acanthobrama* (e.g., eastern Anatolia, Syria, Palestine)

***Vimba persa* (Pallas 1814)** Latin for a Persian, referring to its occurrence in Iran (southern Caspian Sea drainage)

***Vimba tenella* (Nordmann 1840)** Latin for somewhat tender or delicate, referring to its small size (“barely reaching five inches,” the smallest *Abramis* [original genus] Nordmann knew of), and/or its small, thin scales [often misspelled *tenellus*; treated as a subspecies or junior synonym of *V. vimba* by some workers]

***Vimba vimba* (Linnaeus 1758)** presumably derived from its Swedish vernacular, *vimma*



Vimba mirabilis. From: Ladiges, W. 1960. Süßwasserfische der Türkei, I. Teil Cyprinidae. Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut 58: 105–150.