

# Ophichthidae

by J. Blache, M.-L. Bauchot &amp; L. Saldanha

G: 5

Sp: 6

## 86.1

**OPHICHTHUS** Ahl, 1789

Gender: M

*Spec. ichthy. de Muraena et Ophichtho*, 1789 : 5 (type: *Muraena ophis* Linnaeus, 1758, by subs. design. of Bleeker, 1865, *Neder. Tijdschr. Dierk.*, 2 : 119).

*Ophis* Turton, 1807, *The British fauna . . .*, 1 : 82, 87 (type: *O. maculata* Turton, 1807, by monotypy).

*Cogrus* Rafinesque, 1810, *Caratt. Gen. Spec. Sicil.* : 62 (type: *C. maculatus* Rafinesque, 1810, by monotypy).

*Centrurophis* Kaup, 1856, *Cat. Apod. Fish* : 2 (type: *Ophisurus spadiceus* Richardson, 1845, by subs. design. 'Canton, Madagascar, Vanikoro').

*Poecilcephalus* Kaup, 1856, *Cat. Apod. Fish* : 5 (type: *P. bonaparti* Kaup, 1856, by monotypy, 'Amboina').

*Microdonophis* Kaup, 1856, *Cat. Apod. Fish* : 6 (type: *M. altipinnis* Kaup, 1856, by monotypy, 'Macassar').

*Coecilophis* Kaup, 1856, *Cat. Apod. Fish* : 6 (type: *Ophisurus compar* Richardson, 1846, by monotypy, 'Sumatra').

*Herpetoichthys* Kaup, 1856, *Cat. Apod. Fish* : 7 (type: *H. ornatissimus* Kaup, 1856, by subs. design., 'Malabar').

*Elapsopsis* Kaup, 1856, *Cat. Apod. Fish* : 9 (type: *Ophisurus versicolor* Richardson, 1846, by monotypy, 'Moluccas'), also written *Elapsopsis* by various authors.

*Muraenopsis* Lesueur, *apud* Kaup, 1856, *Cat. Apod. Fish* : 11 (type: *Muraenopsis ocellata* Lesueur, 1825, by subs. design., 'Mexico and South America').

*Scytalophis* Kaup, 1856, *Cat. Apod. Fish* : 13 (type: *S. magniocularis* Kaup, 1856, by subs. design., 'Ste Croix and Brazils').

*Leptorhinophis* Kaup, 1856, *Cat. Apod. Fish* : 14 (type: *Ophisurus gomesi* Castelnau, 1855, by subs. design., 'Rio de Janeiro').

*Cryptopterus* Kaup, 1860, *Abh. naturw. Ver. Hamburg*, 1859 [1860], 4 (2) : 11 (type: *C. puncticeps* Kaup, 1860, by monotypy, 'Puerto Cabello'), preoccupied by *Kryptopterus* Bleeker, 1858.

*Uranichthys* Poey, 1867, *Repert. fis. nat. Cuba*, 2 : 256 (type: *Muraena havanensis* Schneider *apud* Bloch, 1801, by subs. design., 'Cuba').

*Oxyodontichthys* Poey, 1880, *An. Soc. esp. Hist. nat.*, 9 : 254 (type: *Ophichthys macrurus* Poey, 1867, by subs. design., 'Cuba').

*Acanthenchelys* Norman, 1922, *Ann. Mag. nat. Hist.*, 10 : 296 (type: *A. spinicauda* Norman, 1922, by monotypy, 'Tobago').

*Cryptopterenchelys* Fowler, 1925, *Am. Mus. Novit.*, 162 : 1 (type: *Cryptopterus puncticeps* Kaup, 1860, by orig. design., 'Puerto Cabello'), to replace *Cryptopterus* Kaup preoccupied.

*Zonophichthus* Whitley, 1930, *Aust. Zool.*, 6 : 250 (type: *Ophichthys cephalozona* Bleeker, 1864, by orig. design., 'Amboina').

## 86.1.1

**Ophichthus ophis** (Linnaeus, 1758)

*Muraena Ophis* Linnaeus, 1758, *Syst. Nat.*, ed. X : 244 ('*Habitat in Oceano Europaeo*').

? *Muraena ophis*: Bloch, 1786 : 35, pl. 154 | Bloch *apud* Schneider, 1801 : 488.

? *Ophichthus ophis*: Ahl, 1789 : 9.

? *Ophisurus ophis*: Lacepède, 1800, 2 : 196 | Risso, 1810 : 87.

? *Anguilla ophis*: Shaw, 1803, 4 : 22, pl. 2.

Complementary iconography. Böhlke & Robins, 1959: fig. 2.  
Eggs, larvae and young stages. No data.

Otoliths (sagitta). No data.

Habitat, distribution and abundance. Benthic, burrowing in sand on the continental shelf (10–50 m). Tropical Western Atlantic, eastern Atlantic from Senegal to Angola. Mediterranean? Not very common, doubtful presence within the area. According to Böhlke & Robins, 1959, *Notul. nat. Acad. Philad.*, 320 : 1–9, the locality indicated by Linnaeus is doubtful. However *O. ophis* is known from West Africa, from Senegal to Angola; so it is not possible to affirm that the presence within the area is erroneous. Common names. None.

#### 86.1.2 *Ophichthus rufus* (Rafinesque, 1810)

*Echelus rufus* Rafinesque, 1810, *Caratt. Gen. Spec. Sicil.* : 65, tab. 16, fig. 2 ('Sicily'). *Centrurophis remicaudus* Kaup, 1856, *Cat. Apod. Fish* : 3 ('Sicily'). Type lost.

*Ophisurus hispanus* Bellotti, 1857, *Atti. Accad. fis. med. statist. Milano*, 3 : 72 ('Barcelona'). Type: MZUT no. 511.

*Ophichthys hispanus*: Günther, 1870, 8 : 72 | Carus, 1893 : 544 | Perugia, 1897 : 141.

*Ophichthys remicaudus*: Günther, 1870, 8 : 73 | Carus, 1893 : 544 | Dieuzeide *et al.*, 1954, 2 : 102.

*Ophisurus hispanus*: Moreau, 1881, 3 : 584, fig. 212.

*Ophichthus rufus*: Fowler, 1936 : 299, fig. 141 | Lozano Rey, 1947 : 557, fig. 168.

*Ophichthys remicaudatus*: Ben Tuvia, 1953 : 8.

*Ophichthus remicaudus*: Tortonese, 1960 : 240, fig. 2; 1963 : 165; 1970 : 341, fig. 138.

Eggs, larvae and young stages. Kaup, 1860 : 270, pl. 3 (fig. A) | Raffaele, 1888 : 69 | Grassi & Calandruccio, 1896b : 349 | Schmidt, 1912b: pl. 4; 1913 : 10, fig. 6 | Grassi, 1913 : 127, pl. 7 (fig. 22–24), pl. 14 (fig. 6–9); 1915 : 703, pl. 2 (fig. 6) | Bertin, 1926: tab. 6 | Fish, 1927 : 307 | Ancona, 1931 : 138, fig. 133–136 | Sparta, 1937 : 12, fig. 19; 1939c : 10 | Castle, 1969 : 24.

Otoliths (sagitta). No data.

Habitat, distribution and abundance. Benthic on the continental slope (150–300 m). Mediterranean. Rare.

Common names. None.

#### 86.2 *APTERICHTHUS* Duméril, 1806 Gender: M

Zool. analyt. : 331 (type: *Caecilia branderiana* Lacepède, 1800, substitute name for *Muraena caeca* Linnaeus, 1758, by monotypy).

*Caecilia* Lacepède, 1800, *Hist. nat. Poiss.*, 2 : 134 (type: *C. branderiana* Lacepède, 1800 = *Muraena caeca* Linnaeus, 1758, by monotypy), preoccupied.

*Typhlotes* Fisher, 1813, *Zoogn.*, 3rd ed., 1 : 75–81, substitute for *Caecilia* Lacepède, preoccupied.

*Branderius* Rafinesque, 1815, *Analyse nat.* : 93, *nomen nudum*.

*Ophisurapus* Kaup, 1856, *Arch. Naturg.*, 22 : 52 (type: *O. gracilis* Kaup, 1856, by monotypy, no locality); misprinted *Ophisuraphis* Kaup, 1856, *Cat. Apod. Fish* : 29.

#### 86.2.1 *Apterichthus caecus* (Linnaeus, 1758)<sup>1</sup>

*Muraena caeca* Linnaeus, 1758, *Syst. Nat.*, ed. X : 245 ('*Habitat in Mari Mediterraneo*'). Type lost.

*Muraena caeca*: Bonnaterre, 1788 : 35.

*Caecula apterygia* Vahl, 1794, *Skript. Naturh. Selsk. Kjøbenhavn*, 3 : 153, a substitute name for *Muraena caeca* Linnaeus.

*Caecilia branderiana* Lacepède, 1800, *Hist. nat. Poiss.*, 2 : 135, a substitute name for *Muraena caeca* Linnaeus.

*Apterichthus caecus*: Delaroche, 1809 : 325, pl. 21 (fig. 6) | Blache & Bauchot, 1972 : 711–714, fig. 7.

1. A recent study by Blache & Bauchot, 1972 (*Bull. IFAN (A)* 34 (3)), showed that the mediterranean species *Verma anguiformis* (Peters, 1877) and *Apterichthus caecus* (Linnaeus, 1758) have been confused by various authors in a single species to which very diverse names have been given, in particular: *Caecula caeca*, *Sphagebranchus caecus*, *Sphagebranchus bimaculatus*, *Sphagebranchus serpa*, *Sphagebranchus spallanzani*, *Ophichthys caecus*.

It is impossible to assign the references of these authors to one or the other of the two species. Therefore we are limiting ourselves only to sure references. For the same reason, references relating to eggs, larvae and young stages cannot be attributed to either species.



Eggs, larvae and young stages. Kaup, 1860 : 270, pl. 3 (fig. A) (*Leptocephalus kefersteini* pro parte) | Grassi & Calandruccio, 1896b : 349 | Schmidt, 1912b: pl. 4 | Grassi, 1913 : 121, pl. 7 (fig. 1–12); 1915 : 703, pl. 2 (fig. 3–5) | Bertin, 1926 : 330, tab. 3, 6 | Ancona, 1931 : 135, fig. 128–132 | Sparta, 1938a : 6, fig. 11–12; 1939c : 11 | Thomopoulos, 1952 : 330, fig. 5; 1954 : 8 | Castle, 1969 : 18, 44.

Otoliths (sagitta). No data.

Habitat, distribution and abundance. Benthic, burrowing in sand or mud on the continental shelf (10–40 m). Mediterranean, eastern Atlantic, south to Cape Blanco.

Not common.

Common names. None.

86.3

### **DALOPHIS** Rafinesque, 1810

Gender: M

Caratt. Gen. Spec. Sicil. : 68 (type: *D. serpa* Rafinesque, 1810, by subs. design., synonym of *Sphagebranchus imberbis* Delaroche, 1809. Mediterranean).

*Pterurus* Rafinesque, 1810, Indice Ittiol. sicil. : 43, 59 (type: *P. flexuosus* Rafinesque, 1810, by monotypy), preoccupied by *Pterourus* Scopoli, 1777.

*Scytallurus* [Kaup MS] Duméril, 1856, *Mém. Acad. Sci. Paris*, 27 : 199 (type: *Sphagebranchus imberbis* Delaroche, 1809, by monotypy).

*Pelia* [Schlegel MS] Bleeker, 1863, *Natuurk. Verh. holl. Maatsch. Wet., Haarlem*, 18 (2) : 128 (type: *Sphagebranchus*? (*Pelia*) *cephalopeltis* [Schlegel MS] Bleeker, 1863, by monotypy, 'côte de l'or') = *Dalophis cephalopeltis* ([Schlegel MS] Bleeker, 1863).

86.3.1

### **Dalophis imberbis** (Delaroche, 1809)

*Sphagebranchus imberbis* Delaroche, 1809, *Annls Mus. Hist. nat., Paris*, 13 : 360, pl. 25 (fig. 18) ('Iviça, Baléares'). Type: MNHN no. 2127.

*Dalophis bimaculata* Rafinesque, 1810, Caratt. Gen. Spec. Sicil. : 69 ('Sicilia') and Indice Ittiol. sicil. : 43.

*Leptocephalus spallanzani* Risso, 1810, Ichth. Nice : 85 ('mer d'Éza vers Monaco'). Type lost.

*Sphagebranchus imberbis*: Risso, 1826, 3 : 196 | Costa, 1844, liv. 45 : 1, pl. 32 (fig. 1) | Bonaparte, 1845 : 39, no. 333 | Kaup, 1856 : 25 | Moreau, 1881, 3 : 586 | Šoljan, 1948 : 395 | Ben Tuvia, 1953 : 8.

*Sphagebranchus oculatus* Risso, 1826, Hist. nat. Europ. Mérid., 3 : 197 (no locality). Type: MNHN no. B 848.

*Ophichthys imberbis*: Günther, 1870, 8 : 84 | Carus, 1893 : 544.

*Caecula imberbis*: Lozano Rey, 1947 : 564, pl. 10 (fig. 2) | Albuquerque, 1954–1956 : 417 | Tortonese, 1963 : 166; 1970 : 345, fig. 141A | Tortonese & Casanova Queirolo, 1970 : 29.

*Dalophis imberbis*: Blache & Bauchot, 1972 : 747–751, fig. 24–25.

Eggs, larvae and young stages. Kaup, 1860 : 270, pl. 3 (fig. A) (*Leptocephalus kefersteini* pro parte) | Raffaele, 1888 : 69, pl. 5 (fig. 2) | Grassi & Calandruccio, 1896b : 349 | Schmidt, 1912b: pl. 4; 1913 : 10, fig. 7 | Grassi, 1913 : 116, pl. 6 (fig. 13–22), pl. 7 (fig. 13); 1914a : 40, fig. 2; 1915 : 704, pl. 2 (fig. 7) | Bertin, 1926 : 332, tab. 6 | Fish, 1927 : 307 | Ancona, 1931 : 132, fig. 120–127 | Ford, 1931 : 996 | Sparta, 1937 : 11, fig. 6–10; 1939c : 10 | Thomopoulos, 1956 : 4, fig. 8–9 | Castle, 1969 : 18.

Otoliths (sagitta). No data.

Habitat, distribution and abundance. Benthic, littoral, burrowing in sand or mud. Mediterranean, Eastern Atlantic south to Mauritania. Not common.

Common names. None.

86.4

### **OPHISURUS** Lacepède, 1800

Gender: M

Hist. nat. Poiss., 2 : 195 (type: *Muraena serpens* Linnaeus, 1758, by subs. design. of Risso, 1826, as restricted).

*Leptognathus* Swainson, 1838, Nat. Hist. Fish., 1 : 221 (type: *L. oxyrhynchus* Swainson, 1838, by monotypy).

*Leptorhynchus* Smith, 1840, Ill. Zool. S. Afr. (pl. 6 in vol. 4, 1849) (type: *L. capensis* Smith, 1840, by monotypy, 'South Africa'). Preoccupied (see Barnard, 1950, for datation).

*Anepistomon* Gistel, 1848, *Naturg. Thier.* : IX (type: *Leptorhynchus capensis* Smith, 1840, by orig. design., substitute for *Leptorhynchus* Smith preoccupied).



- 86.4.1 ***Ophisurus serpens* (Linnaeus, 1758)**  
*Muraena Serpens* Linnaeus, 1758, Syst. Nat., ed. X : 244 ('*Habitat in Oceano Europae australis*').  
*Muraena serpens*: Brunnichius, 1768 : 11 | Bonnaterre, 1788 : 34.  
*Ophisurus serpens*: Lacepède, 1800, 2 : 198 | Rafinesque, 1810b : 37 | Risso, 1810 : 88; 1826, 3 : 206 | Costa, 1844 (45) : 2, pl. 28bis (fig. 1–2) | Bonaparte, 1845 : 39, no. 328 | Richardson, 1846 : 106 | Guichenot, 1850 : 114 | Kaup, 1856 : 7 | Cannes-trini, 1875, 3 : 201 | Moreau, 1881, 3 : 581, fig. 211 | Ancona, 1930: pl. 131 (fig. 1) | Dieuzeide *et al.*, 1954 : 100 | Tortonese, 1960 : 242, fig. 3; 1963 : 166 | Maurin, 1968 : 27, 33 | Tortonese, 1970e : 343, fig. 139.  
*Echelus oxyrinchus* Rafinesque, 1810, Caratt. Gen. Spec. Sicil. : 64, pl. 17 (fig. 4), and Indice Ittiol. sicil. : 42 ('Sicilia').  
*Sphagebranchus serpens*: Lowe, 1839 : 17.  
*Muraena acutirostris* Gronovius, 1854, Cat. Fish. Brit. Mus. : 19 ('*Habitat in America*').  
*Ophichthys serpens*: Günther, 1870, 8 : 65 | Šoljan, 1948 : 123 | Albuquerque, 1954–1956 : 415.  
*Oxystomus serpens*: Fowler, 1936 : 303, fig. 143 | Lozano Rey, 1947 : 560, pl. 10 (fig. 1) | Maul, 1948 : 145 | Dollfus, 1955 : 112 | Postel, 1959–1960 : 149, 251.  
*Ophichthus serpens*: Šoljan, 1948 : 395.  
Eggs, larvae and young stages. Kaup, 1860 : 270, pl. 3 (fig. A) (*Leptocephalus kefersteini pro parte*) | Facciola, 1893c : 58 | Grassi, 1896 : 372 | Grassi & Calandruccio, 1896b : 349 | Facciola, 1897b : 122 | Grassi, 1897a : 261 | Schmidt, 1912b: pl. 4; 1913 : 9, fig. 5 | Grassi, 1913 : 110, 196, pl. 6 (fig. 1–12), pl. 12 (fig. 34); 1915 : 706 | Bertin, 1926: tab. 6 | Fish, 1927 : 307 | Ancona, 1930: pl. 131 (fig. 2); 1931 : 128, fig. 110–119 | Bertin, 1936b : 8 | Sparta, 1939c : 5, 11, fig. 6–8 | Castle, 1969 : 22, 44.  
Otoliths (sagitta). Sanz Echeverría, 1928 : 165.  
Habitat, distribution and abundance. Benthic, burrowing in sand or mud on the continental shelf. Mediterranean, Eastern Atlantic, West Pacific and South Indian Ocean, probably cosmopolite. Not very common.  
Common names. None.
- 86.5 ***PISODONOPHIS* Kaup, 1856** Gender: M  
*Arch. Naturgesch.*, 22 : 47 (type: *Ophisurus cancrivorus* Richardson, 1844, by subs. design. of Bleeker, 1865, 'Indien und Mauritius'), written *Pisoodonophis* in Kaup, 1856, Cat. Apod. Fish : 15.  
*Omochelys* Fowler, 1918, *Proc. Acad. nat. Sci. Philad.*, 70 : 3 (type: *Pisoodonophis cruentifer* Goode & Bean, 1896, by orig. design., 'Western Atlantic') as subgenus.  
*Syletor* Jordan, 1919, *Proc. Acad. nat. Sci. Philad.*, 70 (1918) : 343 (type: *Pisoodonophis cruentifer* Goode & Bean, 1896, by orig. design., 'Western Atlantic').
- 86.5.1 ***Pisodonophis semicinctus* (Richardson, 1848)**  
*Ophisurus semicinctus* Richardson, 1848, *Icht. Voy. 'Erebus' & 'Terror'* : 99 ('Western Africa, north of the Equator'). Type: BMNH.  
*Pisodonophis semicinctus*: Dollfus, 1955 : 112 | Furnestin *et al.*, 1958 : 409, fig. 19 | Postel, 1959–1960 : 149, 251 | Tortonese, 1963 : 166 | Maurin, 1968 : 27, 78.  
Eggs, larvae and young stages. No data.  
Otoliths (sagitta). No data.  
Habitat, distribution and abundance. Benthic, burrowing in sand or mud on the continental shelf (10–30 m). Mediterranean, Eastern Atlantic (south to Angola). Very common in the intertropical zone.  
Common names. None.
- 86.6 ***VERMA* Jordan & Evermann, 1896** Gender: F  
*Bull. U.S. natn. Mus.*, 47 : 374 (type: *Sphagebranchus kendalli* Gilbert, 1891, by monotypy, 'off west coasts of Florida').
- 86.6.1 ***Verma anguiformis* (Peters, 1877)**  
*Ophichthys (Sphagebranchus) anguiformis* Peters, 1876 [1877], *Mber. Akad.*

*Wiss. Berlin* : 849 (15° 40' 01'' N., 23° 05' 08'' W., Cape Verde Islands). Holotype: ZMHU no. 9777.

*Sphagebranchus caecus*: Moreau, 1881, 3 : 588.

*Caecula caeca*: Lozano Rey, 1947 : 566, pl. 10 (fig. 3).

Eggs, larvae and young stages. See *Apterichthus caecus* (Linnaeus, 1758).

Otoliths (sagitta). No data.

Habitat, distribution and abundance. Benthic, burrowing in sand or mud on the continental shelf (10–40 m). Mediterranean, eastern Atlantic, south to Cape Verde. Not common.