

CHECK LIST OF FISHES OF GEORGIA

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Abstract. Investigations of the ichthyofauna of Georgia began in the XVIII-XIX centuries [10, 19,29-31,33,41,43,44,60,64], but no faunistic lists of the fish species of the country have been published until now. The present ichthyofauna of Georgia comprises 167 species, belonging to 3 subgenera, 109 genera, 5 tribes, 9 subfamilies, 57 families, 13 suborders, 25 orders, 5 superorders, 2 subclasses, 3 classes and 2 superclasses. Among them 61 are freshwater inhabitants, 76 live in marine water and 30 species are migratory. Terminology follows modern systematic classification and the Global information system on fishes [7,71]. The following abbreviations are used: BS- Black Sea, BSB- Black Sea Basin, BSE- Black Sea everywhere, BSC- Black Sea Coast, BSCE- Black Sea coast everywhere, BSCC- Black Sea Coast of Caucasus, Riv.- river, Res. - reservoir, L.-lake.

Key words: freshwater, marine, migratory fishes, Georgia

Superclass *Agnatha*, Jawless fish

Class *Cephalaspidomorphi*

Order *Petromyzontiformes*, Lampreys

Family *Petromyzontidae* Bonaparte, 1831, Lampreys

Genus *Caspiomyzon* Berg, 1906, Caspian lampreys

1. *Caspiomyzon wagneri* (Kessler, 1870), Caspian lamprey

Distribution: Before building the Mingechauri Reservoir was frequent. Today is rare [2,3,5,45,61].

Genus *Eudontomyzon* Regan, 1911, Brook lampreys

2. *Eudontomyzon mariae* (Berg, 1931), Ukrainian brook lamprey

Distribution: Riv: Chorokhi, Chakvistiskali, Chaisubani, Khobi, Tsivi, Enguri, Kodori, Kelasuri, Gumista, Bzipi [2,3,5,7,45,61].

Class *Elasmobranchii* Bonaparte, 1838, Rays and sharks

Superorder *Squalomorphi*, Sharks

Order *Squaliformes* Goodrich, 1909, Bramble, Sleeper and dogfish sharks

Family *Squalidae* Blainville, 1816, Dogfishes, Dogfish sharks

Genus *Squalus* Linnaeus, 1758, Spiny dogfishes, Spurdogs

3. *Squalus acanthias* Linnaeus, 1758, Piked dogfish, Spurdog

Distribution: BSE. [4, 69,70].

Superorder *Batoidea*, Torpedoes, Skates and rays

Order *Rajiformes*, Skates and rays

Family *Rajidae* Bonaparte, Rays, Skates

Genus *Raja* Linnaeus, 1758, Rays, Skates

4. *Raja clavata* Linnaeus, 1758, Thornback ray (roker)

Distribution: BSCE [4,69,70].

Family *Dasyatidae* (*Trygonidae*) Jordan et Evermann, Stingrays and whiprays

Genus *Dasyatis* Rafinesque, 1810, Stingrays, Roundrays

5. *Dasyatis pastinaca* (Linnaeus, 1758), Common stingray

Distribution: BSCE [4,69].

Superclass *Gnathostomata*, Jawmouth

Teleostomi Bonaparte, 1836

Class *Actinopterygii* Klein, 1885, Ray-finned fishes

Subclass *Chondrostei*, Cartilage ganoids

Order *Acipenseriformes* Berg, 1940, Sturgeons and paddlefishes

Suborder *Acipenseroidei*, Sturgeons

Family *Acipenseridae* Bonaparte, 1831, Sturgeons

Genus *Acipenser* Linnaeus, 1758, Sturgeons

6. *Acipenser sturio* Linnaeus, 1758, Sturgeon
Distribution: South-East part of BS [2,4,7,9,28,42,49,51,54,65].
7. *Acipenser nudiventris* Lovetsky, 1828, Fringebarbel sturgeon
Distribution: South-East part of BS [2-4,7,10, 28,30,33,42,49,51,54,55,57,58,64,65,69].
8. *Acipenser stellatus* Pallas, 1771, Starry sturgeon
Distribution: South-East part of BS [2-4,7,10,28,30,33,42,49,51,54,55,57,58,64,65,69].
9. *Acipenser gueldenstaedtii* Brandt & Ratzeburg, 1833, Russian sturgeon
Distribution: South-East part of BS [2-4,7,10, 30,33, 42,49,51,54,55,57,58,64,65,69].
10. *Acipenser g. colchicus* Marti, 1940, Colchian Sturgeon
Distribution: South-East part of BS [2-4,7,28,42,49,51,54,55,57,58,64,65,69].
11. *Acipenser g. persicus* Borodin, 1897, Persian sturgeon
Distribution: South-East part of BS [2-4,7,42,49,51,54,55,57,58,64,65,69].
- Genus *Huso* Brandt et Ratzeburg, 1833, Great (huso) sturgeons**
12. *Huso huso* (Linnaeus, 1758), Beluga
Distribution: South-East part of BS [2-4,7,28,30, 42,49,51,54,55,57,58,64,65,69].
Subclass *Neopterygii*, Newfin fishes
Division *Teleostei*, Bony fishes
Subdivision *Elopomorpha*
Order *Anguilliformes*, Eels and morays
Suborder *Anguilloidei*, Eels
Family *Anguillidae* Rafinesque, 1815, Freshwater eels
Genus *Anguilla* Schrank, 1798, Freshwater eels
13. *Anguilla anguilla* (Linnaeus, 1758), European eel
Distribution: Riv: Chorokhi, Kintrishi, Supsa, Rioni, Khobi, Tsivi, Churia, Enguri, Kodori, Besleti, Gumista, Bzipi. L: Paliastomi. Rare. [7,28,61].
Family *Congridae (Leptocephalidae)*, Regan, 1912).
Genus *Conger* Schaeffer, 1760, Congers, Conger eels
14. *Conger conger* (Linnaeus, 1758), Conger eel
Distribution: In Georgia is rare, few numbers [69].
Subdivision *Clupeomorpha*
Order *Clupeiformes* Bleeker, 1859, Herrings
Suborder *Clupeoidei*, Herrings
Family *Engraulidae* Ridewood, 1905, Anchovies
Genus *Engraulis* Cuvier, 1816, Anchovies
15. *Engraulis encrasicolus ponticus* Alesandrov, 1927, Black sea anchovy
Distribution: West and East part of BS [1,5,7,28,66,67,69].
16. *Engraulis encrasicolus maeoticus* Pusanov, 1926, Azov sea anchovy
Distribution: BSC [1,5,7,66,67,69].
Family *Clupeidae* Cuvier, 1816, Herrings, Shads, Sardines
Genus *Alosa* Linck, 1790, Allises, Shads
17. *Alosa caspia palaeostomi* (Sadowsky, 1934), Paliastomi shad
Distribution: BS, L: Paliastomi [3, 4, 7, 29, 69].
18. *Alosa tanaica* (Grimm, 1901), Azov shad
Distribution: BSC, L: Paliastomi. [3, 4, 7, 29, 69].
19. *Alosa immaculata* Bennett, 1835, Pontic shad
Distribution: BSC, L: Paliastomi [3, 4, 7, 29, 69].
Genus *Clupeonella* Kessler, 1877, Kilkas
20. *Clupeonella cultriventris* (Nordmann, 1840), Black Sea sprat, Common kilka
Distribution: BSC, L: Paliastomi [7,69].
Genus *Sprattus* Girgensohn, 1846, Sprats
21. *Sprattus sprattus sprattus* (Linnaeus, 1758), European sprat
Distribution: BSE [7,69].
Subdivision *Euteleostei*, Veritable (true) bony fishes
Superorder *Ostariophysii*, Bonycystics
Series *Otophysi*

Order *Cypriniformes* Berg, 1940, Carps
Family *Cyprinidae* Fleming, 1822, Minnows or carps
Subfamily *Acheilognathinae* Bleeker, 1863, Bitterlings
Genus *Rhodeus* Agassiz, 1832, Bittrelings

22. *Rhodeus sericeus* (Pallas, 1776), Bitterling

Distribution: Every Riv, L. and Res. [4,5,7,21,59].

23. *Rhodeus colchicus* Bogutskaya et Komlev, 2001

Distribution: Every Riv, L. and Res. [6,58].

Subfamily *Barbinae* Bleeker, 1859, Barbels

Genus *Barbus* Cuvier, 1816, Barbels, Barbs

24. *Barbus escherichii* Steindachner, 1897, Barb

Distribution: Riv., L. and Res. of west Georgia [2-5,7,14,20-29,32,37,38].

25. *Barbus lacerta* Heckel, 1843, Kura barbel

Distribution: East Georgia, Riv: Mtkvari and its tributaries. L: Jandara, Paravani, Sagamo-few numbers.
Res: Khrami, Tbilisi, Sioni [2-5,7,13,17,20-29,32,38].

26. *Barbus capito capito* (Gueldenstaedtii, 1772), Bulatmai barbel

Distribution: Riv. Mtkvari and its tributaries. L: Jandara. Res: Tbilisi [2-5,7,14,15,17,20-29,32].

27. *Barbus mursa* (Gueldenstaedtii, 1773), Mursa

Distribution: Riv. Mtkvari and its tributaries, Iori. Res:Tbilisi, Sioni – rare. [2-5,7,15-17,20-29,32,38].

Genus *Capoeta* Valenciennes, 1842, Khramulyas

28. *Capoeta capoeta* (Gueldenstaedtii, 1773), Khramulya, Transcaucasian barb

Distribution: Riv: Mtkvari (up and down stream), Okumi, Liakhvi, Ksani, Aragvi, Khrami and its tributaries, Debeda, Mashavera, Alazani and its tributaries, Iori. L: Jandara, Bazaleti. Res: Tbilisi, Sioni [3,4,7,13,15,17,20,22,28, 29,35,41,46].

29. *Capoeta capoeta sevangi* de Filippi, 1865, Sevan khramulya

Distribution: L: Paravani, Sagamo, Tabatskuri. Res: Khrami, Tbilisi, Tkibuli [2-5,7,13-17,20-29,32].

30. *Capoeta tinca* (Heckel, 1843), Anatolian khramulya

Distribution: R: Chorokhi, Supsa, Rioni and their tributaries [2-5,7,15-17,20-29,32].

31. *Capoeta sieboldi* (Steindachner, 1864), Colchian khramulya

Distribution: Every Riv., L. and Res [2-5,7,15-17,20-29,32].

Subfamily *Ctenopharyngodoninae* Hosoya, 2002, Grass carps

Genus *Ctenopharyngodon* Steindachner, 1866, Grass (Chinese) carps

32. *Ctenopharyngodon idella* (Valenciennes, 1844), Grass carp

Distribution: Acclimatized in 1962. L: Jandara, Kumisi, Lisi. Ponds of Japana [7,29].

Subfamily *Cyprininae* Bonaparte, 1831, Carps

Genus *Carassius* Jarocki, 1822, Crucian carps

33. *Carassius carassius* (Linnaeus, 1758), Crucian carp

Distribution: Everywhere [3-5,7,11,28,29,40].

Genus *Cyprinus* Linnaeus, 1758, Carps

34. *Cyprinus carpio* Linnaeus, 1758, Common carp

Distribution: Riv: Alazani, Bzipi, Iori, Aragvi, Kodori, Enguri, Rioni. L: Paravani, Paliastomi, Bazaleti, Res: Tbilisi, Shaori. Reservoirs of Achara [5,7,21,28,29,52].

Subfamily *Gobioninae* Jordan et Fowler, 1903, Gudgeons

Genus *Gobio* Cuvier, 1816, Gudgeons, Gobies

35. *Gobio lepidolaemus caucasica* Kamensky, 1901, Gudgeon

Distribution: Riv: Chorokhi, Natanebi, Supsa, Rioni, Khobi, Churia, Enguri, Kodori, Bzipi. L: Paliastomi. Res: Tkibuli [3,5,7,29,56].

Genus *Romanogobio* Bănărescu, 1961, Rumanian gudgeons

36. *Romanogobio persus* (Günther, 1899), Kura gudgeon

Distribution: Riv: Mtkvari and its tributaries. L: Jandara. Res: Tbilisi, Sioni [3,5,7,29].

Genus *Pseudorasbora* Bleeker, 1859, Stone morocos

37. *Pseudorasbora parva* (Temminck et Schlegel, 1846), Stone moroco

Distribution: Riv. Iori, Alazani and others. L: Bazaleti, Jandara. Res: Kumasi, Algeti, Tkibuli, Shaori [47,48,68].

Subfamily *Leuciscinae* Bonaparte, 1837, Daces

Tribe *Abramidini* Dybowski, 1862

Genus *Abramis* Cuvier, 1816, Breams

38. *Abramis brama* (Linnaeus, 1758), Common bream
Distribution: Riv: Supsa, Rioni, Tekhura, Churia, Tikori, Enguri. L: Paliastomi, Nabada [3-5,7,28,29].
39. *Abramis brama orientalis* Berg, 1949, Eastern bream
Distribution: Riv: Mtkvari (up to Tbilisi), Khrami, Algeti, Alazani, Iori. L: Jandara. Res: Tbilisi [3-5,7,28,29].

Genus *Ballerus* Heckel, 1843, Zopes

40. *Ballerus sapa* (Pallas, 1814), Zope
Distribution: Riv. Mtkvari, Alazani [3-5,7,28,29].

Genus *Blicca* Heckel, 1843. White (silver) breams

41. *Blicca bjoerkna* (Linnaeus, 1758), Silver bream
Distribution: Freshwaters of BSC. Riv: Rioni, Tekhuri, Enguri. L: Paliastomi, Nabada, Bebesiri [3-5,7,28,29,56].
42. *Blicca bjoerkna transcaucasica* Berg, 1916, Transcaucasian bream
Distribution: Riv: Mtkvari, Iori (down stream), Alazani (middle and down streams). L: Jandara [3-5,7,28,29].

Tribe *Alburnini* Girard, 1859

Genus *Alburnoides* Jeitteles, 1861, Riffle minnows

43. *Alburnoides bipunctatus* (Bloch, 1782)(=*Alburnoides bipunctatus eihwaldi*, Filippi, 1863), Spirlin, Riffle minnow
Distribution: Riv: Mtkvari and its tributaries. L: Paravani, Sagamo, Khanchali, Bazaleti, Jandara. Res: Tbilisi, Pildo, Sioni. [3-5,7,28,29].
44. *Alburnoides bipunctatus fasciatus* (Nordmann, 1840), South minnow
Distribution: South part of Georgia, everywhere [3-5,7,28,29].

Genus *Alburnus* Rafinesque, 1820, Bleaks

45. *Alburnus alburnus* (Linnaeus, 1758), Bleak
Distribution: Riv: Rioni, Tekhura, Churia, Tikori, Kelasuri, Gumista, Besleti [14, 27-29].
46. *Alburnus hohenackeri* Kessler, 1877, North Caucasian bleak
Distribution: Riv: Alazani, Iori. Res: Tbilisi [27-29].
47. *Alburnus filippi* Kessler, 1877, Kura bleak
Distribution: Riv: Mtkvari, Alazani and their tributaries. L: Jandara, Res: Tbilisi, Sioni [8,27-29].

Genus *Acanthalburnus* Berg, 1916, Black-brows

48. *Acanthalburnus microlepis* (De Filippi, 1863), Blackbrow bleak
Distribution: Mtkvari (upper and down streams) and its tributaries. L: Jandara. Res: Tbilisi [8,27-29].

Genus *Chalcalburnus* Berg, 1932, Royal fishes, Shemayas

49. *Chalcalburnus chalcoides* (Gueldenstaedtii, 1772), Danube bleak, Caspian shemaya
Distribution: Riv: Mtkvari, Iori, Alazani. L: Jandara. Res: Tbilisi [8,27-29].
50. *Chalcalburnus chalcoides* derjugini (Berg, 1923), Shemaya of Batumi
Distribution: West Georgia, waters of Achara [27-29,52].

Tribe *Hypophthalmichthyini* Günter, 1868, Silver carps

Genus *Aristichthys* Oshima, 1919, Bigheads

51. *Aristichthys nobilis* (Richardson, 1845), Bighead carp
Distribution: Introduced in 1962 year in ponds of Japana. L: Jandara, Lisi, Kumisi [7,8,28,29,47].

Genus *Hypophthalmichthys* Bleeker, 1859, Silver carps

52. *Hypophthalmichthys molitrix* (Valenciennes, 1844), Silver carp
Distribution: Ponds of Japana. L: Jandara, Lisi, Kumisi [7,8,28,29,47].

Tribe *Leuciscini* Bonaparte, 1846

Genus *Aspius* Agassiz, 1832, Asps

53. *Aspius aspius* (Linnaeus, 1758), Asp
Distribution: BSB. Riv: Rioni, Enguri, Mtkvari [28,29].
54. *Aspius aspius taeniatus* (Eichwaldi, 1831), Caspian asp
Distribution: Riv: Alazani, Mtkvari, Khrami, Iori. L: Jandara. Res: Tbilisi [28,29].

Genus *Chondrostoma* Agassiz, 1832, Nasen

55. *Chondrostoma colchicum* Derjugin, 1899, Colchic nase, Colchian undermouth
Distribution: South Georgia. L: Paliastomi [3-5,7, 22, 28,29].
56. *Chondrostoma cyri* Kessler, 1877, Kura nase

Distribution: Riv: Mtkvari, Ksani, Liakhvi, Khrami, Iori, Alazani, Aragvi. Res: Tbilisi [3-5,7, 13, 28,29].

Genus *Leuciscus* Cuvier, 1816, Daces

57. *Leuciscus leuciscus* (Linnaeus, 1758), Common dace

Distribution: Rivers of BSB [3-5,7,22, 28,29].

Genus *Petroleuciscus* Bogutskaya, 2002

58. *Petroleuciscus borysthenicus* (Kessler, 1859)(= *Luciscus borysthenicus* (Kessler, 1859) Dnieper chub

Distribution: Riv: Chorokhi, Kintrishi, Rioni, Khobi, Churia, Enguri, Kodori, Shavtskala, Bzipi. L: Nuriageli, Paliastomi, Inkiti [3-5,7, 28,29].

Genus *Rutilus* Rafinesque, 1820, Roachs

59. *Rutilus rutilus* (Linnaeus, 1758), Roach

Distribution: BSB, Riv: Rioni, Tekhura, Enguri, Tikori, Churia, Khobi. L: Nabada, Bebesiri, Paliastomi. [4,7,28,29].

60. *Rutilus rutilus kurensis* Berg, 1932, Kura roach

Distribution: Riv: Mtkvari, Khrami, Iori, Alazani. L: Jandara. Res: Tbilisi [3-5,7, 28,29].

61. *Rutilus frisii* (Nordmann, 1840), Kutum, Black Sea roach

Distribution: BS (near Kobuleti), Riv: Dgamishi. L: Paliastomi (few numbers) [3-5,7, 28,29].

Genus *Scardinius* Bonaparte, 1837, Rudds

62. *Scardinius erythrophthalmus* (Linnaeus, 1758), Rudd

Distribution: Gulf of Kodori. Riv: Chorokhi, Rioni, Enguri (BSC). L: Nuriageli, Paliastomi, Bebesiri [3,4,7,24,28].

Genus *Squalius* Bonaparte, 1837, Chubs

63. *Squalius cephalus* (Linnaeus, 1758) (= *Leuciscus cephalus orientalis* Nordmann, 1840), European chub

Distribution: All Rivers, lakes and reservoirs [3-5,7, 28,29].

Genus *Vimba* Fitzinger, 1873, Vimbas, Zantes

64. *Vimba vimba* (Linnaeus, 1758), Vimba

Distribution: Riv: Chorokhi, Chakvistskali, Kintrishi, Natanebi, Rioni, Khobi, Tsivi, Churia, Tikori, Enguri, Kodori, Shavtskala, Bzipi, Psou. L: Paliastomi, Shavnabada [3,4,7,24,25].

Tribe *Pseudaspinini* Bogutskaya, 1990

Genus *Phoxinus* Rafinesque, 1820, Minnows

65. *Phoxinus phoxinus colchicus* Berg, 1910, Eurasian minnow

Distribution: Riv: Chelta, Chorokhi, Korolistkali, Chakvistskali, Kintrishi, Supsa, Bakhvistskali, Kodori, Psou, Tetri, Shavi [7,28,29]

Subfamily *Tincinae* Kryzhanovsky, 1947, Tenches

Genus *Tinca* Cuvier, 1816, Tenches

66. *Tinca tinca* (Linnaeus, 1758), Tench

Distribution: Riv: Mtkvari, Supsa, Rioni, Kodori. L: Paliastomi, Bebesiri. Waters of Achara [7,28,52].

Family *Cobitidae* Swainson, 1839, Loaches

Genus *Cobitis* Linnaeus, 1758, Spined loaches

67. *Cobitis satunini* Gladkov, 1935

Distribution: Almost all rivers, lakes and reservoirs [5,7,28].

Genus *Sabanejewia* Vladykov, 1929, Loaches of Sabanejewia

68. *Sabanejewia aurata aurata* (De Filippi, 1863), Goldside loach

Distribution: Riv: Mtkvari, Iori, Alazani and their tributaries, Khrami, Aragvi, Ksani, Liakhvi. L: Jandara. Res: Tbilisi, Pildo, Sioni [5,7,20,28].

Family *Balitoridae* Swainson, 1839, River loaches

Genus *Barbatula* Linck, 1790, Whiskered loaches

69. *Barbatula angorae* (Steindachner, 1897), Angora loach

Distribution: Riv: Mtkvari Basin(upper stream), Supsa, Chorokhi, Enguri, Sakraula. Reservoirs of Achara. [23,27-29,52].

70. *Barbatula barbatulus caucasicus* Berg, 1899

Distribution: Riv: Arguni, tributary of Terek [29].

Family *Balitoridae* Swainson, 1839, River loaches

Subfamily *Nemacheilinae*

Genus *Oxynoemacheilus* Banareescu et Nalbant, 1966

71. *Oxynoemacheilus brandtii* (Kessler, 1877), Kura stone loach
 Distribution: Rivers of Mtkvari Basin. L: Jandara, Pildo. Res Tbilisi, Sioni. [15-17].
Order *Siluriformes*, Sheatfishes, Catfishes, Nematognathus
Family *Siluridae* Cuvier, 1816, Sheatfishes, Welses, Silurid catfishes
Genus *Silurus* Linnaeus, 1758, Sheatfishes, Welses
72. *Silurus glanis* Linnaeus, 1758, Wels catfish, Wels, European catfish
 Distribution: Almost every rivers of BSB. L: Paliastomi, Bebesiri. Frequent in South Georgia [3-5,28,29].
Superorder *Protacanthopterygii*
Order *Esociformes*, Pikes and mudminnows
Family *Esocidae* Cuvier, 1816, Pikes, Pickerels
Genus *Esox* Linnaeus, 1758, Pikes
73. *Esox lucius* Linnaeus, 1758, Northern pike
 Distribution: BSC. Delta of Rioni, Riv: Tekhura, Abasha, Okumi, Kodori, Besleti, Khobi, Tsivi, Churia. L: Paliastomi, Nabada, Bebesiri, Skurcha [3-5,28,29].
Order *Salmoniformes*, Salmonids
Family *Coregonidae* Cope, 1872, Whitefishes
Genus *Coregonus* Linnaeus, 1758, Ciscos, Whitefishes
Subgenus *Cisco* Jordan, Evermann, 1911, Whitefishes, Ciscos
74. *Coregonus albula* (Linnaeus, 1758), European cisco, Vendace
 Distribution: In 1930 was introduced from Volkhov reservoir (Russia, L: Ladoga) to L: Paravani, Tabatskuri [3-5,7,15,18, 28,29,36,39,47,53].
Subgenus *Coregonus* Linnaeus, 1758, Whitefishes
75. *Coregonus lavaretus* (Linnaeus, 1758), Common whitefish, European (Baltic sea) whitefish
 Distribution: Introduced in L: Paravani, Tabatskuri. Nowadays is vulnerable [18,36,47].
Subgenus *Leucisithys* Dybowski, 1874, Omuls
76. *Coregonus peled* (Gmelin, 1789), Peled
 Distribution: Introduced fertilized eggs from Volkhov hatchery (Russia, L: Ladoga) to L: Kumisi, Kondoli. Lakes and reservoirs of Abasha region. Today is vulnerable [18,36,47].
Family *Salmonidae* Cuvier, 1816, Salmon, Salmonid fishes
Genus *Oncorhynchus* Suckley, 1861, Pacific salmon
77. *Oncorhynchus mykiss* (Walbaum, 1792), Rainbow trout
 Distribution: In 1936-1940 years was introduced from Kurski province (Russian Federation) to East Georgia. [3,5,27-29].
Genus *Salmo* Linnaeus, 1758, Salmon
78. *Salmo trutta* Linnaeus, 1758, Trout (Sea trout, Brown trout)
 Distribution: Every mauntinian rivers and lakes [16,20-29].
79. *Salmo labrax* Pallas, 1814 (= *Salmo trutta labrax* Pallas, 1814), Black Sea salmon
 Distribution: Gulf of Rioni. Riv: Chorokhi, Kintrishi, Enguri, Khobi, Kodori, Gumista, Shavi, Bzipi [24-29].
80. *Salmo caspius* (Kessler, 1877), Caspian salmon
 Distribution: Before building of Mingechauri reservoir (1953-1965) was frequent (coming for spawning to river Mtkvari) [27-29].
Order *Gadiformes*, Cods, Soft-finned fishes
Family *Lotidae* Bonaparte, 1837, Hakes and burbot
Genus *Gaidropsarus* Rafinesque 1815, Rocklings
81. *Gaidropsarus mediterraneus* (Linnaeus, 1758), Shore (Mediterranean) rockling
 Distribution: BS (common for stony coasts) [4,7,69].
Genus *Merluccius* Rafinesque, 1810, Merluccid hakes, whittings
82. *Merluccius merluccius* (Linnaeus, 1758), Hake
 Distribution: South part of BS [4,7,69].
Genus *Odontogadus* Gill, 1863, Whiting
83. *Odontogadus merlangus euxinus* (Nordmann, 1840), Whiting
 Distribution: BSC [4,7,69].
Superorder *Acanthopterygii*, Pickedfins
Series *Mugilomorpha*

Order Mugiliformes, Mullet-like fishes

Family Mugilidae Bonaparte, 1831, Gray mullets

Genus Mugil Linnaeus, 1758, Gray mullets

84. *Mugil cephalus* Linnaeus, 1758, Flathead mullet

Distribution: BSC. Rivers of Caucasus. L: Pitsunda, Paliastomi. Freshwater lakes of Achara [4,7,12,28,69].

85. *Mugil soiyu* Basilewsky, 1855, So-iuy mullet

Distribution: BSC. Freshwater parts of rivers and lakes of BSB [4,7,28,69].

Genus Liza Jordan et Swain, 1884

86. *Liza aurata* (Risso,1810), Golden grey mullet

Distribution: BS. L: Paliastomi [4,7,28,69].

87. *Liza saliens* (Risso, 1810), Leaping grey mullet

Distribution: BSC. Freshwater parts of rivers and lakes of BSB [4,7,28,69].

Family Sphyraenidae Röse, 1793, Barracudas, Sea pikes

Genus Sphyraena Röse, 1793, Barracudas, Sea pikes

88. *Sphyraena sphyraena* (Linnaeus, 1758), European barracuda, spet

Distribution: BS, rare [69].

Family Centranchidae (Maenidae), Pickerels

Genus Spicara Rafinesque, 1810, Pickerels

89. *Spicara smaris* (Linnaeus, 1758), High-body pickerel

Distribution: BSCE [69].

Family Pomacentridae, Damselfishes, Anemonfishes, Coralfishes

Genus Chromis Cuvier, 1815, Chromises, Reef fishes, Pullers

90. *Chromis chromis* (Linnaeus, 1758), Blue damselfish, Barfish

Distribution: BSC [69].

Order Atheriniformes, Silversides

Suborder Atherinoidei, Silversides

Family Atherinidae Risso, 1827, Silversides, Hardy-heads

Genus Atherina Linnaeus, 1758, Atherines, Silversides, Sand smelts

91. *Atherina mochon pontica* Eichwald, 1831, Silverside, Big-scale sand smelt

Distribution: South, East and North BSC [69].

92. *Atherina bonapartei* Boulenger, 1904.

Distribution: BSCC [69].

Order Beloniformes Berg, Syntognaths

Family Belonidae Gill, Needle-fishes, Garfishes

Genus Belone Cuvier, 1817, Needlefishes, Garfishes

93. *Belone belone* euxini Gunther, 1811, Garfish

Distribution: BSCE [7,69].

Order Cyprinodontiformes, Cyprinodont(oid)s

Family Poeciliidae Swainson, 1839, Live bearers, Mosquito fishes

Genus Gambusia Poey, 1854, Mosquito fishes, Topminnows

94. *Gambusia affinis holbrooki* (Girard, 1859), Mosquito fish, Topminnow

Distribution: BSC, freshwater regions [43,47].

Order Gasterosteiformes, Sticklebacks and tubesnouts

Family Gasterosteidae Bonaparte, 1831, Sticklebacks

Genus Gasterosteus Linnaeus, 1758, Sticklebacks

95. *Gasterosteus aculeatus* Linnaeus, 1758, Three-spined stickleback, Tidder

Distribution: Brackish places of BS and deltas of its rivers [4,7,69].

Order Syngnathiformes, Pipefishes and seahorses

Suborder Syngnathoidei, Pipefishes

Family Syngnathidae Bonaparte, 1831, Pipefishes, Seahorses

Genus Nerophis Rafinesque, 1810, Straight-nose pipefishes

96. *Nerophis ophidion* (Linnaeus, 1758), Straight-nose pipefish

Distribution: BSC [3-5,7,29,69].

Genus Syngnathus Linnaeus, 1758, Pipefishes

97. *Syngnathus typhle* Linnaeus 1758, Deep-snouted pipefish

Distribution: BSC [3-5,7,29,69].

98. *Syngnathus variegatus* Pallas, 1814

Distribution: BSCC [3-5,29,69].

99. *Syngnathus tenuirostris* Rathke 1837, Narrow-snouted pipefish

Distribution: BSCC [3-5,29,69].

100. *Syngnathus schmidtii* Popov, 1927, Pipefish

Distribution: BSCC [3-5,7,29,69].

101. *Syngnathus abaster* Risso, 1827, Black-striped pipefish (= *Syngnathus nigrolineatus* Eichwald 1831).

Distribution: BSCC [3,5,69].

Genus *Hippocampus* Rafinesque, 1810, Seahorses

102. *Hippocampus guttulatus* Cuvier, 1829, Long-snouted seahorse (= *Hippocampus microstephanus* Slastenenko, 1937).

Distribution: BSCC [29,69].

Order *Scorpaeniformes*, Scorpion fishes and flatheads

Suborder *Scorpaenoidei*, Scorpion fishes

Family *Scorpaenidae* Risso, 1826, Scorpionfishes, Rockfishes

Genus *Scorpaena* Linnaeus, 1758, Scorpion fishes

103. *Scorpaena porcus* Linnaeus, 1758, Black scorpionfish, Small-scaled scorpion fish, Sea scorpion

Distribution: BSCE [29,69].

Family *Triglidae* Regan, 1913, Saerobins, Grondins, Gurnards

Genus *Trigla* Linnaeus, 1758, Gurnards, Crowners, Tubbots, Latchets

104. *Trigla gurnardus* Linnaeus, 1758 (= *Eutrigla gurnardus* (Linnaeus, 1758)), Gray gurnard

Distribution: South-West part of BS [69].

105. *Trigla lucerna* Linnaeus, 1758 (= *Chelidonichthys lucernus* (Linnaeus, 1758)), Yellow gurnard, tubfish

Distribution: BS, rare [28,69].

Order *Zeiformes*, Dories

Family *Zeidae* Bonaparte, 1899, Dories

Genus *Zeus* Linnaeus, 1758, Joyh dories

106. *Zeus faber* Linnaeus, 1758, John dory (= *Zeus pungio* Valenciennes, 1835)

Distribution: BS, rare [7,29,69].

Order *Perciformes*, Perch-likes

Family *Sparidae*, Porgies

Genus *Diplodus* Rafinesque, 1810, Sea breams

107. *Diplodus annularis* (Linnaeus, 1758), Annular seabream

Distribution: BSCE [69].

Genus *Puntazzo* Bleeker, 1876, Puntazzos

108. *Puntazzo puntazzo* (Cetti, 1784) (= *Diplodus puntazzo* (Cetti, 1777)), Puntazzo, sharp-snouted

Distribution: BSC [69].

Genus *Boops* Cuvier, 1815, Bogue, Striped bigeye

109. *Boops boops* (Linnaeus, 1758), Bogue

Distribution: BSCC [69].

110. *Boops salpa* (Linnaeus, 1758)

Distribution: BSCC [69].

Family *Mullidae*, Goatfishes, Surmulletts, Redmulletts

Genus *Mullus* Linnaeus, 1758, Goatfishes, Mulletts, Surmulletts

111. *Mullus barbatus ponticus* Essipov, 1927, Blunt-snouted mullet

Distribution: BSCE [4,69].

Family *Moronidae* Johnson, 1984, Perches

Genus *Morone* Mitchill, 1814, Striped perches

112. *Morone labrax* (Linnaeus, 1758), European seabass

Distribution: BS, rare [4,5,69].

Family *Serranidae*, Sea basses

Genus *Serranus* Cuvier, 1817, Combers

113. *Serranus scriba* (Linnaeus, 1758), Painted comber

Distribution: BSCC [4,5,69].

- Family Percidae** Cuvier, 1816, Perches, Darters
Genus Perca Linnaeus, 1758, River perches
114. *Perca fluviatilis* Linnaeus, 1758, River perch
 Distribution: Rivers of west Georgia [4,5,69].
Genus Sander Oken, 1817, Pike-perches
115. *Sander lucioperca* (Linnaeus, 1758), Pike-perches
 Distribution: BSCE. Few numbers in rivers [3,5,7].
Family Pomatomidae Regan, 1913, Bluefishes, Greenfishes
Genus Pomatomus Lacepede, 1802, Bluefishes
116. *Pomatomus saltatrix* (Linnaeus, 1758), Bluefish, Elf, Greenfish
 Distribution: BSC [69].
Family Carangidae Regan, 1913, Jacks, Horse mackerels, Queenfishes
Genus Trachurus Rafinesque, 1810, Horse mackerels
117. *Trachurus mediterraneus ponticus* Aleev, 1956, Mediterranean horse mackerel
 Distribution: BSCE [63,69].
118. *Trachurus trachurus* (Linnaeus, 1758), Atlantic horse mackerel
 Distribution: BSC, rare [63,69].
Family Sciaenidae Regan, 1913, Croakers
Genus Sciaena Linnaeus, 1758, Drums, Meagres
119. *Sciaena umbra* Linnaeus, 1758, Brown meagre
 Distribution: BSCE [3,69].
Genus Umbrina Cuvier, 1817, Umberfishes
120. *Umbrina cirrosa* (Linnaeus, 1758), Shi drum, Bearded umbrine
 Distribution: BSCE [3,69].
Family Sparidae Regan, 1913, Porgies
Genus Pagellus Cuvier, 1829, Pandoras
121. *Pagellus erythrinus* (Linnaeus, 1758), Common pandora
 Distribution: BSCC [69].
Genus Sparus Linnaeus, 1758, Sea breams
122. *Sparus aurata* Linnaeus, 1758, Gilthead seabream, Gilthead
 Distribution: BSCC [69].
Family Labridae Cuvier, 1816, Wrasses, Slippery dicks
Subfamily Labroidae
Genus Labrus Linnaeus, 1758, Wrasses
123. *Labrus viridis* Linnaeus, 1758, Green wrasse
 Distribution: BS, rare [69].
Genus Symphodus Rafinesque, 1810, Cork wings
124. *Symphodus tinca* (Linnaeus, 1758), East Atlantic peacock wrasse (= *Crenilabrus tinca* (Linnaeus, 1758))
 Distribution: BSCC, rare [69].
125. *Symphodus roissali* (Risso, 1810) (= *Crenilabrus roissali* (Risso, 1810)), Five-spotted wrasse
 Distribution: BSCC, rare [69].
126. *Symphodus cinereus* (Bonnaterre, 1788) (= *Crenilabrus cinereus* (Bonnaterre, 1788)), Grey wrasse
 Distribution: BSCC, rare [69].
127. *Symphodus ocellatus* (Forsskål, 1775) (= *Crenilabrus ocellatus* (Forsskål, 1775))
 Distribution: BSCC, rare [69].
128. *Symphodus rostratus* (Bloch, 1791) (= *Crenilabrus rostratus* (Bloch, 1791))
 Distribution: BS, rare, few numbers [28,69].
Family Trachinidae Regan, 1913, Weever fishes
Genus Trachinus Linnaeus, 1758, Weever fishes
129. *Trachinus draco* Linnaeus, 1758, Greater weever, Stingfish
 Distribution: BSCC [69].
Suborder Gobioidae, Gobies
Family Gobiidae Fleming, 1822, Gobies, Gudgeons
Genus Pomatoschistus Gill, 1863, Gobies
130. *Pomatoschistus marmoratus* (Risso, 1810), Marbled goby

Distribution: BSCC. L: Paliastomi [3-5,7,28,29,34, 52, 69].

Genus *Knipowitschia* Iljin, 1927

131. *Knipowitschia caucasica* (Berg, 1916)

Distribution: BSCC [3-5,7,28,29,34, 52, 69].

132. *Knipowitschia longicaudata* (Kessler, 1877)

Distribution: BSCC[3-5,7,28,29,34, 52, 69].

Genus *Mesogobius* Bleeker, 1874, Gobies

133. *Mesogobius batrachocephalus* (Pallas, 1814), Knout goby

Distribution: BSCC[3-5,7,28,29,34, 52, 69].

Genus *Neogobius* Iijin, 1927

134. *Neogobius (Ponticola) constructor* (Nordmann, 1840)

Distribution: Rivers of Georgia, everywhere [3,5,7,28,29].

135. *Neogobius (Neogobius) fluviatilis* (Pallas, 1814), Monkey Gob

Distribution: Gulfs of rivers of BSB [3-5,7,28,29,34, 52, 69].

136. *Neogobius (Babka) gymnotrachelus* (Kessler, 1857), Caspian goad goby

Distribution: Riv: Rioni, Supsa, Tskhenistsckali, Tekhuri, Abasha, Enguri. L: Paliastomi [3-5,7,23,24,28,29,34, 52, 59,69].

137. *Neogobius (Apollonia) melanostomus* (Pallas, 1814), Caspian round Gob

Distribution: BSC, rivers of Black sea basin. L: Paliastomi [3-5,7,28,29,34, 52, 69].

138. *Neogobius (Ponticola) ratan* (Nordmann, 1840), Rattan goby

Distribution: BSCC [3-5,7,28,29,34, 52, 69].

139. *Neogobius (Ponticola) platyrostris* (Pallas, 1814), Guban goby

Distribution: BSCC [3-5,7,28,29,34, 52, 69].

140. *Neogobius (Ponticola) syrman* (Nordmann, 1810), Syrman goby

Distribution: BSCC [3-5,7,28,29,34, 52, 69].

Genus *Zosterisessor* Whitley, 1935, Grass gobies

141. *Zosterisessor ophiocephalus* (Pallas, 1814), Grass goby

Distribution: BSCC [3-5,7,28,29,34, 52, 69].

Family *Uranoscopidae* Regan, 1913, Stargazers, Pufferfishes

Genus *Uranoscopus* Linnaeus, 1758, Stargazers

142. *Uranoscopus scaber* Linnaeus, 1758, Atlantic stargazer

Distribution: BSCC, everywhere [69].

Suborder *Blennioidei*

Family *Blenniidae* Rafinesque, 1810, Combtooth blennies, Rockskippers

Genus *Blennius* Linnaeus, 1758, Blennies

143. *Blennius sphynx* (Valenciennes, 1836), Spinx blenny

Distribution: BSCC [4,69].

144. *Blennius pavo* (Risso, 1810) (= *Salaria pavo* (Risso, 1810)), Peacock blenny

Distribution: BSCC[3-5,28,29,34, 52, 69].

145. *Blennius sanguinolentus* (Pallas, 1814) (= *Parablennius sanguinolentus* (Pallas, 1814)), Black Sea blenny

Distribution: BSCC, everwhere[3-5,28,29,34, 52, 69].

146. *Blennius tentacularis* (Brünnich, 1768) (= *Parablennius tentaculatrix* (Brünnich, 1768)), Tentacled blenny

Distribution: BSC (Bichvinta, Sokhumi, Batumi) [3-5,28,29,34, 52, 69].

147. *Blennius zvonimiri* (Kolombatovic, 1892) (= *Parablennius zconimiri* (Kolombatovic, 1892))

Distribution: BSC, frequent near Batumi [3-5,28,29,34, 52, 69].

Genus *Coryphoblennius* Norman, Montagu's blennies

148. *Coryphoblennius galerita* (Linnaeus, 1758), Montague's blenny

Distribution: BSC (Batumi, Sokhumi) [3-5,28,29,34, 52, 69].

Family *Tripterygiidae* Regan, 1912 Threefin blennies, Triplefins

Genus *Tripterygion* Risso, 1826, Triplefins

149. *Tripterygion tripteronotus* (Risso, 1810)

Distribution: BS, rare [3-5,28,29,34, 52, 69].

Suborder *Ammodytoidei*

Family *Ammodytidae* Bonaparte, Sand lances, Sand eels

- Genus** *Gymnammodytes* Duncker et Morh, 1935
150. *Gymnammodytes cicerellus* (Rafinesque, 1810), Mediterranean sand eel
Distribution: BSCC [69].
- Suborder** *Callionymoidei* Regan, 1913
Family *Callionymidae*, Dragonets, Stink fishes
Genus *Callionymus* Linnaeus, 1758, Dragonets, Stingfishes
151. *Callionymus risso* Lessueur 1824 (= *Callionymus balenus* Risso, 1827)
Distribution: BSC (Batumi, Sokhumi) [4,50,69].
152. *Callionymys pusillus* Delaroche, 1809 (= *Callionymus festivus* Pallas, 1811)
Distribution: BSC (Batumi, Akhali Atoni) [4,50,69].
153. *Callionymus lyra* Linnaeus, 1758, Dragonet
Distribution: BSC (Batumi, Akhali Atoni) [4,50,69].
- Suborder** *Scombroidei* Regan, 1909
Family *Scombridae* Rafinesque, Mackerels, Tunas, Bonitos
Genus *Thunnus* South, 1845, Tunas
154. *Thunnus thynnus* (Linnaeus, 1758), Bluefin tunny
Distribution: BSCC, rare [4,69].
- Genus** *Sarda* Cuvier, 1829, Bonitos
155. *Sarda sadra* (Bloch, 1793), Atlantic bonito
Distribution: From Mediterranean sea enters into BS [62,69].
- Genus** *Scomber* Linnaeus, 1758, Mackerels
156. *Scomber scombrus* Linnaeus, 1758, Mackerel
Distribution: BS [4,28,69].
- Family** *Xiphiidae* Regan, 1909, Sword fishes
Genus *Xiphias* Linnaeus, 1758, Sword fishes
157. *Xiphias gladius* Linnaeus, 1758, Swordfish
Distribution: From Mediterranean sea enters into BS, few numbers [69].
- Order** *Ophidiiformes*, Cusk eels
Suborder *Ophidiioidei* Regan, 1912
Family *Ophidiidae* Rafinesque [Brotulidae], Cusk-eels, Rocklings, Lings, Ophidiums
Genus *Ophidion* Linnaeus, 1758, Cusk-eels, Ophidiums
158. *Ophidion rochei* Müller, 1845, Snake blenny
Distribution: BSCC[69].
- Order** *Pleuronectiformes* Bleeker, 1859, Flatfishes
Family *Pleuronectidae* Rafinesque, 1815, Flatfishes, Right-eyed flounders, Halibuts
Genus *Platichthys* Girard, 1856, Flounders
159. *Platichthys flesus* (Linnaeus, 1758) (= *Platichthys flesus lussus* (Pallas, 1814)), Flounder
Distribution: North-West part BS, limans and lakes. Gulf of Riv: Chorokhi, Supsa, Rioni, Khobi, Churia, Tikori, Enguri. L: Paliastomi [4,7,28,29,69].
- Family** *Bothidae*, Lefteye flounders
Genus *Arnoglossus* Bleeker, 1862, Flounders, Scald-fishes
160. *Arnoglossus kessleri* Schmidt, 1915, Scaldback
Distribution: BSCC [4,28,69].
- Family** *Scophthalmidae*, Turbots
Genus *Scophthalmus* Rafinesque, 1810, Brills
161. *Scophthalmus maeoticus* (Pallas, 1814) (= *Psetta maeotica* (Pallas, 1814)), Black Sea turbot, Bastard halibut
Distribution: BSC, everywhere [69].
- Family** *Soleidae* Bonaparte, True soles
Genus *Solea* Quensel, 1806, Soles
162. *Solea lascaris nasuta* (Pallas, 1814) (= *Pegusa lascaris* (Risso, 1810)), Sand sole
Distribution: BSCC, everywhere [69].
- Order** *Tetrodontiformes*
Suborder *Tetrodontiformes*, Puffers and filefishes
Family *Balistidae* Regan, 1902, Triggerfishes

Genus *Balistes* Linnaeus, 1758, Triggerfishes

163. *Balistes capriscus* Gmelin, 1789, Triggerfish

Distribution: BS, everywhere [31,69].

Order *Gobiesocieformes* Berg, Clingfishes

Family *Gobiesocidae* Gunther, Clingfishes and singleslits

Genus *Lepadogaster* Gouan, 1770, Clingfishes

164. *Lepadogaster lepadogaster* (Bonnaterre, 1788), Cornish sucker, Shore clingfish

Distribution: BSCC [69].

165. *Lepadogaster candolii* Risso, 1810 (= *Lepadogaster decandollei* Risso, 1827), Connemarra clingfish, Connemara sucker

Distribution: BSCC [69].

Genus *Diplocogaster* Fraser-Brunner, 1938

166. *Diplocogaster bimaculata bimaculata* (Bonnaterre, 1788), Two-spotted clingfish

Distribution: BSCC [69].

Order *Lophiiformes*, Anglerfishes

Family *Lophiidae* Rafinesque, Goosefishes, Anglers

Genus *Lophius* Linnaeus, 1758, Goosefishes, Anglerfishes

167. *Lophius piscatorius* Linnaeus, 1758, Angler, Frogfish, Sea devil

Distribution: BS, rare [28,69].

References

1. Aleksandrov N. I. 1927. Anchovy of Azov-Black Sea Basin, Proceeding Kerch NIRKh, T.I., Vol.2-3 (in Russian).
2. Antipa G. 1906. Die clupeinen des westlichen Teiles des schwazzen Meeres und der banaummundungen benkschr, Arad. Wiss. Wien Math-natur-wiss, Kl.Bd.78.
3. Barach G.P.1941. Fauna of Georgia, T.I, Freshwater fishes, Tbilisi. (in Russian)
4. Berg L.S. 1899. Data Of Ichthyofauna of Caucasus. Publ. Museum of Caucasus. T.1, Vol.3 (in Russian).
5. Berg L.S. 1949. Fishes of fresh waters of SSSR and its contiguous countries, AS of SSSR, 1-2. (in Russian).
6. Bogutskaya N G., Komlev A.M. 2001. New data of morphology of bitterling (*Rhodeus sericeus*) with description of new species of *Rodeus colchicus* from west transcaucasus. Russian AS, Institute of Zoology, St.Petersburg (in Russian).
7. Bogutskaya N.G., Naseka A.M. 2004. Catalogue of Agnathans and Fishes of fresh and brakish waters of Russia with comments on nomenclature and taxonomy, KMK Scientific Press Lt, Moscow, 387pp (in Russian).
8. Burchuladze O.G.1959. Study results of Ichthyofauna and feeding base of lake Jandara, Proceed. NIRKH, Georgia, T.IV.
9. Burchuladze O., Zarkua Z. 1983. Current status of Sturgeons and their artificial reproduction in south-east part of Black Sea. Moscow (in Russian)
10. Cuvier G. 1829. la regne Animal. En. 2 a., Vol. 2 . Paris.
11. Daraselia T.G. 1985. Existance of *Carassius carassius* in reservoirs of Georgia. Materials of VII conference of young scientists.12-14 (in Russian)
12. Daraselia T.G., Demetrashvili M.G. 1985. Correlation and quantitative distribution of young fish of mullets (*Mugil*) in the lake Paliastomi. Materials of VII conference of young scientists.9-12 (in Russian)
13. Demetrashvili M.G. 1954. Fishes of Khrami Reservoir and its rivers. Proceedings Institute of Zoology of Georgia.XIII, 41-50 (in Russian)
14. Demetrashvili M.G. 1963. Materials of Ichthyofauna of Tkibuli reservoir and its fishery characteristics. Proceedings of I scientific meeting; Reservoirs of Georgia and their importance for fishery. 41-49 (in Russian)
15. Demetrashvili M.G. 1969. Description of fishery of Tbilisi reservoir, Collected articles: Biological production of reservoirs of Georgia (Tbilisi reservoir).Tbilisi, Metsniereba, 132-149 (in Georgian).
16. Demetrashvili M.G. 1972. Materials of fishery characteristics of Sioni reservoir. Collected articles: Hydrobiology and Ichthyology of reservoirs of Georgia. T. III.

17. Demetrashvili M.G. 1980. Influence of regulation of river Mtkvari on its Ichthyofauna. Collected articles: Hydrobiological condition and ichthyofauna of River Mtkvari, 147-171 (in Russian).
18. Demetrashvili M.G., Elanidze R.P., Kokhia A.B. 1977. Systematics and some other data of acclimatized coregonids in high mountain lakes of Georgia. Materials of II conference. Study of reservoirs of Georgia and their importance for fishery. 90-100.
19. Eichwald E. 1831. Zoologia specialis quam exposits animalibustum vivis, tum fossilibus potissimum Rossiar in universum, et Poloniae in specie, in usum lectionum publicarum in universitate caesarea, Vilnensis, Vol.3.
20. Elanidze R.P. 1947. Materials of Ichthyofauna of Riv. Khrami, Proceedings of Institute of Zoology, Georgian Academy of Sciences, T.VII.
21. Elanidze R.P. 1951. Materials of Ichthyofauna of Riv. Alazani, Proceedings of Institute of Zoology, Georgian Academy of Sciences, T.X.
22. Elanidze R.P. 1953. Materials of Ichthyofauna of Riv. Iori, Proceedings of Institute of Zoology, Georgian Academy of Sciences, T.XI.
23. Elanidze R.P. 1954. Materials of Ichthyofauna of Riv. Supsa, Proceedings of Institute of Zoology, Georgian Academy of Sciences, T.XIII.
24. Elanidze, R.P. 1956. Ichthyofauna of Riv. Rioni, Proceedings of Institute of Zoology, Georgian Academy of Sciences, T.XV.
25. Elanidze R.P. 1961. Ichthyofauna of Riv. Kodori, Proceedings of Institute of Zoology, Georgian Academy of Sciences, T.XVIII.
26. Elanidze R.P. 1965. Ichthyofauna of Riv. Bzipi, collected articles "Hydrobiology and Ichthyology of Inland Waters of Georgia", T.II.
27. Elanidze R., Demetrashvili M., Burchuladze O., Kurashvili B. 1970. Fishes of freshwaters of Georgia. Atlas. Tbilisi, 115pp (In Georgian-Russian).
28. Elanidze R., Demetrashvili M. 1973. Pisces. Fauna of Georgia.T.IV. Metsniereba", 122-225 (in Georgian).
29. Elanidze R.F. 1983. Ichthyology of rivers and lakes of Georgia, Publ.. "Metsniereba", Georgian academy of Sciences, Institute of Zoology, Tbilisi.
30. Filippi F. 1863. Nuove o poco note specie di animali vertebrati raccolte in un viaggio in Persia nell' estate dell' anno. Arch.Zool.Anat.Fisiol.Vol.2.
31. Gudimovich P.K. 1953 . Henfishes (Balistes), "Ribnoe xoz-vo", Moscow, 2 (in Russian).
32. Gldenstdt A. 1773. Cyprinus capoeta et cyprinus mursa descripti (Nov. comment, Acad, Sci, Lmp. Petropol, m17).
33. Gunther A. 1866. Catalogue of the fishes in the british museum, Catalogue of the Plysostomi, containing the familias Salmonidae, Percopsidae, Galaxidae, Mormiridae, Gymnarchidae, Esocidae, Umbridae, Scombresocidae, Cyprinodontidae, in the collection of the British Museum, Vol. 6., London, Order of the Trastees, xv+368pp.
34. Ilin B.C. 1949. Short overview of Black sea spini loaches (Pisces, Gobiidae), Bull, Mosk.obsh., icpit. prir.otdel boil.T.54, vol.3 (in Russian).
35. Japoshvili O. G., Japoshvili B.O. 1999. Systematics and Morphology of Genus Varicorhinus, Proceedings of Pedagogical University, T.V, 111-117 (in Georgian).
36. Japoshvili B.O., Japoshvili O.G. 1999. Some data of acclimatized Coregonids in Georgia, Proceedings of Pedagogical University, T. VI, 168-172 (in Georgian).
37. Japoshvili O. G, Japoshvili B.O. 2000. Annotated list of Cypronidae of Georgia, Proceedings of Pedagogical University, T.VII, 100-107.
38. Japoshvili O., Japoshvili B., Goletiani L. 2002. About the Ecological-biological peculiarities of some representatives (Murtsa, Tsvera, Chanari) of the family Cyprinidae:Barbinae. Periodical Scientific Journal –"Prometheus". Tbilisi Sul Khan-Saba Orbeliani State Pedagogical University. XI-XII, 143-148.
39. Japoshvili B. 2004. Age, growth, Condition factor and some morphometric characters of a vendace (Coregonus albula) in the lake Paravani, Proceedings of the Georgian Academy of Sciences, Biol.Ser. B, No.1-2, Vol.2. 97-100.
40. Japoshvili B., O. Ertan. O. Diler. 2004. A study results of morpho-biological characters of Carassius auratus L. in Egirdir lake(Turkey) and Carassius carassius L. in Paravani lake (Georgia), Proceedings of the Institute of Zoology, Vol. XXII, 280-283.
41. Japoshvili, O., Sharvashidze V. 1978. Some data of biology of Khramulya (Varicorhinus capoeta Guldandstadt), Proceedings of pedagogical institute. IV ser. 156-163.
42. Kavraiskiy F.F. 1907. Sturgeons of Caucasus, Tbilisi (in Russian).

43. Kalandadze L.P. 1940. Mosquito fishes and their use for biological control in south region of SSSR.
44. Kamensky S.N. 1897. Ichthyology of Caucasus. Proceedings of Kharkov University, T.XXXI, 77-100.
45. Kokochashvili G. V. 1942. Ukrainian Lamprey in waters of Georgia, Proceedings of State University of Tbilisi, T. XXII.
46. Kokosadze T.R. 1976. Structure of some commercial fishes of river Mtkvari within the bounds of Georgia. Materials of II conf. of young scientists. Tbilisi, Metsniereba, 60-67.
47. Kokosadze T., Japoshvili B., Shonia L. 2000. The role and significance of introduction and acclimatization in the biological complex of the fauna of Georgia (on the example of Ichthyofauna), Proceedings of the Institute of Zoology, Vol.XX, 210-222 (in Georgian)
48. Kokosadze T., Shonia L. 2000. Biological Basis of the ecological condition of the lake Bazaleti, Proceedings of the Institute of Zoology, Vol.XX, 319-322 (in Georgian).
49. Magnin E. 1959. Determination de L'age et crojssance de L'Acipenser sturio L., de la Gironde.
50. Maiorova A.A. 1935. Being of Callionymus lyra L. in Black sea. Journal "priroda" N2, Leningrad.
51. Marti V.Yu. 1940. Systematic and biology of Russian sturgeon of Caucasian coast of Black sea, Journal of Zoology, T.19, N6.
52. Meskhidze D.Kh. 1963. Ichthyofauna of inland waters of Achara and some prospects of development of Fishery, Proceedings of I scientific meeting: study and importance of waters of Georgia for commercial fishery.
53. Ninua N.Sh. 1960. White fish of Tabatskuri Lake, Proceedings of NIRKh of Georgia, T.V.
54. Ninua N.Sh. 1976. Conservation strategies of sturgeon fauna and development of commercial fishery of sturgeons in basin of Riv. Rioni, Vestnik, State Museum of Georgia, T. XXIX-A, Tbilisi.
55. Ninua N.Sh. 1976. Surgeon of Riv. Rioni, , "Metsniereba", Tbilisi.
56. Ninua N.Sh. 1987. Study of Ichthyofauna of Mountain Svaneti, Vestnik, State Museum of Georgia,T. XXXIV-A. Tbilisi.
57. Ninua N., Mkhaidze M., Bogveradze M., Goginashvili T., Bochorishvili V. 2003-2004. Quantitative and structural study of sturgeons of south-east region of Black sea. Vestnik, Georgian National Museum,T.45, Tbilisi.
58. Ninua N.Sh. 2007. 2004-2006 Current status of fishes of south-east part of black sea region and prediction (forecasting) of recourses. "Kavkazskii vestnik"N16.
59. Pavliashvili T. 1960. Materials of Study of Ichtyofauna of R.Enguri., Proceedings of Tbilisi State University, 82.
60. Radde G. I. 1899. Collection of Caucasian Museum. Zoology, Tiflis, Museum of Caucasus (in Russian).
61. Sharvashidze V. 1982. Fishes of Georgia, Publ. "Ganatleba", Tbilisi, 307pp.
62. Shaverdashvili R.S. 1960. Experience of Bonito's (Sarda) age determination by scale.Proceedings Georgian NIRKh,T.V,Batumi.
63. Shaverdashvili, R.S. 1964. Biology and trade of horse-makerel of south-east part of Black sea, Journal Voprosi Ichthyologii, T.IV. Vol.I, Moscow.
64. Shaverdashvili R.S., Ninua N.Sh., Bolkvadze L.D. 1967. Biological characters of Sturgeons of South-East part of Black sea. Proceedings, NIRKh.I, Astrakhan.
65. Shaverdashvili R.S., Ninua N.Sh.1983. Contemporary from Cretaceous period. Journal of "Science of CCCR",T.4, Moscow.
66. Shavlakadze M. 1998. State of Black sea anchovy stock. Conservation of biological diversity as a prerequisite for sustainable development in the Black sea Region. NATO, ASI. Series 2. Environmnet.Vol.46. Kluwer Academic publishers.119-123.
67. Shavlakadze M.A., Goradze R.Kh., Zosidze R.Sh. 2000. Fishery and some questions of ecology of Black sea, Georgian Academy of Ecology, Departm.of Achara, T.I,Batumi.
68. Shonia L., Kokosadze T. 2006. Bioecological characterists of "migrant" Pseudorasbora parva (Sleg.) in Bazaleti lake. Proceedings of Georgian Academy of Sciences, Biological series B, N3, Vol.4.
69. Svetovidov A.N. 1964. Fishes of Black sea (Key of Fauna of SSSR), Russian Academy of Sciences, Institute of Zoology, M-L Nauka.
70. Zarkua, Z., Kokosadze T., Shonia L. 2001. Food-fishes of Black Sea and their status today (present situation). Science and Technology, N4-6, 112-114.
71. www.fishbase.org (Global information system on fishes).