

Type specimens in the fish collection of the National Museum of Natural History, National Academy of Sciences of Ukraine

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abstract

The creation of a collection of type specimens of fishes of the National Museum of Natural History NAS of Ukraine has started in 1974. In the following years, the collection of fish type specimens of the Zoological Museum was enriched by both national and foreign specialists such as E. E. Meisner, L. G. Manilo, G. A. Shandikov, D. A. Didier and M. Stehmann, M. R. De Carvalho and others. Some of these specimens (holotypes and paratypes of eight cartilaginous and bony fishes described at that time) were included into the first catalogue of type specimens of all groups of invertebrates and vertebrates of the Zoological Museum (Catalogue... 2001). This catalogue includes information on 73 type specimens of fishes (10 holotypes and 63 paratypes) belonging to 12 species of 6 families: *Acroteriobatus stehmanni* Weigmann, Ebert, Séret, 2021; *Raja taaf* Meisner, 1987; *Torpedo adenensis* Carvalho, Stehmann, Manilo, 2002; *Neoharriotta pumila* Didier, Stehmann, 1996; *Channichthys aelitae* Shandikov, 1995; *Channichthys bospori* Shandikov, 1995; *Channichthys irinae* Shandikov, 1995; *Channichthys mithridatis* Shandikov, 2008; *Channichthys panticapaei* Shandikov, 1995; *Channichthys richardsoni* Shandikov, 2011; *Channichthys velifer* Meisner, 1974; *Parapercis ventromaculata* Manilo, 1990, stored in the fish collection of the National Museum of Natural History NAS of Ukraine. Two taxa were not found in the collection: the holotype of *Arius dayi* Dmitrenko, 1974 (lost), as well as the holotype and paratypes of *Romanogobio albipinnatus tanaiticus* Naseka, 2001 (not received from the author of the description). The number of paratypes of each species (subspecies) is given according to their presence in the collection as of the time of compilation of this catalogue. In the text, after the Latin name of species (subspecies), the following information is given: collection record number, number of paratype specimens, length (standard or absolute) in millimetres, full label information including water body, coordinates, name of the vessel and cruise number, depth, trawl (station) number, date of collection, and name of collectors.

Типові екземпляри в іхтіологічній колекції Національного науково-природничого музею Національної академії наук України

Леонід Маніло

Резюме. Створення колекції типових екземплярів риб Національного науково-природничого музею НАН України розпочинається в 1974 р. В наступні роки колекція типів риб Зоологічного музею поповнювалась як вітчизняними, так і зарубіжними фахівцями: Е. Е. Мейснером, Л. Г. Манілом, Г. О. Шандиковим, Д. А. Дідье (D. A. Didier) і М. Штеманном (M. Stehmann), М. Р. Де Карвалью (M. R. De Carvalho) та ін. Частина цих надходжень (голотипи та паратири 8 описаних на той час хрящових та кісткових риб) увійшла в перший каталог типових екземплярів всіх груп безхребетних і хребетних тварин Зоологічного музею (Каталог... 2001). Даний каталог включає дані про 73 типових екземпляри риб (10 голотипів та 63 паратири), що належать до 12 видів з 6 родин: *Acroteriobatus stehmanni* Weigmann, Ebert, Séret, 2021; *Raja taaf* Meisner, 1987; *Torpedo adenensis* Carvalho, Stehmann, Manilo, 2002; *Neoharriotta pumila* Didier, Stehmann, 1996; *Channichthys aelitae* Shandikov, 1995; *Channichthys bospori* Shandikov, 1995; *Channichthys irinae* Shandikov, 1995; *Channichthys mithridatis* Shandikov, 2008; *Channichthys pantcapaei* Shandikov, 1995; *Channichthys richardsoni* Shandikov, 2011; *Channichthys velifer* Meisner, 1974; *Parapercis ventromaculata* Manilo, 1990, які зберігаються в іхтіологічній колекції Національного науково-природничого музею НАН України. Не знайдені в колекції два таксона: голотип *Arius dayi* Dmitrenko, 1974 (загублений), а також голотип і паратири *Romanogobio albipinnatus tanaiticus* Naseka, 2001 (не отримані від автора опису). Кількість паратипів кожного виду (підвиду) надається у відповідності до їх наявності в колекції на момент складання даного каталогу. В тексті, після латинської назви виду (підвиду), наведений його інвентарний номер в фондосховищі, кількість екземплярів паратипів, довжина (стандартна або загальна) в міліметрах, повна етикетка: водойма, координати, назва судна та номер його рейсу, глибина, номер тралу (станції), дата збору та прізвище колекторів.

Ключові слова: типові екземпляри, колекція риб, музей, Київ, Україна.

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Introduction

The purposeful formation of the fish collection of the National Museum of Natural History NAS of Ukraine has begun in the early 1960s. The creation of a collection of type specimens of fishes has started in 1974, when E. E. Meisner described a new species—the sail icefish—from the area of Kerguelen Island and passed its holotype to the Zoological Museum (then the Department of Vertebrate Systematics and Zoological Museum of I. I. Schmalhausen Institute of Zoology, Academy of Sciences of the UkrSSR). Paratypes of this species were preserved in the museum collections of the Azov-Black Sea Research Institute of Marine Fisheries and Oceanography (Kerch) and are most likely lost.

In the following years, the collection of fish type specimens of the Zoological Museum was enriched by both national and foreign specialists such as E. E. Meisner, L. G. Manilo, G. A. Shandikov, D. A. Didier and M. Stehmann; M. R. De Carvalho, M. Stehmann and others. Some of these specimens (holotypes and paratypes of eight cartilaginous and bony fishes described at that time) were included into the first catalogue of type specimens of all groups of invertebrates and vertebrates of the Zoological Museum (Catalogue... 2001).

Due to further research into both domestic and world fish fauna, the Museum's fish collection has grown steadily and today it is the largest and most complete regional fish collection in Ukraine comprising more than 152 000 specimens that belong to 1400 species of the world fauna. Nevertheless, the vast majority of specimens was collected in water bodies of Ukraine and they represent the species composition of its ichthyofauna.

At the same time, the collection of fish type specimens was also enriched and some specimens were included into the catalogues of oceanic fishes stored in the Zoological Museum of the NMNH (Manilo 1997), which included 987 species at the time of publication representing 541 genera, as well as into the catalogue of myxines, lampreys, and fishes of the Palaearctic (Movchan *et al.* 2003), which at that time included 380 species and subspecies belonging to 200 genera, 71 families, 24 orders, and 4 classes. A separate catalogue of type specimens of fishes has not yet been compiled, which made the work with this collection difficult and became a prerequisite for its separate publication.

Material and Methods

This catalogue includes scientific data on 73 type specimens, including 10 holotypes and 63 paratypes belonging to 12 species. The number of paratypes of each species corresponds to their presence in the collection at the time of compiling of the catalogue.

All type specimens are stored in glass containers in 70–75% ethanol solution in a separate section.

When preparing this catalogue of type specimens, the system of higher taxa (classes, orders, and families) was adopted to the main modern concepts (Nelson 2006). The authorship of families is given after Van der Laan *et al.* (2014). Suborders, subfamilies, and subgenera are not mentioned in the catalogue; genera in families and species in genera are arranged alphabetically. The names of all type specimens used in the catalogue correspond to names given to the respective taxon in its original description and this name is presented in the genus to which this taxon belongs according to the accepted nomenclature. If the name of the taxon is a junior synonym (or presumably considered as a synonym), this is indicated in the “synonymy” section with reference to the literature source.

In the text, after the Latin name of species (subspecies), the following information is given: collection record number, number of paratype specimens, length (standard and general) in millimetres, full label information including water body, coordinates, name of the vessel and cruise number, depth, trawl (station) number, date of collection, and name of collector. In some cases, the sex and condition of gonads of the fishes are indicated too and are quoted from the original descriptions.

Abbreviations: *TL* — absolute body length, *SL* — standard body length, S — southern latitude, N — northern latitude, E — eastern longitude, coll. — collector(s).

Systematic part

Class Elasmobranchii

Order Rajiformes

Family Rhinobatidae Bonaparte, 1835

Genus *Acroteriobatus* Giltay, 1928

Acroteriobatus stehmanni Weigmann, Ebert, Séret, 2021

(*Acroteriobatus stehmanni* Weigmann, Ebert, Séret 2021: 51–81, Figs. 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, Table 2).

Paratypes. 2 specimens: No. 103836, adult male, *TL* 568 mm, Indian Ocean, near Socotra Island, 12° 39' N, 53° 27' E, depth 41–43 m, Vityaz-2, cruise 17, station 2567, trawl 7, 28.10.1988, coll. L. G. Manilo. No. 103838, female *TL* 523 mm, Indian Ocean, near Socotra Island, 12° 39' N, 53° 27' E, depth 41–43 m, Vityaz-2, cruise 17, station 2567, trawl 7, 28.10.1988, coll. L. G. Manilo (fig. 1).

Family Rajidae de Blainville, 1816

Genus *Amblyraja* Malm, 1877

Raja taaf Meisner, 1987

(*Raja taaf* Meisner 1987: 1840–1849, Figs. 1–2).

Holotype. No. 91514, adult male *TL* 842 mm, Lena Bank, 53° 01' S, 44° 25' E, depth 375–390 m, Novoukrainka, cruise 8, station 107, 11.01.1984, coll. V. N. Schtyrkin (Fig. 2).

Paratypes. 2 specimens: No. 91515, adult female *TL* 770 mm, Lena Bank, 52° 55' S, 44° 26' E, depth 310 m, Novoukrainka, cruise 8, station 55, 30.12.1983, coll. V. N. Schtyrkin. No. 91516, adult male *TL* 765 mm, Lena Bank, 53° 00' S, 44° 16' E, depth 310–320 m, Novoukrainka, cruise 8, station 50, 29.12.1983, coll. V. N. Schtyrkin.

Order Torpediniformes

Family Torpedinidae Henle, 1834

Genus *Torpedo* Houttuyn, 1764

Torpedo adenensis Carvalho, Stehmann, Manilo, 2002

(*Torpedo adenensis* Carvalho, Stehmann, Manilo 2002: 1–34, Figs. 1–7).

Holotype. No. 5121, adult male *TL* 407 mm, Indian Ocean, Gulf of Aden, 15° 15' 03" N, 52° 00' 04" E, depth 125–140 m, Dmitriy Stefanov, cruise 5, bottom trawl 125, 29.12.1989, coll. S. I. Usachev, Yu. G. Domaschenko (Fig. 3).

Paratypes. 2 specimens: No. 5121, adult male *TL* 407 mm, Indian Ocean, Gulf of Aden, 15° 15' 03" N, 52° 00' 04" E, depth 125–140 m, Dmitriy Stefanov, cruise 5, bottom trawl 125, 29.12.1989, coll. S. I. Usachev, Yu. G. Domaschenko. No. 5418, adult female *TL* 390 mm, Indian Ocean, Gulf of Aden, 15° 07' 09" N, 51° 58' 02" E, depth 230 m, Dmitriy Stefanov, cruise 5, bottom trawl 126, 29.12.1989, coll. S. I. Usachev, Yu. G. Domaschenko.

Class Holocephali

Order Chimaeriformes

Family Rhinochimaeridae Garman, 1901

Genus *Neoharriotta* Bigelow et Schroeder, 1950

Neoharriotta pumila Didier, Stehmann, 1996

(*Neoharriotta pumila* Didier, Stehmann 1996: 955–965, Figs. 2, 3).

Paratypes. 7 specimens: No. 4010 a, 4010 b, 4 females *TL* 500–650 mm, 3 males *TL* 495–630 mm, Indian Ocean, off Socotra, 12° 22' N, 53° 02' E, depth 1000–1120 m, Vityaz-2, cruise 17, station 2565, trawl 5, 28.10.1988, coll. L. G. Manilo (Fig. 4).

Class Actinopterygii

Order Siluriformes

Family Ariidae Bleeker, 1858

Genus *Arius* Valenciennes, 1816

Arius dayi Dmitrenko, 1974

(*Arius dayi* Dmitrenko 1974: 37–41, Figs. 1, 2).

Holotype. No. Pi 2/1–2. Indian Ocean, Arabian Sea, Gulf of Masirah (Oman). 19° 47' 8" N, 58° 28' 3" E, Nauka?, cruise ?.

Synonymy: synonym of *Netuma bilineata* (Valenciennes, 1840) (Froese, Pauly 2021).

Remarks: the holotype is lost.

Class Actinopterygii

Order Cypriniformes

Family Cyprinidae Rafinesque, 1815

Genus *Gobio* Cuvier, 1816

Romanogobio albipinnatus tanaiticus Naseka, 2001

(*Romanogobio albipinnatus tanaiticus* Naseka 2001: 99–119, Fig. 1).

Holotype. No. 3661, *SL* 99.4 mm; Donetz River, 7–8 km upstream from Izium, 20.09.1987, coll. Yu. Movtchan, Yu. Rabtzevitch.

Paratypes. 12 specimens: No. 3458, *SL* 72.0–95.5 mm, Donetz River, at the mouth of Evsiug River. 4 specimens: No. 3634, *SL* 69.2–81.6 mm, Donetz River at Izium. 10 specimens: No. 3640, *SL* 64.0–100.5 mm, Donetz River

at Stanichno-Lugansk. 6 specimens: No. 3641, SL 63.5–86.0 mm, Donetz River. 6 specimens: No. 3661, SL 82.5–107.0 mm, Donetz River, 7–8 km upstream from Izium. 15 specimens: No. 4810, SL 67.0–76.1 mm, Donetz River.

Remarks: not all specimens (holotype and paratypes) have been received from the author.



Fig. 1. Paratype of *Acroteriobatus stehmanni* Weigmann, Ebert, Seret, 2021.

Рис. 1. Паратип *Acroteriobatus stehmanni* Weigmann, Ebert, Seret, 2021.



Fig. 2. Holotype of *Amblyraja taaf* (Meisner, 1987).

Рис. 2. Голотип *Amblyraja taaf* (Meisner, 1987).



Fig. 3. Holotype of *Torpedo adenensis* Carvalho, Stehmann, Manilo, 2002.

Рис. 3. Голотип *Torpedo adenensis* Carvalho, Stehmann, Manilo, 2002.

Order Perciformes

Family Channichthyidae Gill, 1861

Genus *Channichthys* Richardson, 1844

Channichthys aelitae Shandikov, 1995

(*Channichthys aelitae* Shandikov 1995: 3–18, Fig. 7).

Holotype. No. 4575 a, mature male (gonads in pre-spawning state), SL 334 mm, Kerguelen Island, 49° 54' S, 70° 16' E, depth 161 m, Aelita, cruise 2, bottom trawl 119, 25.02.1969, coll. N. V. Kononov (Fig. 5).

Paratypes. 2 specimens: No. 4575 b, mature male (gonads in pre-spawning state) SL 316 mm, Kerguelen Island, 49° 54' S, 70° 16' E, depth 161 m, Aelita, cruise 2, bottom trawl 119, 25.02.1969, coll. N. V. Kononov; mature female (gonads at III stage of maturity) SL 316 mm, Kerguelen Island, 49° 54' S, 70° 16' E, depth 161 m, Aelita, cruise 2, bottom trawl 119, 25.02.1969, coll. N. V. Kononov.

Channichthys bospori Shandikov, 1995

(*Channichthys bospori* Shandikov 1995: 3–18, Fig. 6).

Holotype. No. 5106, mature male (gonads at IV stage of maturity) SL 350 mm, Kerguelen Island, 48° 22' 5" S, 70° 44' E, depth 126 m, Professor Mesiatsev, cruise 23, bottom trawl 6, 19.07.1990, coll. G. A. Shandikov.

Paratypes. 2 specimens: No. 5107, mature male with mature gonads SL 347 mm, Kerguelen Island, 48° 22' 5" S, 70° 44' E, depth 126 m, Prof. Mesiatsev, cruise 23, bottom trawl 6, 19.07.1990, coll. G. A. Shandikov; mature female (gonads at VI–III stage of maturity) SL 361 mm, Kerguelen Island, 48° 22' 5" S, 70° 44' E, depth 126 m, Professor Mesiatsev, cruise 23, bottom trawl 6, 19.07.1990, coll. G. A. Shandikov. 2 specimens: No. 5108, 2 mature male (gonads at III–IV stage of maturity) SL 308 and SL 308 mm, Kerguelen Island, 47° 04' 5" S, 70° 18' E, depth 200–228 m, Professor Mesiatsev, cruise 23, bottom trawl 81, 6.08.1990, coll. G. A. Shandikov (Fig. 6).

Channichthys irinae Shandikov, 1995

(*Channichthys irinae* Shandikov 1995: 3–18, Fig. 5).

Holotype. No. 5103, mature male (gonads at III–IV stage of maturity) SL 209 mm, Kerguelen Island, 47° 44' 4" S, 71° 31' 6" E, depth 270–310 m, Professor Mesiatsev, cruise 23, bottom trawl 91, 10.08.1990, coll. G. A. Shandikov (Fig. 7).

Paratypes. 2 specimens: No. 5104, mature males SL 222–259 mm, Kerguelen Island, 47° 44' 4" S, 71° 31' 6" E, depth 270–310 m, Professor Mesiatsev, cruise 23, bottom trawl 91, 10.08.1990, coll. G. A. Shandikov. 9 specimens: No. 5105, (8 mature males and 1 female) SL 180–224 mm, Kerguelen Island, 47° 49' 5" S, 70° 06' 2" E, depth 165–171 m, Professor Mesiatsev, cruise 23, bottom trawl 83, 8.08.1990, coll. G. A. Shandikov.

Channichthys mithridatis Shandikov, 2008

(*Channichthys mithridatis* Shandikov 2008: 123–131, Figs. 2–4).

Holotype. No. 5111, mature male (gonads at VI–II stage of maturity) SL 332 mm, Kerguelen Island, 47° 44' 4" S, 71° 31' 6" E, depth 270–310 m, Professor Mesiatsev, cruise 23, bottom trawl 91, 10.08.1990, coll. G. A. Shandikov.

Paratypes. No. 5112, 6 specimens: post-spawning or first maturing males SL 280–327 mm, Kerguelen Island, 47° 44' 4" S, 71° 31' 6" E, depth 270–310 m, Professor Mesiatsev, cruise 23, bottom trawl 91, 10.08.1990, coll. G. A. Shandikov; 5 specimens: females SL 275–387 mm, Kerguelen Island, 47° 44' 4" S, 71° 31' 6" E, depth 270–310 m, Professor Mesiatsev, cruise 23, bottom trawl 91, 10.08.1990, coll. G. A. Shandikov (Fig. 8).

Channichthys panticapaei Shandikov, 1995

(*Channichthys panticapaei* Shandikov 1995: 3–10, Fig. 1).

Holotype. No. 5109, adult male (gonads at II stage of maturity) SL 348 mm, Kerguelen Island, 48° 35' 9" S, 70° 48' 9" E, depth 120 m, Skif, cruise 21, bottom trawl 8, 18.02.1987, coll. A. N. Todiev.

Paratypes. 7 specimens: No. 5110, adult males (gonads at VI–II and IV stage of maturity) SL 290–354 mm, Kerguelen Island, 48° 22' 5" S, 70° 44' E, depth 126 m, Professor Mesiatsev, cruise 23, bottom trawl 6, 19.07.1990, coll. G. A. Shandikov; 8 specimens: adult females (gonads at VI–III and IV stage of maturity, SL 296–361 mm, Kerguelen Island, 48° 22' 5" S, 70° 44' E, depth 126 m, Professor Mesiatsev, cruise 23, bottom trawl 6, 19.07.1990, coll. G. A. Shandikov (Fig. 9).



Fig. 4. Paratype of *Neoharriotta pumila* Didier, Stehmann, 1996.

Рис. 4. Паратип *Neoharriotta pumila* Didier, Stehmann, 1996.



Fig. 5. Holotype of *Channichthys aelitae* Shandikov, 1995.

Рис. 5. Голотип *Channichthys aelitae* Shandikov, 1995.



Fig. 6. Paratype of *Channichthys bospori* Shandikov, 1995.

Рис. 6. Паратип *Channichthys bospori* Shandikov, 1995.



Fig. 7. Holotype of *Channichthys irinae* Shandikov, 1995.

Рис. 7. Голотип *Channichthys irinae* Shandikov, 1995.



Fig. 8. Paratype of *Channichthys mithridatis* Shandikov, 2008.

Рис. 8. Паратип *Channichthys mithridatis* Shandikov, 2008.



Fig. 9. Paratype of *Channichthys panticapaei* Shandikov, 1995.

Рис. 9. Паратип *Channichthys panticapaei* Shandikov, 1995.



Fig. 10. Holotype of *Channichthys richardsoni* Shandikov, 2011.

Рис. 10. Голотип *Channichthys richardsoni* Shandikov, 2011.



Fig. 11. Holotype of *Channichthys velifer* Meisner, 1974.

Рис. 11. Голотип *Channichthys velifer* Meisner, 1974.



Fig. 12. Holotype of *Parapercis ventromaculata* Manilo, 1990.

Рис. 12. Голотип *Parapercis ventromaculata* Manilo, 1990.

***Channichthys richardsoni* Shandikov, 2011**

(*Channichthys richardsoni* Shandikov 2011: 125–134, Fig. 2).

Holotype. No. 5116, adult female (gonads at VI-III stage of maturity) SL 316 mm, TL 355 mm, Kerguelen Island, 48° 22' 5" S, 70° 44' E, depth 126 m, Professor Mesiatsev, cruise 23, bottom trawl 6, 19.07.1990, coll. G. A. Shandikov (Fig. 10).

Paratypes. 6 specimens (adult, post-spawning or firstly maturing specimens): No. 5116a, 3 males SL 253–290 mm, TL 282–325 mm, Kerguelen Island, 48° 22' 5" S, 70° 44' E, depth 126 m, Professor Mesiatsev, cruise 23, bottom trawl 6, 19.07.1990, coll. G. A. Shandikov. No. 5116b, 3 females SL 267–314 mm, TL 302–353 mm, Kerguelen Island, 48° 22' 5" S, 70° 44' E, depth 126 m, Professor Mesiatsev, cruise 23, bottom trawl 6, 19.07.1990, coll. G. A. Shandikov.

***Channichthys velifer* Meisner, 1974**

(*Channichthys velifer* Meisner 1974: 50–55, Fig. 1).

Holotype. No. 2730, female SL 407 mm, Kerguelen Island, 48° 07' S, 70° 19' 1" E, depth 140–142 m, Kara-Dag, cruise 2, station 693 (bottom trawl), 21.02.1972, coll. E. E. Meisner (Fig. 11).

Family Pinguipedidae Günther, 1860

Genus *Parapercis* Bleeker, 1863

***Parapercis ventromaculata* Manilo, 1990**

(*Parapercis ventromaculata* Manilo 1990: 1016–1019, Fig. 1).

Holotype. No. 4224, SL 96 mm, Indian Ocean, Maldives Islands, Male Island, Akademik Vernadsky, cruise 24, dredge, 1.11.1981, coll. Yu. V. Movchan (Fig. 12).

Paratype. No. 4224 a, SL 93 mm, Indian Ocean, Maldives Islands, Male Island, Akademik Vernadsky, cruise 24, dredge, 1.11.1981, coll. Yu. V. Movchan.

Synonymy: probably junior synonym of *Parapercis signatus* Randall, 1984 (Randall & McCosker 2002).

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