

CHECK-LIST OF THE FISHES OF THE NORTH-EASTERN ATLANTIC
and of the Mediterranean

Clofnam

Catalogue des poissons de l'Atlantique du nord-est
et de la Méditerranée

57977

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Introduction

The *Check-list of the Fishes of the North-eastern Atlantic and the Mediterranean* (*Clofnam*), published in 1973 by Unesco (J.C. Hureau and Th. Monod, ed.), was the first stage of a much vaster work: a preparation of the *Fishes of the North-eastern Atlantic and of the Mediterranean* which will include classification keys, illustrations and descriptions of all species. The scientific committee responsible for the preparation of this fauna considered that an addendum and corrigendum to *Clofnam* should be published before preparation of the new work began because, since 1973, new information has become available which makes it possible to correct or supplement *Clofnam*.

The text of this *Supplement to Clofnam* has been elaborated with the valuable collaboration of a number of ichthyologists who have provided us either with complete papers or with the information required for their preparation. We are particularly grateful to:

- V.V. Barsukov (Anarhichadidae)
- H. Bath (Blenniidae)
- M.L. Bauchot (Anguilliformes, Sparidae)
- A. Ben Tuvia (Sillaginidae)
- M.J. Costa (Ateleopodidae)
- G. Krefft (Notosudidae, Alepocephalidae, Myctophidae)
- G.E. Maul (Diretmidae, Ceratioidae, Trachichthyidae)
- P.J. Miller (Gobiidae)
- J. Nielsen (Nemichthysidae, Ophidiidae, Bythitidae)
- J.C. Quéro (Selachii, Alepocephalidae, Gonostomatidae, Bathylagidae)
- W.M. Smith-Vaniz (Carangidae)
- M. Stehmann (Rajidae)
- E. Trewavas (Mugilidae, Sciaenidae)

Complementary information was also received from R.G. Baird, E. Bertelsen, M. Desoutter, E.A. Lachner, Th. Monod, J.R. Paxton, A. Post, A.G. Pras, V.G. Springer, M. Torchio, V.D. Vladkyov, A. Wheeler, P.J.P. Whitehead and G.D. Zander. In preparing the final manuscript, the editors added numerous new elements and modifications, particularly concerning the Mediterranean species.

The most important additions to *Clofnam* concern the Rajidae, Alepocephalidae, Myctophidae and Gobiidae families and the Ceratioidei sub-order. With regard to the Blenniidae, we have given a brief description of the new classification proposed by H. Bath, while stressing that C.D. Zander is not in complete agreement with that classification.

Since 1973, several families and many genera and species have been observed for the first time in the *Clofnam* geographical area:

New families: 5 (Megalopidae, Sillaginidae, Draconettidae, Thaumathichthyidae and Bythitidae, this last family including a part of the former Brotulidae)

New genera: 22

New species: 65

In accordance with new systematic interpretations, a number of families have been combined or subdivided or have changed their names:

<i>Clofnam classification</i>	<i>Present classification</i>
Bathylaconidae + Alepocephalidae + Bathyprionidae	Alepocephalidae
Synodontidae + Bathysauridae	Synodontidae
Bathypteroidae + Ipnopidae + Chlorophthalmidae	Chlorophthalmidae
Scopelarchidae	Notosudidae
Echelidae + Ophichthidae	Ophichthidae
Eretmophoridae	Moridae
Girellidae + Kyphosidae	Kyphosidae
Scombridae + Thunnidae + Scomberomoridae	Scombridae
Brotulidae	Ophidiidae (<i>partim</i>) + Bythitidae (<i>partim</i>)
Tetraodontidae + Canthigasteridae	Tetraodontidae

It may be added that the bibliography has been enlarged by the addition of 327 new references.

Preceding a few minor corrections (*errata*), the *addenda* and *corrigenda* are set out according to the presentation found in *Clofnam*: the numbers in the margin correspond to the numbers of the families, genera and species in the basic edition. The headings of the two sections "Eggs, larvae and young stages" and "Habitat, distribution and abundance" have been abridged.

Clofnam and its *Supplement* will provide the ichthyologists who are preparing the *Fishes of the North-eastern Atlantic and the Mediterranean* with a working tool that is as up to date as possible.

The *Supplement* therefore had to be published before the specialists begin their work. We hope that we have achieved the objective assigned to us.

E. Tortonese and J.C. Hureau

Introduction

Le Catalogue des poissons de l'Atlantique du nord-est et de la Méditerranée (*Clofnam*), publié en 1973 par l'Unesco (J.C. Hureau et Th. Monod, ed.), n'était que la première étape d'une œuvre beaucoup plus vaste : la rédaction d'une Faune des poissons de l'Atlantique du nord-est et de la Méditerranée comprenant des clés de détermination, des figures et des descriptions de toutes les espèces. Cependant, le Comité scientifique chargé de cette "Faune" a jugé indispensable la publication d'un addenda et corrigenda au *Clofnam* avant que ne commence la préparation de cet ouvrage. En effet, depuis 1973, de nombreux travaux de systématique ou de biologie générale ont été publiés et permettent de corriger le *Clofnam* ou de le compléter.

Le texte de ce *Supplément* a été mis au point grâce à la précieuse collaboration d'un certain nombre d'ichtyologistes qui nous ont fourni, soit des manuscrits complets, soit les éléments nécessaires à leur rédaction. Nous tenons à remercier particulièrement :

V.V. Barsukov (Anarhichadidae)
H. Bath (Blenniidae)
M.L. Bauchot (Anguilliformes, Sparidae)
A. Ben Tuvia (Sillaginidae)
M.J. Costa (Ateleopodidae)
G. Krefft (Notosudidae, Alepocephalidae, Myctophidae)
G.E. Maul (Diretmidae, Ceratioidae, Trachichthyidae)
P.J. Miller (Gobiidae)
J. Nielsen (Nemichthyidae, Ophidiidae)
W.M. Smith-Vaniz (Carangidae)
M. Stehmann (Rajidae)
E. Trewavas (Mugilidae, Sciaenidae)

Par ailleurs, nous avons reçu des informations de R.C. Baird, E. Bertelsen, M. Desoutter, E.A. Lachner, Th. Monod, J.R. Paxton, A. Post, A.G. Pras, V.G. Springer, M. Torchio, V.D. Vladkyov, A. Wheeler, P.J.P. Whitehead et C.D. Zander. Lors de la préparation du manuscrit, les rédacteurs ont apporté de nombreuses additions, surtout en ce qui concerne les espèces méditerranéennes.

Les plus importantes additions au *Clofnam* concernent les familles des Rajidae, Alepocephalidae, Myctophidae, Gobiidae et le sous-ordre des Certatioidei. En ce qui concerne les Blenniidae, nous exposons brièvement la nouvelle classification proposée par H. Bath, tout en soulignant que C.D. Zander n'est pas complètement d'accord avec celle-ci.

Depuis 1973 plusieurs familles et de nombreux genres et espèces sont nouveaux pour l'aire géographique du *Clofnam* :

Nouvelles familles : 5 (Megalopidae, Sillaginidae, Draconettidae, Thaumathichthyidae et Bythitidae, cette dernière famille incluant une partie des anciens Britulidae)

Nouveaux genres : 22

Nouvelles espèces : 65

A la suite de nouvelles interprétations systématiques, quelques familles ont été réunies ou subdivisées ou ont changé de nom :

<i>Classification du Clofnam</i>	<i>Classification actuelle</i>
Bathylaconidae + Alepocephalidae + Bathypirionidae	Alepocephalidae
Synodontidae + Bathysauridae	Synodontidae
Bathypteroidae + Ipnopidae + Chlorophthalmidae	Chlorophthalmidae
Scopelarchidae	Notosudidae
Echelidae + Ophichthidae	Ophichthidae
Eretmophoridae	Moridae
Girellidae + Kyphosidae	Kyphosidae
Scombridae + Thunnidae + Scomberomoridae	Scombridae
Brotulidae	Ophidiidae (<i>partim</i>) + Bythitidae (<i>partim</i>)
Tetraodontidae + Canthigasteridae	Tetraodontidae

Ajoutons que la bibliographie s'est enrichie de 327 nouvelles références.

Avant la mention de quelques corrections mineures (*errata*), les *addenda* et *corrigenda* sont présentés selon la forme adoptée dans le *Clofnam* : les numéros indiqués en marge correspondent aux numéros des familles, genres et espèces dans l'ouvrage original. Les intitulés des rubriques "Eggs, larvae and young stages" et "Habitat, distribution and abundance" ont été abrégés pour alléger le texte.

Le *Clofnam* et son *Supplément* permettront aux ichthyologistes qui collaboreront à la rédaction de la "Faune" de disposer d'un outil de travail le plus à jour possible. Le *Supplément* devait donc être publié avant que les spécialistes ne commencent leur travail. Nous souhaitons avoir atteint l'objectif qui nous était assigné.

E. Tortonese et J.C. Hureau

Addenda and corrigenda to volume I

Addenda et corrigenda concernant le volume I

2. MVXINIDAE

2.1.1 *Myxine glutinosa* Linnaeus, 1758

Habitat, etc. In the Mediterranean only found off Morocco (Tetuan : Roule, 1919) and Algeria (Cherchell : Dieuzeide, 1956).

3. HEXANCHIDAE

3.2.1. *Heptanchias perlo* (Bonnaterre, 1788)

Heptanchus cinereus : Darracq in Moreau, 1881 : 340.

Heptanchias perlo : Capapé, 1974a : 230 / Belloc in Harambillot *et al.*, 1976 : 24 / Quéro *et al.*, 1977 : 231, fig. 1.

Habitat, etc. Also in the Gulf of Biscay.

5. ODONTASPIDIDAE

5.1.1. *Odontaspis ferox* (Risso, 1810)

Quéro, 1972 : 195 / Capapé, 1975 : 108, fig. 1.

Common names, Schildzahnhai (De) must be replaced by Stierhai, also applied to *O. taurus*.

5.1.3 *Odontaspis taurus* (Rafinesque, 1810)

Capapé, 1974a : 232.

6. MITSUKURINIDAE

6.1.1 *Mitsukurina owstoni* Jordan, 1898

Scapanorhynchus owstoni : Quéro, 1970 : 281 / Gueguen & Quéro, 1974 : 182.

Mitsukurina owstoni : Quéro & Verron, 1975 : 99, fig. 1. / Gueguen *et al.*, 1977 : 182 / Du Buit *et al.*, 1977 : 186.

Mitsukurina, sp. : Quéro *et al.*, 1976 : 180, fig. 3.

Habitat, etc. Gulf of Biscay, 220-400 m ; French Guiana, 600-700 m (Abbes in Quéro, 1972).

7. LAMNIDAE

7.1.1 *Lamna nasus* (Bonnaterre, 1788)

Capapé, 1975 : 110, fig. 2.

Eggs, etc. Embryos described by Calderwood (1887 : 263), Collett (1905 : 77), Shann (1911 : 73 ; 1923 : 161), Nordgaard (1939 : 39), Bigelow & Schröder (1948 : 116, fig. 17).

7.2.1 *Carcharodon carcharias* (Linnaeus, 1758)

Quérb *et al.*, 1978 : 429, fig. 1-2.

Eggs, etc. Capapé, 1974a : 233. Embryo described by Parker (1887 : 27, pl. 4-8).

Habitat, etc. Gulf of Biscay : Dessalines d'Orbigny (1821) in Quéro *et al.*, 1978 : 429 ; Moreau, 1881 : 632 ; Quéro *et al.*, 1978 : 429, fig. 1-2.

Common names, Reuzenhai (De) must be replaced by Riesenhai.

7.3.1 *Isurus oxyrinchus* Rafinesque, 1810

Eggs, etc. Capapé, 1974a : 233. Embryo described by Vaillant (1889).

8. CETORHINIDAE

8.1.1 *Cetorhinus maximus* (Gunnerus, 1765)

Eggs, etc. Capapé, 1974a : 235.

9. ALOPIIIDAE

9.1.1 *Alopias vulpinus* (Bonnaterre, 1788)

Eggs, etc. Capapé, 1974a : 234. Embryos described by Doderlein (1881 : 52), young stages by Vaillant (1886 : 41).

11. **SCYLIORHINIDAE**
 11.1.1 *Scyliorhinus canicula* Linnaeus, 1758
Scyllium acanthonotum De Filippi & Vérany, 1859, *Mem. Accad. Sci. Torino*, 2, 18 : 193, fig. 2 (Albenga, gulf of Genoa), Holotype : MZUT 2497 (= young *S. canicula*).
Scyliorhinus canicula : Capapé, 1977a : 83, 9 fig.
- 11.1.2 *Scyliorhinus stellaris* (Linnaeus, 1758)
 Capapé, 1977 : 3.
- 11.3.1 *Galeus melastomus* Rafinesque, 1810
 Capapé & Zucuali, 1977, 449-463, 7 fig.
12. **PSEUDOTRIAKIDAE**
 12.1.1 *Pseudotriakis microdon* Capello, 1868
 Quéro & Verron, 1975 : 100, fig. 2 / Gueguen et al., 1976 : 181 / Quéro et al., 1976 : 181, fig. 4 / Du Buit et al., 1977 : 185 / Quéro et al., 1977 : 238 ; 1978 ; 434.
13. **CARCHARHINIDAE**
 13.1.7 *Carcharhinus plumbeus* (Nardo, 1827)
 Eggs, etc. Capapé, 1974a : 334.
 13.3.1 *Galeorhinus galeus* (Linnaeus, 1758)
 Eggs, etc. Capapé, 1974a : 237.
 13.5.1 *Mustelus mustelus* (Linnaeus, 1758)
 Eggs, etc. Capapé, 1974a : 330.
 13.5.2 *Mustelus asterias* Cloquet, 1821
 Eggs, etc. Capapé, 1974a : 235.
 13.5.3 *Mustelus mediterraneus* Quignard & Capapé, 1972
 Capapé & Quignard, 1977 : 103, 10 fig.
 Eggs, etc. Capapé, 1974a : 331.
 Habitat, etc. Also in Ionian Sea (Kaspiris, 1974).
 13.8.1 *Prionace glauca* (Linnaeus, 1758)
 Eggs, etc. Capapé, 1974a : 333.
14. **SPHYRNIDAE**
 14.1.1 *Sphyrna zygaena* (Linnaeus, 1758)
 Eggs, etc. Capapé, 1974a : 339. Embryos described by Tortonese (1950 : 54, fig. 4).
 14.1.4 *Sphyrna mokarran* (Rüppell, 1837)
Zygaena mokarran Ruppell, 1837, Neue Wirbeltiere, Fische : 66-67, pl. 17 fig. 3 (Massawa, Red Sea). Holotype SMF 3590.
Sphyrna mokarran : Gilbert, 1967, *Proc. U.S. Nat. Mus.*, 119 (3539) : 25, fig. 6, 7, 21b, pl. 2, fig. 6A.
 Habitat, etc. Circumtropical. A large specimen was captured in the Gulf of Genoa (Boero & Carli, 1977). This is the first Mediterranean report.
15. **OXYNOTIDAE**
 15.1.1 *Oxynotus centrina* (Linnaeus, 1758)
 Eggs, etc. Capapé, 1974a : 238.
16. **SQUALIDAE**
 16.1.2 *Squalus blainvillei* (Risso, 1826)
 Ledoux, 1970 : 65, fig. 1-3 / Quignard, Capapé & Negla, 1971 : 125.
 Eggs, etc. Capapé, 1974a : 239.
 16.2.1 *Centrophorus granulosus* (Schneider, 1801)
 Eggs, etc. Capapé, 1974a : 243.
 16.6.1 *Etmopterus spinax* (Linnaeus, 1758)
 Eggs, etc. Capapé, 1974a : 244.
 16.10.1 *Scymnorhinus licha* (Bonnaterre, 1788)
 Eggs, etc. Capapé, 1974a : 245.
 16.11.3 *Somniosus bauchotae* Quéro, 1976
Somniosus bauchotae Quéro, 1976, *Rev. Trav. Inst. Pêches marit.*, 39,4 : 455-459, fig. 1-8 (46°50'N, 05°10'W, 220 m depth). Holotype MNHN 1976-12.
Somniosus, sp. : Quéro, Verron & Cattin, 1976 : 182-183, fig. 2.
Somniosus bauchotae : Quéro et al., 1978 : 431, fig. 3.
 Habitat, etc. Only known from the holotype, a female of 130 cm total length, taken by long line.
 16.12.1 *Squaliolus laticaudus* Smith & Radcliffe, 1912
 Seigel et al., 1977 : 788-791.

- 17 SQUATINIDAE
 17.1.1 *Squatina squatina* (Linnaeus, 1758)
 Eggs, etc. Capapé, 1974a : 245.
- 17.1.3 *Squatina oculata* (Bonaparte, 1840)
 Eggs, etc. Capapé, 1974a : 248.
18. PRISTIDAE
 18.1.1 *Pristis pristis* (Linnaeus, 1758)
 Capapé, 1977 d : 7 (Embiez, near Toulon, France).
19. RHINOBATIDAE
 19.1.1 *Rhinobatos rhinobatos* (Linnaeus, 1758)
 Eggs, etc. Capapé *et al.*, 1975 : 48.
- 19.1.2 *Rhinobatos cemiculus* E. Geoffroy Saint-Hilaire, 1817.
 Eggs, etc. Capapé *et al.*, 1975 : 52, fig. 1-2.
- 19.1.3 *Rhinobatos halavi* (Forsskal, 1775)
 Habitat, etc. The presence in the Mediterranean is very uncertain (Ben Tuvia, 1966 : 269).
20. TORPEDINIDAE
 20.1.1 *Torpedo torpedo* (Linnaeus, 1758)
 Eggs, etc. Quignard & Capapé, 1974 : 99, 5 fig.
- 20.1.2 *Torpedo marmorata* Risso, 1810
 Eggs, etc. Capapé, 1974 b : 256.
- 20.1.3 *Torpedo (Tetronarce) nobiliana* Bonaparte, 1835
 Eggs, etc. Capapé, 1974 b : 263.
21. RAJIDAE
 21.1.1 *Raja (Raja) miraletus* Linnaeus, 1758
 Capapé & Quignard, 1975 a : 263-276.
 Eggs, etc. Capapé & Quignard, 1974 : 39, 5 fig.
- 21.1.1a *Raja (Raja) africana* Capapé, 1977
Raja africana Capapé, 1977 e, *Bull. Soc. Sci. nat. Tunisie*, 12 : 69, fig. 1-3. Holotype : MNHN 1977.206, Mauritania.
 Habitat, etc. Mauritania, 200 m ; off North Tunisia, 300-400 m.
- 21.1.2 *Raja (Raja) asterias* Delaroche, 1809
 Capapé, 1977 b : 305, 8 fig.
- 21.1.4 *Raja (Raja) clavata* Linnaeus, 1758
 Capapé, 1976 a : 907, 6 fig.
- 21.1.5 *Raja (Raja) maderensis* Lowe, 1839 (1)
Raja maderensis Lowe, 1839, *Trans. Zool. Soc. London*, (1841) 2 (3) : 195 (off Madeira). No types.
 Note - This replaces the first three lines ; remaining text as originally.
- 21.1.7 *Raja (Raja) montagui* Fowler, 1910
 Capapé, 1975 : 113, fig. 3.
- 21.1.9a *Raja (Amblyraja)* spec.
 One additional well-defined *Raja* species of the subgenus *Amblyraja* living in the area is now under study and will be published soon by Stehmann.
- 21.1.15 *Raja (Leucoraja) naevus* Müller & Henle, 1841
 Capapé, 1975 a : 76, fig. 1, pl. 1.
- 21.1.16 *Raja (Malacoraja) spinacidermis* Barnard, 1923
Raja mollis : Stehmann, 1977 : 90-92.
Raja spinacidermis : Hulley & Stehmann, 1977 : 227-237, fig. 1-5 / Stehmann, 1977 : 90-92.
 Habitat, etc. Add : first adult male reported by Hulley & Stehmann, 1977.
- 21.1.16a *Raja (Malacoraja) kreffti* Stehmann, 1977
Raja kreffti Stehmann, 1977, *Arch. Fisch. Wiss.* 28 (2/3) : 77-93, fig. 1-9 (NW slope Bill Bailey's Bank). Holotype ISH 748/74.
 Habitat, etc. Benthic. Known from the holotype only, an adult male, caught in 1200 m depth northwest of Scotland.

(1) Vol. 2 of the *Trans. Zool. Soc. London* was published in four issues, no 3 of which appeared in 1839, while the title page for the complete volume was printed together with issue no 4 first in 1841 ; cf. Stehmann, 1971b : 175-176.

- 21.1.17a *Raja (Rajella) bathyphila* Holt & Byrne, 1908 (1)
Raja bathyphila Holt & Byrne, 1908, *Fish. Irel. scient. Inv.* (1906), 1908, 5 : 51-52
(51°12'30" N, 12°01'8" W ; off SW Ireland). Holotype BMNH 1912.3.1.108.
Raja linteae (nec Fries, 1839) : Clark, 1926 : 47 (*partim*).
Raja bathyphila : Bigelow & Schroeder, 1953a : 159-165 (*partim*, so far holotype is concerned) / Stehmann, 1970 (*partim*) / Stehmann, 1978 : 36-57, fig. 4-15.
- 21.1.17b *Raja (Rajella) bigelowi* Stehmann, 1978
Raja bigelowi Stehmann, 1978, *Arch. Fisch. Wiss.* 29 (1/2) : 26-35, 52-57, fig. 1-3
(37°05' N, 74°20.6' W, continental slope NW-Atlantic). Holotype : USNM n° 218284 ; 14 paratypes : USNM nos 35584, 35591, 38210, 148269, 148276, 218273 a + b, 218285, MOM without coll. no., ISH nos. 969/73, 970/73 a + b, 148/74, GMNH (Z) no. 1977-170-11.
Raja ackleyi (nec Garman, 1881) : Roule, 1912 : 20.
Raja bathyphila (nec Holt & Byrne, 1908) : Bigelow & Schroeder, 1953a : 159-165, fig. 30-31 / Bigelow & Schroeder, 1954 : 52-54 / Stehmann, 1970 (*partim*) / Stehmann, 1971a : 1, fig. 1-2 / Stehmann, 1973 : 66 (*partim*) / McEachran & Stehmann, 1977 : 20-25, fig. 1-5.
Complementary iconography. Bigelow & Schroeder, 1953a : fig. 30-31.
Eggs, embryonic and young stages. Bigelow & Schroeder, 1953a : 163-165, fig. 31B / Stehmann, 1978 : fig. 3.
Habitat, distribution and abundance. Benthic on the abyssal plains and along lower parts of the continental slopes. In the area : Rockall Basin. Outside the area : NW-Atlantic between 28° N and 45° N, 1 specimen from the Azores. Rare.
- 21.1.21 *Raja melitensis* Clark, 1926
Capapé, 1975a : 85, fig. 2, pl. 2 ; 1977c : 177, pl. 1, 5 fig.
- 21.1.22 *Raja polystigma* Regan, 1923
Bini, 1970 : 303, fig. 1-5 / Kaspiris, 1974 : 2.
- 21.1.23 *Raja radula* Delaroche, 1809
Capapé, 1974 : 211, 8 fig. / Capapé & Quignard, 1975a : 263-276.
- 21.1.25 *Raja undulata* Lacepède, 1802
Bini, 1970 : 310, fig. 6.
- 21.2.2 *Bathyraja richardsoni* (Garrick, 1961)
Templeman, 1973a : 1729-1732, fig. 1-4 ; 1973b : 1831-1840, fig. 1-8.
- 21.2a *Breviraja* Bigelow & Schroeder, 1948 Gender : F
J. Mar. Res. 7 (3) : 558 (type by orig. design. : *B. colesi* Bigelow & Schroeder, 1948 (south and north coast of Cuba).
design. : *B. Colesi* Bigelow & Schroeder, 1948 (south and north coast of Cuba).
- 21.2a.1 *Breviraja caerulea* Stehmann, 1976
Breviraja caerulea Stehmann, 1976, *Arch. Fisch. Wiss.*, 27 (2) : 97-114, fig. 1-11 (slopes around Rockall Basin). Holotype ISH 90/74a ; 11 paratypes ISH 48-74, 58/74, 71/74, 72/74a-c, 77/74, 83/74, 90/74b, 92/74, 153/75.
Eggs, etc. Stehmann, 1976 : 108-114, fig. 8b, 10c (1 juv. male).
Habitat, etc. Benthic in 600 to 1260 m depth on the slopes around the Rockall Basin (NE Atlantic) ; also on the outer slopes of its surrounding banks. Including types so far known from 13 specimens.
- 21.2a.2 *Breviraja* spec. (2)
Raja fullonica (nec Linnaeus) Vaillant, 1888, Expéd. «Travailleur» et «Talisman», 1880-1883, Poissons : 79, pl. 4, fig. 1-1a. Golfe de Gascogne, 614 m. This single specimen (MNHN 83-149) is disintegrated and in bad condition, in alcohol.
Breviraja spec. : Stehmann, 1976 : 100-101.
Habitat, etc. Since the genus *Breviraja* has been verified in the NE Atlantic with *B. caerulea* from the Rockall basin, Vaillant's specimen has been carefully checked again by Stehmann, including its capture locality. Most probably it was captured not at the station n° 1, but at the station n° 6 of «Travailleur» (6.7.1882 ; 43° 47' N, 06° W, off northern Spain in 614 m depth). Undoubtedly this specimen does not fit in *B. caerulea*, but whether or not it represents an undescribed species remains still uncertain.

(1) This completely replaces n° 21.1.19.

(2) Delete completely (page 69) *Raja fullonica* (nec Linnaeus) Vaillant, 1888, including footnote 2. All is now replaced by 21.2a.2.

22. **DASYATIDAE**
- 22.1.1 *Dasyatis pastinaca* (Linnaeus, 1758)
Capapé, 1976 : 22 ; 1977f : 76, fig. 2-3.
- 22.1.2 *Dasyatis centroura* (Mitchill, 1815)
Capapé, 1977 : 84, fig. 4-5.
- 22.1.3 Eggs, etc. Capapé, 1974c : 345, fig. 1-2.
Dasyatis violacea (Bonaparte, 1832)
Capapé, 1975 : 118, fig. 5 ; 1977f : 91, fig. 6-7.
- 22.1.4 *Dasyatis tortonesei* Capapé, 1977
Dasyatis tortonesei Capapé, 1977f, *Cybium* (2) : 95-99, fig. 8-9. Off Tunisia. Holotype MNHN 1977-107.
Dasyatis pastinaca (nec Linnaeus, 1758) : Tortonese, 1956 : 267, fig. 148 (*partim*).
Dasyatis tortonesei : Capapé, 1975 : 116-118, fig. 4 (*nomen nudum*) ; 1977f : 95, fig. 8-9.
Habitat, etc. Benthic on sandy and soft bottoms in coastal waters to 100 m depth. Known only from Tunisia. Not rare.
- 22.2.1 *Gymnura altavela* (Linnaeus, 1758)
Pteroplatea binotata Lunel, 1879, *Mém. Soc. Phys. Hist. nat. Genève*, 26 (2) : 423-426, fig. 1-2. Rio de Janeiro. Holotype MHNG 1213.89.
Pteroplatea binotata : Stehmann, 1974 : 412-426, fig. 1, 3.
Eggs, etc. Capapé, 1974c : 350.
23. **MYLIOBATIDAE**
- 23.1.1 *Myliobatis aquila* (Linnaeus, 1758)
Capapé & Quignard, 1974a : 1-27.
- 23.2.1 *Pteromylaeus bovinus* (E. Geoffroy Saint-Hilaire, 1817)
Capapé & Quignard, 1975 : 1329, 8 fig.
24. **RHINOPTERIDAE**
- 24.1.1 *Rhinoptera marginata* (E. Geoffroy Saint-Hilaire, 1817)
Habitat, etc. A specimen recorded from Adriatic (Perugia, 1881 : 60) and quoted afterwards by several authors, was really an abnormal *Pteromylaeus bovinus*, now preserved in the Museum of Natural History of Trieste (Tortonese, 1954 : 161, fig. 1-6).
25. **MOBULIDAE**
- 25.1.1 *Mobula mobular* (Bonnaterre, 1788)
Eggs, etc. Embryos described by Tortonese (1957 : 45, fig.) and by Capapé & Zaouali (1976 : 1, fig. 1-2).
- 28a. **MEGALOPIDAE**
- 28a.1 *Tarpon* Jordan & Evermann, 1896
Bull. U.S. Nat. Mus., 47 : 409 (type : *Megalops atlanticus* Cuv. Val., 1847, by monotypy).
Tarpon atlanticus (Valenciennes, 1847)
Megalops atlanticus Valenciennes in Cuvier & Valenciennes, 1847, *Hist. nat. Poiss.*, 19 : 398.
Tarpon atlanticus : Costa Pereira & Saldanha, 1977 : 1-15, 2 fig.
Habitat, etc. Pelagic and littoral. In the area : Portugal, Azores (rare) ; generally : coasts of Senegal to Angola and coasts of North Carolina to Brazil.
30. **ALEPOCEPHALIDAE**
- This family now includes Bathylaconidae (29) and Bathypriionidae (31).
- 30.1.1 *Alepocephalus rostratus* Risso, 1820
Maul, 1976 : 9-10
- 30.1.2 *Alepocephalus agassizii* Goode & Bean, 1883
Habitat, etc. Benthic on sand and clay bottoms in about 1000 to 2300 m depth. In the area : Denmark Strait and between SW Iceland and Ireland, probably much further south at appropriate depths. Generally : North Atlantic from Davis Strait to 15° N. Rather common.
- 30.1.3 *Alepocephalus australis* Barnard, 1923
Alepocephalus australis Barnard, 1923, *Ann. S. Afr. Mus.*, 13 (8) : 440-441 («off Cape Point, 630 fathoms»). 4 syntypes : SAM 12714-12716, BMNH 1927.12.6.3.
Alepocephalus australis : Barnard, 1925 : 121, pl. 7, fig. 2 / Grey, 1956, *partim* : 105 / Markle, 1976 : 114.

Alepocephalus ? australis : Koefoed, 1927 : 39-40, pl. 4, fig. 5-6.

Alepocephalus australis australis : Parr, 1952b : 257.

Habitat, etc. Benthic in about 1000 to 2600 m depth. In the area, only known from a few specimens of doubtful identification caught off SW Ireland ; generally : probably widely distributed in the Atlantic ocean off South Africa, in the Gulf of Guinea and the Western North Atlantic. Probably not rare.

Note. The taxonomic status of the North Atlantic specimens is uncertain. The name *australis* Barnard is applied to them tentatively only.

30.1.4 *Alepocephalus bairdi* Goode & Bean, 1879

Alepocephalus rostratus (nec Riss, 1820) : Maul, 1948a : 10-11, fig. 2.

Alepocephalus bairdii : Maul, 1976 : 10-11, fig. 2.

30.2 *Anomalopterichthys* Whitley, 1940

Add to the synonyms :

Leptochilichthys Garman, 1899, *Mem. Mus. Comp. Zool. Harvard*, 24 : 284-285 (type by monotypy : *L. agassizii* Garman : 01°07'N, 80°21'W, off Ecuador, 2877 m).

30.2.1 *Anomalopterichthys pinguis* Vaillant, 1886

Add to the references :

Leptochilichthys agassizii Garman, 1899, *Mem. Mus. Comp. Zool. Harvard*, 24 : 285-286, pl. 58, fig. 3. Holotype MCZ 28479.

Leptochilichthys agassizii macrops Roule & Angel, 1931, *Bull. Inst. Océan. Monaco*, 581 : 6 (Coast of Morocco, 0-3000 m). Holotype in MOM.

Leptochilichthys agassizii macrops : Roule & Angel, 1933 : 8, 39, pl. 1, fig. 3 / Belloc, 1949 : 5.

Leptochilichthys agassizii : Markle, 1976 : 109-111, fig. 38a.

Habitat, etc. Bathypelagic ; generally between 2000 and 3100 m, exceptionally at 490 m depth. In the area : slopes of Western Europe between 48°30'N and the southern border ; southward to 14°11'N. Elsewhere : eastern Pacific Ocean from the equator to 38°24'N. Rarely caught.

30.4.1 *Bajacalifornia megalops* (Lutken, 1898)

Cyclothona (?) *megalops* Lutken, 1898, *Dan. Ingolf Exped.*, 2 (1) : 10-11, pl. 4, fig. 6 (64°38'N, 32°03'W, 1040 fathoms). Holotype ZMUC n.1.

Bathytroctes drakei Beebe, 1929, *Zoologica, N.Y.*, 12 : 6 (Hudson Gorge, 39°15'N, 72°00'W). Holotype USNM 170958.

Bathytroctes drakei : Beebe, 1933b : 23-26, fig. 2-6 ; 1937 : 138.

Bajacalifornia drakei : Parr, 1937 : 25-27, fig. 1D, 8 ; 1952 : 265 / Grey, 1956 : 108 / Bussing, 1965 : 187 / Markle, 1976 : 121-122, fig. 36C.

Bathytroctes spec. : Krefft, 1964a : 79.

Eggs, etc. Beebe, 1933b : 26-31 (larvae and juveniles).

Habitat, etc. Bathypelagic in 700 to 2500 m depth. In the area known from Denmark Strait (Krefft, 1964a) and from unpublished specimens in ISH, taken by R/V «Walther Herwig» during the «Overflow '73» expedition at several stations between E-Greenland and 46° N, along the slope of W Europe. Generally : widely distributed in the western North Atlantic between 64° and 21° N, also in the eastern Pacific, at 33° S, 72° W. «Moderately rare» (Beebe, 1933b).

30.4a *Bathylaco* Goode & Bean, 1896

Gender : M

Oceanic Ichthyology : 57 (type *B. nigricans* Goode & Bean, by monotypy).

Macromastax Beebe, 1933, *Zoologica, N.Y.*, 13 (8) : 161 (type *M. gymnos* Beebe, by monotypy).

30.4a.1 *Bathylaco nigricans* Goode & Bean, 1896

Bathylaco nigricans Goode & Bean, 1896, Oceanic Ichthyology : 57, fig. 69 (between St. Croix and St. Thomas, Virgin Isls.). Holotype MCZ 28061.

Macromastax gymnos Beebe, 1933, *Zoologica, N.Y.*, 13 (8) : 162-163, fig. 40 (eight miles south of Nonsuch Isl., 1000 fathoms). Holotype USNM 170960 (Synonymy doubtful).

Bathylaco nigricans : Nielsen & Larsen, 1968 : 222-231, pl. 15 ; 1970 : 30-35, fig. 1A, 2-4 / Nielsen, 1972b : 34-35, fig. 5 / Markle, 1976 : 123, fig. 38 B.

Eggs, etc. Nielsen & Larsen, 1968 : 228-229, 231, fig. 7 (*Macromastax gymnos* is probably a juvenile form).

Habitat, etc. Meso- and bathypelagic. In the area : off Madeira, the Azores and on the western slopes of Europe northwards to about 50° N (ISH, unpublished) ; generally ; warmer parts of all oceans. Not rare.

30.4b *Bathyprion* Marshall, 1966

Gender : M

Dana Rep., (68) : 4 type : *R. danae* Marshall by orig. design).

- 30.4b.1 *Bathyprion danae* Marshall, 1966
Bathyprion danae Marshall, 1966, Dana Rep., (68) : 4-9, fig. 1-3 (33°26'S., 157°02'E.). Holotype : ZMUC no. P. 1785.
- Bathyprion danae* : Markle, 1976 : 133-134, fig. 39 B.
- Habitat, etc. Bathypelagic. In the area : off Madeira and western Europe, northwards to 64°N. (unpublished specimens in ISH) ; generally : eastern Atlantic Ocean southwards to 21°S., Pacific Ocean off Australia, probably worldwide, at depths of 1100 to 2100 m. Rarely caught.
- 30.4c. *Bathytroctes* Günther, 1878 Gender : M
Ann. Mag. nat. Hist., (5) 2 : 249 (type : *B. microlepis* Günther, by subsequ. design. of Jordan, 1919 : 395).
- Grimatrocetes* Parr, 1952, *Bull. Mus. comp. Zool. Harv.*, 107 (4) : 263-265 (type : *Bathytroctes grimaldii* Zumayer, by orig. design.).
- 30.4c.1 *Bathytroctes microlepis* Günther, 1878
Bathytroctes microlepis Günther, 1878, *Ann. Mag. nat. Hist.* (5) 2 : 249 (off Portugal, abt. 35°N., 08°W., 1921 m). Holotype : BMNH no. 1887. 12.7.233.
- Bathytroctes microlepis* : Günther, 1887 : 226-227, pl. LVII (fig. A) / Goode & Bean, 1896 : 42-43 / Roule, 1935, 1, 4 / Nobre, 1935 : 519-520, part. (only the type specimen) / Lozano Rey, 1947 : 76-77, fig. 11 / Dollfus, 1955 : 29, 99 / Markle, 1976 : 128-130, fig. 37 A-C.
- Bathytroctes grimaldii* Zugmayer, 1911a, *Bulletin. Inst. Océanogr. Monaco*, (193) : 1-2 (37°38'N., 100°53'W., 0-4900 m). Holotype : MOM.
- Bathytroctes grimaldii* : Zugmayer, 1911b : 6-7, pl. I (fig. 2) / Lozano Rey, 1947 : 73-74, pl. III (fig. 2) / Belloc, 1949 : 5.
- Grimatrocetes microlepis* : Parr, 1952b : 266 / Grey, 1956 : 108 ; 1958 : 152-153.
- Grimatrocetes grimaldii* : Parr, 1952b : 266 / Grey, 1956 : 108 ; 1958 : 152.
- Bathytroctes danae* Parr, 1951, *Am. Mus. Novit.*, (1531) : 12 (15°22'N., 115°20'E., 600 m.w.o.). Holotype : ZMUC no. P 1776.
- Grimatrocetes bullisi* Grey, 1958, *Fieldiana, Zool.*, 39 : 150-153, fig. 22 (28°47'N., 87°50'W., 2104-2194 m). Holotype : USNM no. 159331 : 3 paratypes : FMNH no. 64073 (identity of one of the paratypes doubtful).
- Habitat, etc. Bathypelagic. In the area : from about 53°N. southwards along the western slopes of Europe to the southern border of the area and beyond to abt. 15°S. ; generally : warmer parts of the Atlantic Ocean, South China Sea and eastern South Pacific, at depths exceeding 1500 m, sometimes close to the bottom. Not rare.
- 30.5 *Bellocia* Parr, 1951
Nomocetes Parr, 1952, *Bull. Mus. comp. Zool.*, 107 (4) : 266 (subgenus ; type : *Bathytroctes michaelsarsi* Koefoed, by orig. design.).
- 30.5.1 *Bellocia koefoedi* (Parr, 1951)
Bathytroctes koefoedi Parr, 1951, *Am. Mus. Novit.*, (1531) : 11 (34°59'N., 33°00'W., 2865 m). Holotype : UBNM no. 3351.
- Bathytroctes melanocephalus* Vaillant, 1888, part., Expéd. 'Travailleur' et 'Talisman', Poissons : pl. XI (fig. 3) only, not description, *ibid* : 155-157. One paratype : MNHN no. 86-3.
- Bathytroctes alvifrons* : Koefoed, 1927 : 45-48.
- Bathytroctes melanocephalus* : Bertin, 1940a : 274, part. / Lozano Rey, 1947 : 78-79, part. / Dollfus, 1955 : 29, 99, part. (Station XXVIII).
- Bellocia vaillanti* Parr, 1951, *Am. Mus. Novit.* (1531) : 12-13 (off Morocco, 2600 m). Holotype : MNHN no. 86-3.
- Bathytroctes koefoedi* : Parr, 1952 : 267
- Bellocia vaillanti* : Grey, 1956 : 110 / Dollfus, 1962 : 97-98, pl. V (fig. 1-2) / Markle, 1976 : 135.
- Nomocetes koefoedi* : Markle, 1976 : 132, fig. 38D.
- Bellocia koefoedi* : Markle (in press).
- Habitat, etc. Benthic (?). Inside the area : Near the Azores and Morocco ; elsewhere found once in the Gulf of Mexico. Found between 2600 and 5850 m. Rare.
- Note. This species may be a synonym of *Bathytroctes alvifrons* Garman, 1899.
- 30.5.2 *Bellocia michaelsarsi* (Koefoed, 1927)
Bathytroctes michaelsarsi Koefoed, 1927, Rep. scient. Results 'Michael Sars' N. Atlant. deep Sea Exped. 4 (1) : 48-50, pl. III (fig. 9) (34°59'N., 33°01'W., 2865 m). 4 syntypes : UBNM no. 3413.
- Bathytroctes (Nomocetes) michaelsarsi* : Parr, 1952 : 266.
- Nomocetes michaelsarsi* : Markle, 1976 : 131, fig. 38 C.
- Habitat, etc. Bathypelagic. In the area : found between 23°29'58.8"N., 23°17.3"W., in

- 2010 to 3000 m depth (IOS unpubl.) and $42^{\circ}56'N$, $13^{\circ}29'W$, in 3000 to 3100 m (ISH unpubl.) ; elsewhere : known from a few specimens taken in the western North Atlantic. Rare.
- Note.* Possibly a synonym of *Bathyroctes alveatus* Garman, 1899.
- 30.6 *Conocara* Goode & Bean, 1896
Mem. Mus. Comp. Zool. Harvard, 22 : 39 (type : *C. macdonaldi* Goode & Bean, by subs. design. of Jordan & Evermann, 1896).
- 30.6.2a *Ericara* Gill & Townsend, 1897, *Proc. Biol. Soc. Wash.*, 11 : 232 (type : *E. salmonaea* Gill & Townsend, by monotypy).
- 30.6.2a *Conocara salmonaea* (Gill & Townsend, 1897)
Ericara salmonaea Gill & Townsend, 1897, *Proc. Biol. Soc. Wash.*, 11 : 232 (Bering sea, about $55^{\circ}N$, $170^{\circ}W$, 3239 m). Holotype USNM 48769.
- 30.6.3 *Xenognathus profundorum* Gilbert, 1915, *Proc. U.S. Nat. Mus.*, 48 : 311 (off Sta. Catalina Isl., California, 1350 to 2182 fathoms). Holotype USNM 75826.
- 30.7 *Ericara salmonaea* : Parr, 1951 : 14-15 / Grey, 1956 : 115 / Markle, 1976 : 144-145.
Habitat, etc. Benthic. In the area : taken at $50^{\circ}03.16'N$, $13^{\circ}50.56'W$, in 3749-3757 m (IOS unpubl.). Generally : western Atlantic and eastern Pacific Oceans. Rare.
- 30.6.3 *Conocara werneri* Nybelin, 1947
Markle, 1976 : 144.
- 30.7 *Einara* Parr, 1951
Torictus Parr, 1951, *Am. Mus. Novit.* (1531) : 10 (type : *Alepocephalus edentulus* Alcock, by orig. design.).
- 30.7.1 *Einara macrolepis* (Koefoed, 1927)
Markle, 1976 : 141-142.
Habitat, etc. Bathypelagic to abyssopelagic. Eastern North Atlantic from off SW Ireland to the southern border of Clofnam area, and beyond to - at least - $12^{\circ}N$. Possibly also in the Indian ocean. Rarely caught.
- 30.7.2 *Einara edentula* (Alcock, 1892)
Alepocephalus edentulus Alcock, 1892, *Ann. Mag. Nat. Hist.*(6) 10 (59) : 358-359, pl. 18, fig. 2 (Bay of Bengal, $12^{\circ}50'N$, $81^{\circ}30'E$, 475 fathoms). Holotype ZSI n° F 13192.
Alepocephalus edentulus : Alcock, 1899 : 172-173.
Alepocephalus edentulus atlanticus Roule & Angel, 1931, *Bull. Inst. Océan. Monaco*, (581) : 5-6 (between Madeira and the southern coast of Morocco, 0 to 4000 m). Holotype in MOM.
Alepocephalus edentulus atlanticus : Roule & Angel, 1933, 4-5, pl. 1, fig. 1 / Belloc, 1949 : 5.
Alepocephalus atlanticus : Fowler, 1936 : 1161 / Dollfus, 1955 : 28, 98 / Grey, 1956 : 105-106.
Torictus edentulus : Parr, 1951 : 10 / Geistdoerfer et al., 1971a : 364.
Torictus atlanticus : Geistdoerfer et al., 1971b : 1178.
- 30.7a *Einara edentulus* : Markle, 1976 : 140-142.
Habitat, etc. Bathypelagic to abyssopelagic. Only known from a few specimens. In the area : between Madeira and Morocco, and taken by the French R/V «J. Charcot» at $36^{\circ}47.4'N$, $27^{\circ}11.7'W$. Generally : Atlantic and Indian Oceans.
- 30.7a *Herwigia* Nielsen, 1972
Arch. Fischwiss., 23 (1) : 30-32 (type : *Bathylaco kreffti* Nielsen & Larsen, by orig. design.).
Gender : F
- 30.7a.1 *Herwigia kreffti* (Nielsen, 1970)
Bathylaco kreffti Nielsen & Larsen, 1970, *Arch. Fisch. Wiss.* 21 (1) : 35-38, fig. 5-6 ($34^{\circ}01'S$, $47^{\circ}39'W$, about 2000 m). Holotype : ISH 1540/68 ; 1 paratype ISH 231/68.
Herwigia kreffti : Nielsen, 1972b : 32-34, fig. 2a, 3-4 / Iwamoto et al., 1976 : 55-59 fig. 1 / Krefft, 1978.
Eggs, etc. Nielsen, 1972b : 33 (ovarial eggs).
Habitat, etc. Bathypelagic. In the area : West of Scotland, off north Spain and Azore (ISH unpubl.). Generally : Eastern Atlantic, southwards to about $30^{\circ}S$; off Hawaii at depths ranging from 750 to 2500 m. Not rare.
- 30.10.1 *Leptoderma macrops* Vaillant, 1886
Markle, 1976 : 148-150, fig. 33 A.
Habitat, etc. Benthic on soft bottoms in 650 to 2330 m, center of distribution probably between 1000 and 2000 m. Both sides of the Atlantic Ocean, western Pacific (*L. retropinna* Fowler), if Fowler's species should prove to be the same. Inside the Clofnam area found in the Bay of Biscay and off Morocco ; southwards to of

Senegal ; in the Western Atlantic from Brazil ($23^{\circ}13'S$) throughout the Gulf of Mexico and the Caribbean in 530 to 1200 m depth. Not rare.

30.10.2

Leptoderma ? lubricum Abe, Marumo & Kawaguchi, 1965

Leptoderma lubricum Abe, Marumo & Kawaguchi, 1965, *Jap. J. Ichthyol.*, 13 (1/3) : 69-72, fig. 1-4 ($34^{\circ}52'N$, $138^{\circ}48'E$, 0-1300 m). Holotype : ORIT 642.

Leptoderma lubricum-complex : Markle, 1976 : 150-151, fig. 33 C.

Habitat, etc. Originally described from Suruga Bay, Japan, and found in the Eastern South Pacific Ocean off Peru and Chile ; a very similar form has been taken near the Azores in 2283 to 2287 m depth (Markle, l.c.). Whether this eastern Atlantic form is conspecific with *L. lubricum* or may represent an undescribed species, is uncertain. Probably bathypelagic and as yet rarely caught.

30.10a

Mirognathus Parr, 1951

Gender : M

Am. Novit., (1531) : 4,10 (type : *M. normani* by monotypy).

30.10a.1

Mirognathus normani Parr, 1951

Mirognathus normani Parr, 1951, *Am. Mus. Novit.*, (1531) : 10 ($48^{\circ}26'S$, $22^{\circ}10'W$, 1500 to 1600 m). Holotype : BMNH 1952.4.3.2.

Mirognathus normani : Markle, 1976 : 152-153.

Habitat, etc. Bathypelagic. Of the four specimens known, two were taken by R/V «Walter Herwig» inside the Clofnam area at $58^{\circ}03'N$, $28^{\circ}30'W$ and at $42^{\circ}56'N$, $13^{\circ}29'W$, in 2000 and 3100 m, respectively ; the holotype and one larger specimen were found in the South Atlantic.

30.11.1

Narcetes stomias (Gilbert, 1890)

No changes in the first two references and in a few others.

Narcetes pluriserialis Garman, 1899, *Mem. Mus. Comp. Zool. Harvard*, 24 : 289-291, pl. 57, fig. 3 ($05^{\circ}31'N$, $86^{\circ}31'W$, 1010 fath.). Holotype : MCZ 28474.

Narcetes pluriserialis : Koefoed, 1927 : 54-55.

Narcetes stomias : Markle, 1976 : 154-157, fig. 36 D-E.

Habitat, etc. Benthopelagic to benthic in 1510 to 2334 m, mainly between 1800 and 2100 m. East Pacific and Atlantic Oceans ; inside the Clofnam area known from the slopes off Great Britain and Ireland, southwards to off Morocco. Rather common.

30.11a

Photostylus Beebe, 1933

Gender : M

Zoologica, N.Y., 13 (8) : 163 (type : *P. pycnopterus* Beebe, by monotypy).

30.11a.1

Photostylus pycnopterus Beebe, 1933

Photostylus pycnopterus Beebe, 1933a, *Zoologica, N.Y.*, 13 (8) : 163-165, fig. 4 (9 miles south-east of Nonsuch, Bermuda, 800 fathoms). Holotype : USNM no. 170959.

Photostylus pycnopterus : Beebe, 1933b : 82-84, fig. 23 / Grey, 1958 : 56-57 / Good-year, 1969 : 398-400 / Kotthaus, 1972a : 5-6, fig. 1 / Quéro, 1975a : 435-436, fig. 1 / Best & Bone, 1976 : 227-236 / Krefft, 1978 : 1.

Eggs, larvae and young stages, Goodear, 1969 : 399 (ovarial eggs).

Otoliths (sagitta). Kotthaus, 1972a : fig. 1.

Habitat, etc. Bathypelagic at depths exceeding 1000 m. Circumglobal between $65^{\circ}N$. and $35^{\circ}S$. In the area : from West of Iceland southwards to the southern border ; generally all three oceans.

30.11b

Rinocetes Parr, 1952

Gender : M

Bull. Mus. Comp. Zool. Harv., 107 (4) : 263-264 (type : *Bathytroctes nasutus* Koefoed, 1927, by orig. design.).

30.11b.1

Rinocetes nasutus (Koefoed, 1927)

Bathytroctes nasutus Koefoed, 1927, Rep. scient. Results 'Michael Sars' N, Atlantic deep Sea Exped. 1910, 4 (1) : 50-51, pl. III (fig. 10) ($34^{\circ}59'N$, $33^{\circ}01'W$, 2865 m). Holotype : UBNM no. 3208.

Rinocetes nasutus : Parr, 1952 : 264-265 / Grey, 1956 : 106 / Markle, 1976 : 160-161, fig. 39A.

Habitat, etc. Benthopelagic at depths ranging from 2012 to 3757 m. Azores, Cuba and off Yucatan ; in the Clofnam area taken at $50^{\circ}03.16'N$, $13^{\circ}50.56'W$ (IOS unpubl.). Rarely caught.

30.12.1

Rouleina attrita (Vaillant, 1888)

Bathytroctes attritus Vaillant, 1888, Expéd. 'Travaillleur' et 'Talisman', Poissons : 158-160, pl. 12, fig. 2, 2a-c ($37^{\circ}35'N$, $29^{\circ}26'W$, 1442 m). Holotype : MNHN 85-166.

Bathytroctes aequatorialis Goode & Bean, 1896 : 44, fig. 50 ($01^{\circ}03'N$, $80^{\circ}15'W$, 1355 m). Holotype : USNM 44085.

Rouleina attrita : Markle, 1978 : 81, fig. 1 B, 2 A, 3.

Rouleina mollis : Quéro, 1975b : 437-438 / Marle, 1976 : 164.

- Habitat, etc. Benthic at depths mainly between 1400 and 2100 m (Markle, 1978). In the area : From the slopes off Scotland southwards beyond the area's border to abt. Cape Verde, Madeira, Azores ; generally : Atlantic and Southeast Pacific Ocean, southwestern Indian Ocean. Rather common.
- 30.12.2 *Rouleina maderensis* Maul, 1948
Markle, 1976 : 165 ; 1978 : 84, fig. 1A, 2B.
Habitat, etc. Benthic at depths ranging from about 600 to 1200 m, juvenile specimens mesopelagic (Markle, 1978). Distribution area rather equalling that of *R. attrita*, except for the Indian Ocean where the species has not yet been found. Not rare.
- 30.12a *Talismania* Goode & Bean, 1896
Mem. Mus. comp. Zool. Harv., 22 : 41, part. (*homopterus* Vaillant and *antillarum* Goode & Bean only) (type : *Bathytroctes homopterus* Vaillant, by subs. design. of Jordan & Evermann, 1896 : 455).
Nemabathytroctes Fowler, 1934a, *Proc. Acad. nat. Sci. Philad.*, 85 : 252 (type : *Bathytroctes longifilis* Brauer, 1902, by orig. design.).
Binghamia Parr, 1937, *Bull. Bingham oceanogr. Coll.*, 3 (7) : 7 (type : *B. microphos* Parr, 1937, 23°37'25"N., 77°15'10"W., 2135 m w.o., by monotypy).
Binghamichthys Whitley, 1941, *Aust. Zool.*, 10 : 4 (*nomen novum* replacing *Binghamia* Parr preoccupied by *Binghamia* Tutt, 1908 (Lepidoptera) and, therefore, having the same type species).
- 30.12a.1 *Talismania homoptera* (Vaillant, 1888)
Bathytroctes homopterus Vaillant, 1888, *Expéd. scient. 'Travailleur'* et 'Talisman', Poissons : 153-155, pl. XII (fig. 1, 1a-b) (22°03'N., 17°33'W., 1113 m). Holotype : MNHN no. 86-4.
Bathytroctes (Talismania) homopterus : Goode & Bean, 1896 : 43-44.
Talismania homoptera : Parr, 1952a : 269 / Sulak, 1975 : 88 / Quéro, 1975c : 439 / Markle, 1976 : 169-171.
? *Talismania oregoni* Parr, 1952a, *J. Wash. Acad. Sci.*, 42 (8) : 270, fig. 1 (29°09'N., 87°58'W., 470-500 fathoms). Holotype : USNM no. 160482 ; 1 paratype : USNM no. 215561.
? *Talismania oregoni* : Sulak, 1975 : 88-93, fig. 2-5 (compared with other species) / Markle, 1976 : 171-172.
Habitat, etc. Benthic (?). In the area : known from a single specimen taken at 31°26'1"N., 10°52.8'W., in 1166 to 1229 m (IOS unpubl.) ; generally : Banc d'Arguin, and if conspecific with *oregoni*, on both sides of the tropical Atlantic (Gulf of Guinea, Gulf of Mexico, Caribbean, and off northeastern South America. Not Rare.
- 30.12a.2 *Talismania mekistonema* Sulak, 1975
Talismania mekistonema Sulak, 1975, *Bull. mar. Sci.*, 25 (1) : 88-93, fig. 1-5 (23°33.5-54.0'N., 77°02.06-04.5'W., 1244-1234 m). Holotype : USNM no. 211284 ; 3 paratypes : UMML no. 31255 (2), 31247 (1).
Talismania grandisquamis Quéro, 1975c, *Rev. Trav. Inst. Pêches marit.*, 38 (4) : 439-442, fig. 1 (26°53'N., 14°01.5'W., 1200-1250 m). Holotype : MNHN no. 1974-94.
Talismania mekistonema : Markle, 1976 : 172-173.
Habitat, etc. Benthic to benthopelagic. In the area : known from a single specimen taken at 38°14.8'N., 27°07.4'W. (IOS, unpubl.) ; generally : eastern Atlantic from abt. 03°S. to abt. 28°N. ; western Atlantic, in the Gulf of Mexico and off southern Florida.
- 30.14 *Xenodermichthys* Günther, 1878
Aleposomus Gill, 1884, *Am. Nat.*, 18 : 433 (type : *A. copei* Gill, by monotypy).
30.14.1 *Xenodermichthys copei* (Gill, 1884)
Aleposomus copei (Gill, 1884) *Am. Nat.*, 18 : 433 (37°12'20"N., 69°39'W., 2949 fathoms, not given by the author). Holotype : USNM 33551.
Xenodermichthys socialis Vaillant, 1886, *C.R. Acad. Sci. Paris*, 103 (25) : 1239, *nomen nudum*.
Delete the reference : *Aleposomus copei* Gill, 1884 ...
Habitat, etc. Mesopelagic to benthopelagic from about 100 to more than 1000 m many records giving depths down to 3500 m refer to specimens taken in open pelagic nets fishing up to the surface. Widely distributed in the Atlantic ocean, a few specimens were found in the Indian and the western Pacific Oceans. In the area from East Greenland and Iceland southwards to the southern border. Rather common.
Note - Markle (1976) stresses the validity of the specific name *copei* arguing that Gill's (1884) short description of «an alepocephalid, with the body as well as head scaleless» was a sufficient amount of information to clearly distinguish *A. copei* from all alepocephalids then known.

31. **BATHYLACONIDAE**
This family is to be included in Alepocephalidae.
33. **CLUPEIDAE**
Sardina pilchardus (Walbaum, 1792)
Eggs, etc. Marinaro, 1971 : 16, pl. 1, fig. 1-2 / Yannopoulos, 1977 : 73.
Habitat, etc. The southern limit has now been extended from Cabo Blanco ($20^{\circ}44'N$) to the Bay of Gorée, Sénégal ($14^{\circ}43'N$) (Moal, 1957) ; also Freon & Stequet, *in press*, based on 162 specimens, 7, 5-18,1 cm S.L.).
- 33.4.1 *Sardinella aurita* Valenciennes, 1847
Eggs, etc. Marinaro, 1971 : 16, pl. 1, fig. 3 / Kacic, 1976 : 35.
- 33.5.1.1 *Sprattus sprattus sprattus* (Linnaeus, 1758)
Tortonese et Cautis, 1968 : 304.
- 33.6.3.2. *Alosa fallax nilotica* (E. Geoffroy Saint-Hilaire, 1808)
Common names. Delete «agonie» (It) because this name is applied only to subsp. *lacustris* Fatio (lakes of North Italy).
- 33.7 *Herklotischthys* Whitley, 1951 Gender : M
Proc. R. zool. Soc. N.S.W., 1949-50 (1951) : 67 (Type : *Harengula dispilonotus* Bleeker, by original designation).
- 33.7.1 *Herklotischthys punctatus* (Ruppell, 1837)
Clupea punctata Ruppell, 1837, Neue Wirtheit., Fische : 78, pl. 21, fig. 3 (Bay of Massawa, Red Sea).
Harengula punctata : Tillier, 1902 : 292, 297, 299 (Suez Canal).
Herklotischthys punctatus : Whitehead, 1973 : 174-176, fig. 7 (key, synonymy, distribution in the Indo-Pacific region) / Mounemné, 1977 : 38-39, fig. 1 (Lebanon) / Ben-Tuvia, 1977 : 96-97, fig. 1 ; 1978 : 18-22 (Mediterranean coast of Israel).
Habitat, etc. Surface or close to bottom in shallow, coastal waters. Considered to have immigrated recently into eastern Mediterranean via Suez Canal. In the area : Bar-dawil Lagoon, Israel, Lebanon ; generally : Suez Canal, Red Sea and entire Indo-Pacific region.
- 33.8 *Spratelloides* Bleeker, 1851
Natuurk. Tijdschr. Ned.-Indië, 2 : 214 (type : *Clupea argyrotaenia* Bleeker, by monotypy) / *Idem*, 1852, Verh. batav. Genoot. Kunst. Wet., 24 : 29 (generic diagnosis).
Stolephorus non Lacepede) : Fowler, 1941, *Bull. U.S. natn. Mus.*, 13 (100) : 561.
33.8.1 *Spratelloides delicatulus* (Bennett, 1831)
Clupea delicatula Bennett, 1831, *Proc. Zool. Soc. London*, 1 : 168 (Mauritius).
Spratelloides delicatulus : Whitehead, 1973 : 172-173, fig. 6/ Ben Tuvia, 1978 : 18 & 22.
Habitat, etc. In the area : a single specimen from the coast of Israel, considered as an immigrant via Suez canal. Generally : Red Sea and entire Indo-Pacific region.
- 35 **ENGRAULIDAE**
35.1.1 *Engraulis encrasicolus* (Linnaeus, 1758)
Quignard *et al.*, 1973 : 191.
Eggs, etc. Marinaro, 1971 : 17, pl. 1, fig. 4.
37. **GONOSTOMATIDAE**
37.4.1. *Cyclothona pseudoacclinidens* Quéro, 1975
(replaces *C. acclinidens*)
Cyclothona pseudoacclinidens Quéro, 1975, *Revue Trav. Inst. Sci. Techn. Pêches Marit.*, 38 (4) : 449-457, fig. 1-3 (North-eastern Atlantic, 600-4000 m). Holotype : MNHN 1975-63.
Cyclothona acclinidens (nec Garman) : Brauer, 1906 : 85 part. ?, fig. 34 a-c, pl. 6, fig. 1/ Murray & Hjort, 1912 : 612, 676/Pappenheim, 1914 : 180 / Barnard, 1926-27 : 147 / Beebe, 1929 : 13 / Norman, 1930 : 288, part. / Fowler, 1936 : 226, part. / Iversen, 1936 : 91-99 / Smith, 1949b : 103 / Marshall, 1951 : 3 / Grey, 1956 : 125, part. / Koefoed, 1960 : 8, 12 / Grey, 1964 : 188, part., fig. 48-51 / Quéro, 1969 : 2 / Badcock, 1970 : 1019 / Witzell, 1973 : 116 / Bond & Kenneth, 1974 : 274.
Eggs, etc. Grey, 1964 : 185.
Otoliths (sagitta). Kotthaus, 1967 : 19, fig. 26.
Habitat, etc. Bathypelagic, 600-4000 m. Atlantic and (?) Indian Ocean. In the area : from Bay of Biscay to the southern border. Frequently collected.

- 37.8.1 ***Maurolicus muelleri*** (Gmelin, 1789)
Eggs, etc. Demir N., 1958 : 153, fig. 1-11 / Marinaro, 1971 : 18, pl. 2, fig. 5.
38. **STERNOPTYCHIDAE**
The species in Clofnam area have been variously considered by Weitzman (1974) in his paper concerning the family and by Badcock & Merrett (1976, 1977), Goodyear *et al.* (1972), Merrett & Roe (1974). *Sternopyx diaphana*, *Argyropelecus affinis* and *A. olfersii* have been reported from the eastern Mediterranean (Lebanon) by George *et al.* (1964), simply quoting them without details.
39. **ASTRONESTHIDAE**
Borostomias antarcticus (Lönnberg, 1905)
Tortonese & Zunini Sertorio, 1974 : 1, fig. 1 (Gulf of Genoa, 700 m).
42. **MELANOSTOMIATIDAE**
Bathophilus nigerrimus Giglioli, 1884
Holotype : MZUF 2028.
Cavaliere & Bardar, 1976 : 45, fig. 1-7.
42.10.1 ***Trigonolampa miriceps*** Regan & Trewavas, 1930
Gueguen *et al.*, 1975 : 211 (Bay of Biscay : 46°55'N, 5°25'W).
45. **SALMONIDAE**
45.1.2.1 ***Salmo trutta trutta*** Linnaeus, 1758
Trutta adriatica Kolombatovic, 1890, Glasnik Narav, Druztva, 6 : 166. Type in NMW.
Trutta adriatica : Ninni E., 1930 : 446, fig. 1 / Soljan, 1963 : 191, fig. 424.
46. **ARGENTINIDAE**
46.2.1 ***Glossanodon leioglossus*** (Valenciennes, 1848)
Argentina leioglossa : Maurin, 1968 : 20, fig.
Eggs, etc. Marinaro, 1971 : pl. 3, fig. 1-4.
Habitat, etc. Guichet, 1966 : 3 (from the Bay of Biscay to the southern limit of the area of Clofnam).
47. **BATHYLAGIDAE**
47.1.1 ***Bathylagus berycoides*** (Borodin, 1929)
Habitat, etc. In the area (Eastern Atlantic) : Quéro, 1969 (47°20'N, 6°47'W) ; Tortonese, 1972d : 20, fig. 1.
47.1.4 ***Bathylagus greyae*** Cohen, 1958
Bathylagus greyae Cohen, 1958e, *Breviora*, 98 : 5, fig. 2 (Bermuda, 500-550 m)
Holotype CNHM 49730.
Bathylagus greyae : Cohen, 1964 : 36-37, fig. 11 / Kotthaus, 1972 : 6 / Quéro, *in press*.
Habitat, etc. Bathypelagic. Subtropical North Atlantic (Bermuda ; Canary Isl. ; an unpublished record from Portugal, ISH).
51. **SYNODONTIDAE**
51.1.2 ***Synodus saurus*** (Linnaeus, 1758)
Eggs, etc. Marinaro, 1971 : 19, pl. 2, fig. 6.
52. **BATHYSAURIDAE**
This family is now included in Synodontidae (Sulak, 1977).
52.1.2 ***Bathysaurus mollis*** Günther, 1878
Habitat, etc. In the area : a few specimens from Ireland to the Azores and Madeira.
53. **BATHYPTEROIDAE**
Sulak (1977) revised this family and included it in Chlorophthalmidae.
53.1.1 ***Bathypterois dubius*** Vaillant, 1888
Bathypterois bigelowi : Roux & Hureau, 1969 : 1021 (misidentification : Sulak, 1977 : 95).
53.1.3.2 ***Bathypterois mediterraneus algeriensis*** Bauchot, 1963
This subspecies is not valid according to Rannou & Gaborit Rezzouk (1976).
53.1.4 ***Bathypterois phenax*** Parr, 1928
Bathypterois phenax Parr, 1928, *Bull. Bingham Ocean. Coll.*, 3 (3) : 31 (off the Bahama Isl.). Holotype : BOC 2133.

Bathypterois phenax : Mead, 1966 : 136, fig. 40 / Sulak, 1977 : 90.
Habitat, etc. Benthic (827-2651 m). In the area : one specimen from off the Azores (Rannou & Gaborit Rezzouk, 1976 : 461). Generally : off the coasts of America from 9°N to 40°N and off the coasts of tropical West Africa. Not rare.

54. **IPNOPIDAE**
This family is now included in Chlorophthalmidae (Sulak, 1977).
- 54.2.1 ***Bathytyphlops sewelli* (Norman, 1939)**
Bathymicrops sewelli Norman, 1939. The John Murray Expedition 1933-34, Scient. Rep., 7 (1) : 26, fig. 7 (Arabian Sea, 3840 m). Holotype BMNH.
- Bathytyphlops azorensis* Geistdoerfer, Hureau & Rannou, 1970, Bull. Mus. natn. Hist. nat., 42 (3) : 454, fig. 2A-2B (Azores Islands, 3550 m). Holotype MNHN 1970-30.
- Bathytyphlops azorensis* : Sulak, 1974 : 570-573, 2 fig.
- Bathytyphlops azoriensis* : Marshall & Merrett, 1977 : 486, table 1.
- Bathytyphlops sewelli* : Merrett, in press.
56. **NOTOSUDIDAE (replaces Scopelosauridae)**
***Scopelosaurus* Bleeker, 1860** Gender : M.
Act. Soc. scient. Indo-Néerl., 8 (5) : 12 (type : *S. hoedti* Bleeker, 1860, Amboina, by monotypy).
- Notosudis* Waite, 1916, Scient. Rep. Australas. Antarct. Exp., (C) 3 (1) : 56 (type : *N. hamiltoni* Waite, by monotypy. Macquarie Islands).
- 56.1.1 ***Scopelosaurus argenteus* (Maul, 1954)**
Notosudis argenteus Maul, 1954, Bol. Mus. munic. Funchal, 7 (18) : 47-54 (holotype only), fig. 17 (top), 18 (Madeira). Holotype : MMF 3998.
- Notosudis argentea* Krefft & Maul, 1955 : 310-313, partim.
- Scopelosaurus smithii* : Marshall, 1966 : 201-202, partim / Krefft, 1968, fig. 1 (bottom).
- Scopelosaurus argenteus* Bertelsen, Krefft & Marshall, 1976 : 49-54, pl. 1, fig. 5, text-fig. 31.
- Eggs, etc. Bertelsen, Krefft & Marshall, 1976 : 52-53, fig. 32 (larval stages).
- Habitat, etc. Mesopelagic, oceanic. In the area : Atlantic Ocean between 45°N in the Bay of Biscay to the southern border of the area and from 10°W to the western border. Generally : mainly North Atlantic between about 40°N and 20°N, and from 10°W to at least 70°W, moderately common ; much rarer in equatorial waters south to ca. 1°S.
- 56.1.2 ***Scopelosaurus lepidus* (Krefft & Maul, 1955)**
Notosudis lepida Krefft & Maul, 1955, Arch. Fisch. Wiss., 6 (5/6) : 305-316, partim (holotype only), fig. 1-2 (Denmark Strait). Holotype : ISH 12/55.
- Notosudis lepida* : Kotthaus & Krefft, 1957 : 173 / Krefft, 1964 : 79 / Postolakii, 1965 : 622-624, fig. 1-2.
- Scopelosaurus lepidus* : Marshall, 1966 : 202-203, fig. 54 / Krefft, 1966 : 177 ; 1967 : 185 / Bertelsen, Krefft & Marshall, 1976 : 72-80, pl. 1, fig. 7, text-fig. 50, 64.
- Eggs, etc. Bertelsen, Krefft & Marshall, 1976 : 76-78, fig. 51 (larval development).
- Habitat, etc. Mesopelagic to benthopelagic at depths between 500 and 800 m, partially oceanic. In the area : Atlantic Ocean from East Greenland and Iceland to the southern border of the area and beyond. Generally : a North Atlantic species ranging as adults between about 52°N and 67°40'N. The larvae were found from about 20°N to about 52°N, the larger ones being concentrated mainly in the eastern part of the ocean east of 32°W and between 40° and 50°N. The Sargasso Sea most probably is the main spawning area. A few larvae have been caught also in the Central Atlantic between 20°N and 20°S. Common.
- 56.1.3 ***Scopelosaurus smithii* Bean, 1925**
Scopelosaurus smithii Bean, 1925, Proc. biol. soc. Wash., 38 : 13-14 (off Brazil). Holotype : USNM 86676.
- Notosudis argenteus* Maul, 1954, Bol. Mus. munic. Funchal, 7 (18) : 47-54, partim (paratype only), fig. 17 (bottom).
- Notosudis lepida* Krefft & Maul, 1955, Arch. Fisch. Wiss., 6 (5/6) : 305-316, partim (paratype only), fig. 17 (bottom).
- Scopelosaurus smithii* : Marshall, 1966 : 201, partim, fig. 53 / Bertelsen, Krefft & Marshall, 1976 : 44-49, pl. 1, fig. 3, text-fig. 28.
- Scopelosaurus lepidus* (nec Krefft & Maul) : Kotthaus, 1972a : 16, 23.
- Eggs, etc. Bertelsen, Krefft & Marshall, 1976 : 47-48, fig. 29 (larval development).
- Otoliths (sagitta). Kotthaus, 1972a : 16, 27, fig. 98-99.

- Habitat, etc. Mesopelagic, oceanic. In the area : Madeira. Generally : mainly between 20°N and 20°S in all oceans, sometimes up to 30° in both hemispheres ; in the western north Atlantic some larvae drifted north to 40°N. Moderately common.
- 56.2 *Ahliesaurus* Bertelsen, Krefft & Marshall, 1976 Gender : M
Dana-Rep. 86 : 21 (type *A. berryi* Bertelsen et al., 1976, by orig. design.).
- 56.2.1 *Ahliesaurus berryi* Bertelsen, Krefft & Marshall, 1976
Ahliesaurus berryi Bertelsen, Krefft & Marshall, 1976, *Dana-Rep.* 86 : 22-27, fig. 13-16 (30°00'1"S, 42°30'W). Holotype : ISH 1434/68. 30 paratypes ISH 85/6 (1 specimen), 151/66 (3), 320/66 (2), 202/68 (1), 331/68 (1), 431/68 (1), 781/6 (1), 1084/68 (1), 1476/68 (1), 1507/68 (2), 465/71 (1), 1486/71 (1), 1564/68 (2), 1741/71 (1), 1790/71 (1), 1844/71 (5), 1883/71 (2), 2936/71 (1), 2940/71 (1) 2 paratypes USNM 206598 (1), 206599 (1) : 1 paratype CAS (SU) 56000.
Eggs, etc. Bertelsen et al., 1976 : 25, fig. 15 (larval development).
- Habitat, etc. Mesopelagic at depths greater than 500 m, oceanic. In the area : off the Iberian Peninsula and the northwestern coast of Africa, its northern boundary at about 40°N. Generally : warmer parts of the Atlantic Ocean between the Bermudas in the North and South Africa and southern Brazil in the South ; southern India and central Pacific Oceans. Moderately common.
58. MYCTOPHIDAE
- 58.1 *Mycetophum* Rafinesque, 1810
To the synonyms must be added *Ctenoscopelus* Fraser-Brunner (58.5)
- 58.1.1 *Mycetophum punctatum* Rafinesque, 1810
Eggs, etc. Moser & Ahlström, 1974 : 400, fig. 5 C.
- 58.1.2 *Mycetophum nitidulum* Garman, 1899
Eggs, etc. Moser & Ahlström, 1974 : 400, fig. 5 D.
- 58.1.3 *Mycetophum selenops* Taaning, 1928
Eggs, etc. Moser & Ahlström, 1974 : 400, fig. 7 A.
- 58.1.4 *Mycetophum phengodes* (Lütken, 1892)
This is the new position of *Ctenoscopelus phengodes* (58.5.1).
Eggs, etc. Moser & Ahlström, 1974 : 400, fig. 5 E.
- 58.2.1 *Benthosema glaciale* (Reinhardt, 1837)
Eggs, etc. Moser & Ahlström, 1974 : 397, fig. 3 A,B.
- 58.2.2 *Benthosema suborbitalis* Gilbert, 1913)
Eggs, etc. Moser & Ahlström, 1974 : 397, fig. 3 C.
- 58.6.11 *Diaphus adenomus* Gilbert, 1905
Diaphus adenomus Gilbert, 1905, *U.S. Fish Comm. Bull.*, 23 (2) : 592, pl. 68, fig. (the Kaiwi Channel between Oahu and Molokai, Hawaii, 335 to 350 fms). Holotype : USNM no. 51588 ; 1 paratype : CAS(SU).
- Diaphus anteorbitalis* Gilbert, 1913, *Mem. Carnegie Mus.* 6 (2) : 92, pl. 12, fig. 1 (32°24'50"N, 135°38'40"E, 253 fms). Holotype : USNM no. 74471 ; 1 paratype CAS(SU).
- Diaphus adenomus* : Nafpaktitis, 1974 : 1-4, fig. 1.
- Habitat. Epibenthic (adults) to mesopelagic (adolescents). Inside the area found on off Casablanca, Morocco. Generally on or in the vicinity of continental and island shelves in the Caribbean and off the Bahama Islands ; off Hawaii and southern Japan, at depths ranging from 180 to about 600 m. Rather common.
- 58.10.1 *Hygophum hygomi* (Lütken, 1892)
Donato et al., 1977 : 144, pl. 2.
- 58.10.2 *Hygophum benoitii* (Cocco, 1838)
Donato et al., 1977 : 134, pl. 1.
- 58.10.3 *Hygophum reinhardti* (Lütken, 1892)
Eggs, etc. Moser & Ahlström, 1974 : 397, fig. 4 A.
- 58.10.4 *Hygophum taanungi* Bekker, 1965
Eggs, etc. Moser & Ahlström, 1974 : 397, fig. 4 E.
- 58.13.1 *Lepidophanes guentheri* (Goode & Bean, 1896)
Eggs, etc. Moser & Ahlström, 1972 : fig. 8.
- 58.13.2 *Lepidophanes gaussi* (Brauer, 1906)
Eggs, etc. Moser & Ahlström, 1974 : 409, fig. 12 C.
- 58.14.1 *Lobianchia gemellari* (Cocco, 1838)
Eggs, etc. Moser & Ahlström, 1974 : 406, fig. 9 D / Cavaliere, 1976a, 177, pl. 1-4.
- 58.14.2 *Lobianchia dobleini* (Zugmayer, 1911)

- Eggs, etc. Moser & Ahlström, 1974 : 406, fig. 9 / Berdar & Cavaliere, 1975 : 117, pl. 1-4.
- 58.17 *Notoscopelus* Günther, 1864
To the synonyms is to be added :
Pareiophus Nafpaktitis, 1975, *Bull. mar. Sci.*, 25 : 83 (type : *Notoscopelus bolini* Nafpaktitis, by original designation), subgenus of *Notoscopelus*.
- 58.17.1 *Notoscopelus resplendens* (Richardson, 1845)
Nafpaktitis, 1975 : 78-81, fig. 3.
Eggs, etc. Moser & Ahlström, 1972 : 551, fig. 6 A-D.
- 58.17.2 *Notoscopelus caudispinosus* (Johnson, 1863)
Nafpaktitis, 1975 : 76-78, fig. 1.
Habitat, etc. After «... from the tropical Indian Ocean» insert «and Clarke (1973) from off Hawaii».
- 58.17.3 *Notoscopelus elongatus* (Costa, 1844)
Nafpaktitis, 1975 : 82-83 / Tortonese & Fabiano, 1975 : 227-230, fig. 1 A.
Habitat, etc. To be changed as follows : Known only from the western Mediterranean, including the Ligurian and Tyrrhenian Seas, and from the Adriatic basin.
- 58.17.4 *Notoscopelus kroyeri* (Malm, 1861)
Notoscopelus (N.) elongatus kroyeri : Nafpaktitis, 1975 : 81-82, fig. 5.
Habitat, etc. Delete the last sentence «Western Mediterranean, including the Tyrrhenian Sea».
- 58.17.5 *Notoscopelus* spec. is to be replaced as follows :
Notoscopelus bolini Nafpaktitis, 1975
Notoscopelus (Pareiophus) bolini Nafpaktitis, 1975, *Bull. mar. Sci.*, 25 (1) : 83-85, fig. 6 (38°39'N, 04°12'E, 0 to 1300 m). Holotype : USNM no. 212056 ; 5 paratypes : USNM no. 212057, MCZ no. 49741, 49742, LACM no. 33935, 33936.
Notoscopelus 'the Strait population' Bolin, 1959, Rep. scient. Results Michael Sars N. Atlant. deep Sea Exped., 1910, 4, pt 2 (7) : 38-40.
Notoscopelus bolini : Tortonese & Fabiano, 1975 : 227-230, fig. 1 B.
Eggs, etc. Taning, 1918 : 103-107, part.
Habitat, etc. Eastern and western Mediterranean : eastern North Atlantic between about 40 and 50°N, ranging westward to 50°W. Mesopelagic to nycti-epipelagic.
Rather common.
- 58.20.2 *Taaningichthys minimus* Taanning, 1928
Eggs, etc. Moser & Ahlström, 1972 : fig. 13 A-C.
61. EVERMANNELLIDAE
- 60.2.1 *Coccorella atrata* (Alcock, 1893)
Otoliths (sagitta) : Kotthaus, 1972 : fig. 105.
61. ALEPISAURIDAE
- 61.1.1 *Alepisaurus ferox* Lowe, 1833
Eggs, etc. Haedrich, 1964 : 1-15, 2 fig.
Habitat, etc. Bay of Biscay (Quéro & Verron, 1975 : 100, fig. 3 / In the Mediterranean was only reported from Sicily by Bonaparte (1846 : 80) and after him was quoted by Doderlein (1881 : 57) and Tortonese (1970e : 204, fig. 81).
62. OMOSUDIDAE
- 62.1.1 *Omosudis lowei* Günther, 1887
Otoliths (sagitta) : Kotthaus, 1972 : fig. 104.
63. PARALEPIDIDAE
- 63.1.1 *Paralepis speciosa* Bellotti, 1878
Eggs, etc. Spartà, 1949 : 157, fig. 1-7.
65. MIRAPINNIDAE
- 65.1.1 *Mirapinna esau* Bertelsen & Marshall, 1956
Habitat, etc. Pelagic. In the area : north of Azores. Generally : north Atlantic, central Pacific (Fourmanoir, 1971). Rare.
68. ATELEOPODIDAE
- 68.2 *Guentherus* Osorio, 1917
Gender : M.
Guentherus Osorio, 1917, *Arch. Univ. Lisboa*, 4 : 117-118 (type : *Guentherus altivelia* Osorio, by monotypy).

- Melanogloea* Barnard, 1941, *Ann. Rep. S. Afr. Mus.* 1940 in Barnard, 1948 : 356-358
fig. 5 (type : *Melanogloea ventralis* Barnard by monotypy).
- Anodontus* Cervigon, 1961, *Inv. Pesq.*, 19 : 119-125, fig. 1-4 (type : *Anodontus mauritanicus* Cervigon by monotypy).
- 68.2.1 *Guentherus altivela* Osorio, 1917
Guentherus altivela Osorio, 1917, *Arch. Univ. Lisboa*, 4 : 117-118, pl. 31, fig. 1-2 (Senegal, Cabo Blanco). Types, in MB, now presumably lost,
- Melanogloea ventralis* Barnard, 1941. *Ann Rep. S. Afr. Mus.* 1940 in Barnard, 1948 : 356-358, fig. (South Africa : between Walvis Bay and Saldahna Bay). Holotype SAM 19543.
- Anodontus mauritanicus* Cervigon, 1961, *Inv. Pesq.*, 19 : 119-125, fig. 1-4 (off Morocco). Holotype IIPC n.4 ; paratype IIPC n.4.
- Melanogloea ventralis* : Cadenat, 1960 : 1424-1426, pl. 1, fig. 1-2 / Smith, 1961 : 117 / Franca & Ferreira, 1967 : 2-10, fig. 1-6 / Blache, Cadenat & Stauch, 1970 : 191, fig. 520.
- Guentherus altivela* : Trunov & Isarev, 1971 : 115-117 ; fig. / Coasta & Reiner, 1977 : 6, fig. 2.
- Otoliths (sagitta), Trunov & Isarev, 1971 : 115.
- Habitats, etc. Benthic. Between 214 and 549 m. Known from all the west coast of Africa. In the area : one specimen from off Portugal.
73. MURAENIDAE
- 73.2 *Lycodontis* McClelland, 1844
This is a synonym of *Gymnothorax* Bloch, 1795 (Blache, 1977).
- 73.2.1 *Gymnothorax anatinus* (Lowe, 1841)
Eggs, etc. Blache, 1977 : 53 (leptocephali).
- 73.2.2 *Gymnothorax unicolor* (Delaroche, 1809)
Eggs, etc. Blache, 1977 : 49 (leptocephali).
- 73.2.3 *Gymnothorax vicinus* (Castelnau, 1855)
Eggs, etc. Blache, 1977 : 42 (leptocephali).
- 73.2.4 *Gymnothorax polygonius* Poey,
Gymnothorax polygonius Poey, *Ann. Lyc. Nat. Hist.*, 9 : 320 (Cuba)
- Lycodontis polygonius* : Blache, 1967 / Maul in litt.
Habitat, etc. : littoral, rocky coasts. Gulf of Mexico, Caribbean sea, Cabo Verde Archipel. Madeira (Maul in litteris).
- 73.4.1 *Gymnothorax maderensis* (Johnson, 1862)
Eggs, etc. Blache, 1977 : 37 (leptocephali).
74. HETERENCHELIDAE
- 74.1.1 *Panturichthys mauritanicus* Pellegrin, 1913
Eggs, etc. Blache, 1977 : 81 (leptocephali).
- 74.1.2 *Panturichthys fowleri* (Ben Tuvia, 1953)
Economidis & Bauchot, 1976 : 877 (Aegean Sea : Greece).
76. NEMICHTHYIDAE
- 76.1.2 *Nemichthys curvirostris* (Strömman, 1896)
Leptocephalus curvirostris Strömman, 1896, *Lept. Univ. Zool. Mus.* Upsala : 16-44 pl. 1-5. Central Atlantic, near isl. Fernando Noronha : 30°S, 30°W.
- Leptocephalus curvirostris* : Bertin, 1936a : 9-10.
- Tylurus curvirostris* : Pappenheim, 1914 : 188-189, fig. 7, pl. 9.
- Leptocephalus polymerus* Lea, 1913, Rep. Sci. Results Michael Sars N. Atlant. deep Sea Exped., 3 : 27-28, fig. 17, pl. 3.
- Eggs, etc. Roule & Bertin, 1929b : 81-83, pl. I, III, IV and VIII.
Habitat, etc. Bathy- and mesopelagic (720-2000 m) ; diurnal migrations. In the area a few specimens in the Atlantic off Madeira and the Azores. Generally : warmer parts of all oceans. Rather common.
- 76.2 *Paravocettinops* Kanazawa & Maul, 1967
According to the revision by Nielsen & Smith (1978) this is a junior synonym of *Nemichthys* Richardson, 1848 (76.1) and *P. trilinearis* Kanazawa & Maul, 1967 (76.2.1) is a junior synonym of *N. scolopaceus* Richardson, 1848 (76.1.1).
- 76.3 *Borodinula* Whitley, 1931
According to the same revision this name should not have replaced *Avocettina* Jordar & Davis, 1892 as the latter was not preoccupied.

77. XENOCONGRIDAE

77.1.1 *Chlopsis bicolor* Rafinesque, 1810

Maul, 1976 : 16, fig. 5 / Menezes & Quadros, 1976 : 270.

Habitat, etc. Also in the Eastern Atlantic and off Southern Brazil.

79. MURAENESOCIDAE

79.1.1 *Cynoponticus ferox* O.G. Costa, 1846

Eggs, etc. Delete the reference (Blache, 1968 ...) because it concerns the larva of a Congrid : *Ariosoma mellissi*.

80. NETTASTOMATIDAE

80.1.1 *Nettastoma melanurum* Rafinesque, 1810

Eggs, etc. Marinaro, 1971 : pl. 3, fig. 4 / Blache, 1977 : 172 (leptocephali).

80.2.1 *Facciolella physonema* (Facciola, 1914).

Menezes & Quadros, 1976 : 272 (off Southern Brazil)

Eggs, etc. Blache, 1977 : 174 (leptocephali).

80.3.1 *Saurenchelys cancrivora* Peters, 1864

Eggs, etc. Blache, 1977 : 176 (leptocephali).

Habitat, etc. The existence in the Mediterranean is very uncertain.

81. NETTODARIDAE

This family is now included in Synaphobranchidae (Robins C.H. & C.R., 1976).

81.1 *Nettodarus* Whitley, 1951

This is a junior synonym of *Dysomma* Alcock, 1889 (*Ann. Mag. Nat. Hist.* (6) 4 : 459. Type : *D. bucephalus* Alcock, by monotypy).

81.1.1 *Dysomma brevirostre* (Facciola, 1887)

According to Robins C.H. & C.R. (1976 : 256-257) this name replaces *Nettodarus brevirostris*.

82. CONGRIDAE

82.1.1 *Conger conger* (Artedi, 1738) Linnaeus, 1758

Common names. Sanoure (Ar : Morocco), kongr (Ar : Algeria), gringou (Ar : Tunisia), meeraal (De), cungri (Eg), conger eel (En), congrio (Es), congre (Fr), mongri (He), ugor (Hr), grongo (It), qonger mazuy (Iw), congro (Pr), migri (Tu).

82.2.1 *Ariosoma halaeicum* (Delaroche, 1809)

Eggs, etc. Blache, 1977 : 94 (leptocephali).

82.3.1 *Gnathophis mystax* (Delaroche, 1809)

Menezes & Quadros, 1976 : 273 (off Southern Brazil).

Eggs, etc. Blache, 1977 : 136 (leptocephali).

82.3.2 *Gnathophis codoniphorus* Maul, 1972

Gnathophis codoniphorus Maul, 1972, *Bocagiana*, 31 : 1-7, 1 fig. Holotype MMF 22876 ; paratypes 2 spec. MMF 22545.

Habitat, etc. Three specimens only are known (1 young and 2 postlarval) : 20°05'0.2"N, 28°23.8"W (300-304 m) and 30°03'N, 28°40"W (490-450 m).

82.5 *Pseudophichthys* Roule, 1915

According to Blache & Bauchot (1976 : 417) and Smith & Kanazawa (1977 : 542) this is not a synonym of *Promyllantor* Alcock, 1890.

82.5.1 *Pseudophichthys splendens* (Lea, 1913)

According to the same authors, this is a senior synonym of *Promyllantor laterodorsalis* (Roule, 1915).

Doubtful species :

Conger simulatus Facciola, 1913, *Boll. Soc. Zool. Ital.*, 4 : 101-109. Messina (Sicily). Type lost.

82b. HETEROCONGRIDAE

82b.1 *Taenioconger* Herre, 1923, *Philippine Journ. Sci.*, XXIII, 2 : 152 (type : *Taenioconger chapmani* Herre, 1923 by orig. des., Philippines).

Heteroconger Bleeker, 1868, *Versl. Akad. Amsterdam*, II : 331 (type *Heteroconger polyzona* by monotypy. Amboine) pro parte.

82b.1.1 *Taenioconger longissimus* (Günther, 1870)

Heteroconger longissimus Günther, 1870, *Cat. Fish. Brit. Mus.*, 8 : 45 (Lanzarote).

Heteroconger longissimus : Maul 1949 : 145 / Bauchot et Bassot, 1958 : 258.

Habitat, etc. littoral, large populations burrowing in the sand areas between the coral reefs. Circumtropical but very discontinuous distribution. Madeira is the northern most limit.

84. **ECHELIDAE**
This is now considered as a subfamily (Echelinae) of Ophichthidae.
84.1.1 *Echelus myrus* Linnaeus, 1758
Eggs, etc. Marinaro, 1971 : pl. 3, fig. 2 / Blache, 1977 : 208 (leptocephali).

86. **OPHICHTHIDAE**
86.1.1 *Ophichthus ophis* (Linnaeus, 1758)
Eggs, etc. Blache, 1977 : 259 (leptocephali).
86.2.1 *Apterichthys caecus* (Linnaeus, 1758)
Eggs, etc. Blache, 1977 : 275 (leptocephali).
86.3.1 *Dalophis imberbis* (Delaroche, 1809)
Eggs, etc. Marinaro, 1971 : pl. 3, fig. 3.
86.4.1 *Ophisurus serpens* (Linnaeus, 1758)
Eggs, etc. Blache, 1977 : 257 (leptocephali).

88. **HALOSAURIDAE**
88.1.1 *Halosauridae ovenii* Johnson, 1863
McDowell, 1973a : 57, fig. 6.
Habitat, etc. Also SW Mediterranean (Off Algeria, m 550 : Dieuzeide, 1963 : 117).
88.3.1 *Aldrovandia phalacra* (Vaillant, 1888)
MacDowell, 1973a : 105, fig. 12 / Maul, 1976 : 20, fig. 8 (Portugal).
Habitat, etc. North Atlantic (probably also South), Indian and Pacific oceans.
88.3.2 *Aldrovandia affinis* (Günther, 1878)
MacDowell, 1973a : 92, fig. 10 / Maul, 1976 : 22, fig. 9 (Portugal).

89. **NOTACANTHIDAE**
89.1.2 *Notacanthus bonapartei* Risso, 1840
Notacanthus mediterraneus Filippi & Vérany, 1859. Holotype MZUT 449 (Nice).
89.2 *Polyacanthonotus* Bleeker, 1874
Macdonaldia Goode & Bean, 1894 (not 1895) (89.3) is a junior synonym.
89.2.1 *Polyacanthonotus rissoanus* (Filippi & Verany, 1859). Holotype MZUT 733.
Gallego & Ibanez, 1974 : 171, fig. 1, pl. 1.
Habitat, etc. Western Mediterranean, North Atlantic (east from Ireland to Azores, west from Davis strait to off Chesapeake bay), South Atlantic (off Cape Point). About 500-2000 m.
Note. *Macdonaldia rostrata* (Collett, 1889) (89.3.1) is a synonym.

91. **SCOMBERESOCIDAE**
91.1.1 *Scomberesox saurus* (Walbaum, 1972)
Eggs, etc. Raffaele, 1895 : 127 / Marinaro, 1971 : 22, pl. III, fig. 5-6.

92. **EXOCETIDAE**
92.2.3.1 *Cheilopogon heterurus heterurus* (Rafinesque, 1810)
Exocoetus procne Filippi & Vérany. Syntypes MZUT 451.
Exocoetus maculipinnis Vinciguerra. Holotype MSNG 13998.

94. **CYPRINODONTIDAE**
94.1.1 *Aphanitus fasciatus* Nardo, 1827
Kiener & Schachter, 1974 : 317, fig. 1-13.

96. **MACRORHAMPHOSIDAE**
96.1.1 *Macrorhamphosus scolopax* (Linnaeus, 1758)
Eggs, etc. Marinaro, 1971 : 29, pl. 4, fig. 3.

97. **SYNGNATHIDAE**
97.1.6 *Syngnathus taenionotus* Canestrini, 1861
Syntypes MSNG 14038.
97.1.7 *Syngnathus tenuirostris* Rathke, 1837
Economidis & Bauchot, 1976 : 878 (Aegean Sea).
97.4.2 *Hippocampus ramulosus* Leach, 1814
Eggs, etc. Brunelli, 1922 : 1, 2 pl.

98. **GASTEROSTEIDAE**
 98.1.1 *Gasterosteus aculeatus* Linnaeus, 1758
 Habitat, etc. Also in North Adriatic (Museum of Genoa).
99. **MACROURIDAE**
 99.1.1 *Trachyrhynchus trachyrhynchus* (Risso, 1810)
 Ibanez, 1977 : 213-230, 5 fig.
 99.3.2 *Gadomus arcuatus* (Goode & Bean, 1886)
 Maul, 1976 : 25, fig. 10 (Morocco).
 99.5.2 *Hymenocelphalus (Hymenogadus) gracilis* Gilbert & Hubbs, 1920
H. (Hymenogadus) gracilis Gilbert & Hubbs, 1920, U.S. Nat. Mus. Bull. 100 (1), 7 : 522-525, fig. 31.
H. (Hymenogadus) gracilis : Maul, 1976 : 28, fig. 12.
 Habitat, etc. Atlantic and Pacific oceans. In the area : off Morocco, 160-345 m.
 99.9.1 *Nezumia aequalis* (Günther, 1878)
 Maul, 1976 : 32, fig. 14 (Morocco).
- 99.12.1 *Coelorhynchus coelorhynchus* (Risso, 1810)
 Otoliths (sagitta). Nolf, 1976 : 37, pl. 11, fig. 1-8.
- 99.12.2 *Coelorhynchus occa* (Goode & Bean, 1886)
 Habitat, etc. Also in W Mediterranean (Rainbault, 1963).
- 99.17a *Sphagemacrurus* Fowler, 1925 Gender : M
Amer. Mus. Novit., 162 : 3 (type : *Macrurus Hirundo*. Collett, by monotypy).
- 99.17a 1 *Sphagemacrurus grenadæ* (Parr, 1946)
Grenurus grenadæ Parr, 1946, *Bull. Bingham Ocean. Coll.*, 10 (1) : 46, fig. 9 (5) and 15. Grenada (West Indies).
Sphagemacrurus grenadæ : Marshall & Iwamoto, 1973 : 622, fig. 38 / Maul, 1976 : 30, fig. 13.
 Habitat, etc. Atlantic (Caribbean, Florida, Morocco, Portugal).
- 99.19 See the following note under 100.3.
- 100 **MERLUCCIIDAE**
 100.1.1 *Merluccius merluccius* (Linnaeus, 1758)
 Otoliths (sagitta). Bouhlal & Ktari, 1975 : 7, pl. 1-2.
- 100.3 *Macruronus* Günther, 1873
 D. Cohen informs (*in litt.*) to have reinvestigated the types of *Macruronus caninus* Maul (100.3.1) and *M. maderensis* Maul (100.3.2). The former is identical to *Lycodes brachycelus* Holt & Byrne, the second «may be a young rattail - but they are certainly not *Macruronus*».
- 101 **GADIDAE**
 101.1.1.1 *Gadus morhua morhua* Linnaeus, 1758
 Common names. Merluzzo (It.).
 101.5.1.1 *Gadiculus argenteus argenteus* Guichenot, 1850
 Eggs, etc. Marinaro, 1971 : 27, pl. 4, fig. 4.
 101.8.1 *Micromesistius poutassou* (Risso, 1826)
 Common names. Potassolo (It.) instead of «melù».
 101.9.1 *Pollachius pollachius* Linnaeus, 1758
 Eggs, etc. De Buen, 1932 : 4, fig. 2.
 101.9.2 *Pollachius virens* (Linnaeus, 1758)
 Common names. Köhler (De) instead of «seelachs».
 101.11.2 *Trisopterus esmarkii* (Nilsson, 1855)
 Habitat, etc. Also : Bay of Biscay (Dardignac & Quéro, 1978 : 2,5,6).
 101.19.1 *Antonogadus macrophthalmus* (Günther, 1867)
 Maul, 1976 : 35, fig. 16 (Portugal, Morocco).
 101.19.2 *Antonogadus megalokynodon* (Kolombatovic, 1894)
Onos biscayensis (partim) : Maurin, 1968 : 22, fig. 8.
Gaidropsarus biscayensis : Tortonese & Casanova Queirilo, 1970 : 30, fig. 4-5, (Gulf of Genoa, 80 - 350 m, very common).
Antonogadus megalokynodon : Economidis & Bauchot, 1976 : 879 (Aegean Sea).
 101.20.1 *Gaidropsarus mediterraneus* (Linnaeus, 1758).
 Eggs, etc. D'Ancona, 1933 : 241, fig. 220-226, pl. 13, fig. 15-20, pl. 14, fig. 13-22.
 101.20.4 *Gaidropsarus vulgaris* (Cloquet, 1824)
 Eggs, etc. D'Ancona, 1933 : 248, pl. 13, fig. 21, pl. 15, fig. 1-4.

- 103 **MORIDAE**
 The name Moridae replaces Eretmophoridae, according to Cohen (1975).
 103.1.1 *Eretmophorus kleinenbergi* Giglioli, 1889
 This specific name is now validated (Intern. Comm. Zool. Nom., Opinion 1082, 1977).
 103.3.1 *Gadella maraldi* (Risso, 1810)
 Eggs, etc. Spartà, 1928 : 1, pl. 1.
 Habitat, etc. Also in Adriatic.
 103.5.3 *Laemonema yarrelli* (Lowe, 1841)
 Maul, 1976 : 36, fig. 17.
- 104 **MELANONIDAE**
 104.1.1 *Melanonus zugmayeri* Norman, 1930
 Tortonese, 1972 d : 25.
- 105 **LAMPRIDIDAE**
 105.1.1 *Lampris guttatus* (Brünnich, 1788)
 This is the proper specific name according to Palmer-Oelschläger (1976).
- 106 **REGALECIDAE**
 106.1.1 *Regalecus glesne* Ascanius, 1772
 Eggs, etc. Spartà, 1927 : 1, pl. 1 / Berdar *et al.*, 1975 : 123-131, fig. 1, pl. 1-3.
- 107 **TRACHIPTERIDAE**
 107.1.1 *Trachipterus trachypterus* Gmelin, 1789
 Eggs, etc. Spartà, 1933 : 267, fig. 231-234, pl. 15, fig. 5-10 / Sardou, 1966 : 199, 4 pl.
- 109 **LOPHOTIDAE**
 109.1.1 *Lophotus lacepedei* Giorna, 1809
 Habitat, etc. Add. : Portugal (Saldanha, 1977).
- 113 **DIRETMIDAE**
 113.1.1 *Diretmus argenteus* Johnson, 1863
Diretmus argenteus : Vaillant, 1888 : 355 / Zugmayer, 1911 : 107-110, pl. 5 (fig. 7) / Fowler, 1936 : 540-541 (from Johnson), fig. 255 (from Zugmayer) / Maul, 1954a : 23-24, fig. 7 / Wood, 1973 : 291-296, fig. 12-14 / Post, 1976 : 87-114, fig. 1 a-f, 3, 5b, 6b, 9 (distribution in key and in tables 1-12, etc.).
 Eggs, etc. Maul, 1954a : 23-24, fig. 7 / Post, 1976 : 97 (key), fig. 1 a-f.
 Habitat, etc. Mesopelagic, Atlantic between Iceland and 40°S. Indian and Pacific Ocean (from Post, 1976). Not common.
 113.1.2 *Diretmus pauciradiatus* Woods, 1973
Diretmus pauciradiatus Woods, 1973, *Mem. Sears Found. Mar. Res.*, New Haven, 1 (6) : 296-298, fig. 15, (Southern and western Caribbean). Holotype : FMNH n° 66797.
Diretmus pauciradiatus : Post, 1976 : 87-114, fig. 2a-f, 4, 5a, 6a, 7a, 8, pl. 1-12.
Diretmus argenteus : Barnard & von Bonde, 1944 : 237, fig. 238 / Maul, 1949 : 31-34, fig. 12.
 Eggs, etc. Post, 1976 : 97 (key), fig. 2 a-f.
 Habitat, etc. : Mesopelagic. Excepting east Pacific, worldwide in temperate zones ; one adult off Madeira. Not common.
115. **TRACHICHTHYIDAE**
 115.2.2 *Hoplostethus atlanticus* Collett, 1889
Hoplostethus atlanticus Collett, 1889, *Bull. Soc. Zool. France*, 14 : 306, pl. III, fig. 12 (Azores). Holotype MOM.
Hoplostethus islandicus Kotthaus, 1952, *Helgol. Wiss. Meeresunters.*, 4 : 62-87, f.2 (Iceland). Holotype : NMH n.H.1.
Hoplostethus atlanticus : Collett. 1896 b : 17, pl. 3, fig. 12.
Hoplostethus sp. : Vaillant in Roule, 1916 : 131.
Leiogaster atlanticus spinulosus Roule, 1916a, *Bull. Inst. océanogr. Monaco* (320) : 15-16.
Leiogaster atlanticus : Roule, 1919 : 46.
Hoplostethus gilchristi Smith, 1935, *Rec. Albany Mus.*, 4 : 182, pl. 22, fig. E.
Hoplostethus islandicus : Kotthaus, 1952a : 82-83. (descr. of holotype) / Quéro, 1973 : 224 / Gueguen & Quéro, 1974 : 183.
Hoplostethus atlanticus : Woods & Sonoda, 1973 : 307-313, fig. 19-20 (references) /

Karrer, 1973 : 223-227, fig. 15-17 / Quéro, 1974 : 107 / Gueguen, Lamolet & Quéro, 1976 : 181.
Eggs, etc. Collett, 1889, fig. 12.
Otoliths (sagitta). Karrer, 1975, fig. 17.
Habitat, etc. : Pelagic at depths 180-1000 m. North and South Atlantic.

- 116 **HOLOCENTRIDAE**
116.1 *Holocentrus* Artedi in Seba, 1761 (instead of Gronovius, 1763).
- 117 **MELAMPHAIDAE**
117.3 *Poromitra* Goode & Bean, 1883
Delete the question mark before *Poromitrella*.
117.3.1 *Poromitra capito* Goode & Bean, 1883
Ebeling & Weel, 1973 : 437 / Ebeling, 1975 : 314.
117.3.2 *Poromitra crassiceps* (Günther, 1878)
Ebeling & Weel, 1973 : 440 / Ebeling, 1975 : 314.
117.3.3 *Poromitra megalops* (Lütken, 1877)
Ebeling & Weel, 1973 : 433 / Ebeling, 1975 : 314.
- 120 **ZEIDAE**
120.1.1 *Zeus faber* Linnaeus, 1758
Tortonese & Cautis, 1967 : 1 (Black Sea).
120.2.1 *Zenopsis conchifer* (Lowe, 1852)
Quéro, 1972 : 195 / Gueguen & Quéro, 1974 : 183 / Gueguen et al., 1975 : 212 / Quéro et al., 1976 : 183, fig. 5 ; 1977 : 233, f. 3 / Quéro & Robles Pariente, 1977 : 108, fig. 2.
Habitat, etc. In the area : from the Channel to the southern limit.
120.3.1 *Cyttus roseus* (Lowe, 1843)
Quéro, 1970 : 281, 282 / Blacker, 1973 : 222 / Quéro & Robles Pariente, 1977 : 111, fig. 4.
Habitat, etc. In the area : from North Spain to the southern limit.
- 123 **CAPROIDAE**
123.2.1 *Antigonia capros* Lowe, 1843
Maul, 1976 : 39 (Madeira).
- 124 **SERRANIDAE**
Some genera (e.g. *Dicentrarchus*, *Howella*) have also been placed in a separate family (Percichthyidae : Gosline, 1966).
124.1.2 *Serranus atricauda* Günther, 1874.
Habitat, etc. Seen and photographed near Port-Cros (Îles d'Hyères, South France) (A. Pras, in litt.).
124.4.2 *Dicentrarchus punctatus* (Bloch, 1792)
Ben Tuvia, 1971 : 741 (Gulf of Suez).
124.5a.1 *Howella sherborni* (Norman, 1930)
Rhectogramma sherborni Norman, 1930, Discovery Rep., 2 : 348, fig. 39 (South Africa). Holotype : BMNH n.1930.1.12. 1052.
Rhectogramma sherboni : Fraser-Brunner, 1931
Galeagra sherboni : Part, 1933.
Howella sherborni : Fowler, 1936 : 1286 / Schultz, 1940 : 422 / Grindley & Penrith, 1965 : 284 / Parin, 1976 : 195 / et al., 1976 : 232 / Fedoryanko, 1976 : 170.
Howella brodiei : Koefoed, 1952 : 5 / Berry & Perkin, 1966 : 671 / Mead & de Falla, 1975 : 271 / Parin et al., 1974 / Bekker et al., 1975 : 323 / Parin, 1975 : 322.
Eggs, etc. Fedoryanko, 1976 : 176.
Habitat, etc. Tropical and subtropical areas of all oceans. In the Atlantic to 33-35° N. Juveniles pelagic from 26 to 200-300 m ; adults bathypelagic.
- Doubtful species* - *Cephalopholis miniatus* (Forsskal).
Torchio (in litt.) informs that he had the actual specimen from Finale (Gulf of Genoa), not the photo only.
- 125 **THERAPONIDAE**
125.2 *Therapon* Cuvier, 1816
Therapon Cuvier, 1816, Règne Anim., 2 : 295 (type : *Holocentrus servus* Bloch, by elimination). Emended to *Therapon*, ibid. ed. II, 2, 1829 : 148.

- Aunistes* De Vis, 1885, *PROC. Linn. SOC. IV.S.W.*, 9 : 398 (type : *A. argenteus* De Vis, b: monotypy = *Th. puta*).
- 125.2.1 ***Therapon puta*** Cuvier, in Cuv. Val., 1829
Therapon puta Cuvier, in Cuvier & Valenciennes, 1829, *Hist. Nat. Poiss.*, 3 : 13
(Pondichéry, Mahé). Type lost.
- Authistes puta* : Ben Tuvia, 1977, *Cybium*, 1 : 97, fig. 2.
- Habitat, etc. Red Sea, Indian and SW Pacific Oceans. Immigrated in the Mediterranean (Israel : Bardawil lagoon).
- 127 **APOGONIDAE (1)**
- 127.1.1 ***Apogon imberbis*** (Linnaeus, 1758)
Almeida & Gomes, 1978 : 3 (Portugal).
- 127.2.1 ***Epigonus telescopus*** Risso, 1810
Mayer, 1974 : 152, fig. 2-3.
Habitat, etc. 75-1200. Also in Western Atlantic (a capture off United States) and SW Pacific (east of New Zealand).
- 127.2.2 ***Epigonus denticulatus*** Dieuzeide, 1950
Mayer, 1974 : 175, fig. 13-14 / Maul, 1976 : 40, fig. 18 (Morocco).
Habitat, etc. 130-830 m. Cosmopolitan.
- 127.2.3 ***Epigonus constanciae*** (Giglioli, 1880)
Pomatomichthys constanciae Giglioli, 1880. Elenco pesci. ital. : 20 (Messina). Holotype : MZUF 3089.
Epigonus constanciae Mayer & Tortonese, 1977, *Breviora*, 443 : 1-13, fig. 1.
Habitat, etc. Chiefly on upper portions of the continental slope (200-400). Western Mediterranean and Eastern Atlantic : Madeira, equatorial West Africa, probably Canary.
- 127.4.1 ***Microichthys coccoi*** Rüppell, 1852
Letterio *et al.*, 1971 : 195-197, 2 fig. / Cavallaro & Bonina, 1972 : 79-94, 7 fig.
- 127.4.2 ***Microichthys sanzoi*** Spartà, 1950.
Microichthys sanzoi Spartà, 1950, *Boll. Pesca. Piscic. Idrobiol.*, 5 (2) : 202-206, fig. 1-13.
Microichthys sanzoi : Cavallaro *et al.*, 1974 : 16, fig. 1-2 / Cavallaro, 1978 : 531.
Habitat, etc. Known only from the Strait of Messina (Sicily).
- 128 **CEPOLIDAE**
- 128.1.1 ***Cepola macropthalma*** Linnaeus, 1758
Atkinson *et al.*, 1977 : 369-384, 4 fig.
Note - An application to the International Commission on Zoological Nomenclature is expected for preserving the specific name *rubescens* Linnaeus, 1766, generally used.
- 129 **POMATOMIDAE**
- 129.1.1 ***Pomatomus saltator*** (Linnaeus, 1766)
Common names. Lufar (Ro, U.S.S.R.), lufer (Tu).
- 130 **RACHYCENTRIDAE**
- 130.1.1 ***Rachycentron canadum*** (Linnaeus, 1766)
Eggs, etc. Dawson, 1971 : 65-71, fig. 1-2.
- 131 **CARANGIDAE**
- 131.1.2 ***Caranx dentex*** (Schneider, 1801)
According to Smith-Vaniz (in litt.), this species becomes *Pseudocaranx dentex* (131.1a.1). Delete *Caranx cheilio* Snyder, 1904, from the synonymy ; this valid species from Pacific becomes *Pseudocaranx cheilio*.
- 131.1a ***Pseudocaranx*** Bleeker, 1863
Nat. Verh. Holl. Maatsch. Wet. Haarlem, 18 (2) : 82 (type : *Scomber dentex* Bloch Schneider, 1801 by monotypy).
- 131.1a.1 ***Pseudocaranx dentex*** (Bloch-Schneider, 1801)
Replaces *Caranx dentex*, according to Smith-Vaniz (in litt.).

(1) The genus *Howella* is now included in Serranidae (*Howella sherborni* : 124.5a.1).

- 131.1.3 *Caranx crysos* (Mitchill, 1815)
Eggs, etc. McKenney *et al.*, 1958 : 168, fig. 1-4 / Berry, 1959 : 441.
- 131.3.1 *Decapterus macarellus* (Cuvier, in Cuv. Val., 1833)
Lectotype : MNHN 5850, designated by F.H. Berry, 1968 : 161. Paralectotypes : MNHN A6245 and B2880.
- 131.5 *Lichia* Cuvier, 1816
In order to have this name validated, an application was sent to the Intern. Commission on Zool. Nomenclature (Tortonese, 1974 : 27). But, according to Smith-Vaniz and Staiger, 1973 : 228, *Lichia* Cuvier, 1816 is a junior synonym of *Hypacanthus* Rafinesque, 1810 (type : *Centronotus vadigo* Lacepède, 1802 = *Scomber amia* Linnaeus, 1758 by subs. design. of Smith-Vaniz and Staiger, 1973).
- 131.7 *Alectis* Rafinesque, 1815
According to Smith-Vaniz and Berry (in litt.), *Alectis* is a senior synonym of *Scyris* Cuvier, 1829. So *Scyris alexandrina* (E. Geoffroy Saint-Hilaire, 1817) (131.7.1) must be called *Alectis alexandrinus*.
- 131.7.1 *Alectis alexandrinus* (E. Geoffroy Saint-Hilaire, 1817)
Habitat, etc. Also in the Adriatic (Tortonese, 1975 : 155).
- 131.8 *Alepes* Swainson, 1839
Nat. Hist. Fishes ..., 2 : 248 (Type : *Alepes melanoptera* Swainson, 1839 by monotypy).
Atule Jordan and Jordan, 1922 is a synonym of *Alepes*, but *Selar* Bleeker, 1851 is a different valid genus.
- 131.8.1 *Alepes djedaba* (Forsskal, 1775)
This species must be referred to the genus *Alepes*, according to Smith-Vaniz, Bauchot and Desoutter (in press).
- 131.10.1 *Trachurus trachurus* (Linnaeus, 1758)
According to Berry & Cohen, 1972 (1974) : 189, *T. saurus* Rafinesque is a *nomen nudum*, *Scomber lacerta* Pallas is a *nomen dubium*.
Habitat, etc. In the Atlantic only from Iceland to Cape Verde Isl.
- 131.10.3 *Trachurus mediterraneus* (Steindachner, 1868)
Berry & Cohen, 1972 (1974) : 186. Includes *T.m. ponticus* Aleev and *T. furnestini* (Dard. Vinc.).
Habitat, etc. NE Atlantic from bay of Biscay to Gibraltar and Azov seas.
- 131.10.4 *Trachurus picturatus* (T.E. Bowdich, 1825)
Berry & Cohen, 1972 (1974) : 187. Includes *T. suareus* (Risso *apud* Cuvier & Valenciennes, 1833).
Habitat, etc. NE Atlantic from Bay of Biscay to Canary Islands, Mediterranean.
- 131.12 *Selene* Lacepède, 1803
Hist. nat. Poiss., 4 : 560 (type : *Selene argentea* Lacepède by subs. design. of Jordan, 1917).
According to Berry (in litt.), *Selene* is a senior synonym of *Vomer* Cuvier, 1816. So, *Vomer setapinnis* (Mitchill, 1815) (131.12.1) must be called *Selene setapinnis*.
- 131.12.1 *Selene setapinnis* (Mitchill, 1815)
From the synonymy of this species, delete *Vomer goreensis* Guichenot, 1866 (not 1858 : *nomen nudum*) (holotype : MNHN 2924), *Vomer gaboensis* Guichenot, 1866 (holotype : MNHN 2928), *Vomer senegalensis* Guichenot, 1866 (holotype : MNHN 2918) and *Vomer dorsalis* Gill, 1862. All these four nominal species are synonyms of *Vomer dorsalis* Gill, 1862, a valid species from the area south to the Clofnam area.
Vomer brownii : Cuvier, 1833 is only *pro parte* a synonym of *Selene setapinnis*.

- 136 POMADASYIDAE
- 136.1.2 *Pomadasys stridens* (Forsskal, 1775)
Pomadasys stridens : Mouneimné, 1977 : 48, fig. 15.
Rhonciscus stridens : Ben-Tuvia, 1977 : 99, fig. 3.
Habitat, etc. Israel : Haifa bay, Rafiah (Gaza), Lebanon, 20 m.
- 137 SCIAENIDAE
- 137.1 *Sciaena* (Artedi) Linnaeus, 1758
Correct : Opinion 988 of the Intern. Comm. zool. Nomencl. (1972). Footnote 1 (p. 396), correct : «One species in the area of the Clofnam, two in the Caribbean sea».

- 137.1.1 *Sciaena umbra* Linnaeus, 1758
Eggs, etc. De Buen, 1932 : 24, fig. 16.
- 137.2.1 *Argyrosomus regius* (Asso, 1801)
Sciaena umbra (nec Linn.) : Bonaparte, 1835, XIII punt. 65 : pl. 88, fig. 1).
- 137.3.2 *Pseudotolithus senegalensis* (Valenciennes, 1833)
Otolithus (sagitta). Trewavas, 1977 : fig. 48, from Nolf, pers. comm.
- 137.4.2 *Umbrina canariensis* Valenciennes, 1843
Umbrina canariensis : Dardignac, 1961 : 266, fig. 3, 5B, 6-13, 15, tables I, II, IV, VI, VII / Oliver, 1975 : 423 / Trewavas, 1977 : 279.
- 137.4.3 *Umbrina ronchus* Valenciennes, 1843
Umbrina ronchus : Palmer, 1966 : 423, pl. 6 ; 7a / Tortonese, 1975a : 145, fig. 60 / Trewavas, 1977 : 281, fig. 50.
Umbrina fusca Dardignac. The type (ISTPM) is lost.
Habitat, etc. Delete : «Tortonese (*in litt.*)» and the question mark before «South Africa». Add : Gulf of Oman.
- 137a **SILLAGINIDAE**
- 137a *Sillago* Cuvier, 1817 (1816)
Règne animal, 2 : 258 (type : *Sillago acuta* Cuvier, 1817 (1816) by subs. design. of Gill, 1861).
- 137a.1.1 *Sillago sihama* Forsskal, 1775
Atherina sihama Forsskal, 1775, Descr. anim. : 70 (Lohaja, Red Sea). Holotype ZMUC, P. 45164 (dry skin). Described by Klausewitz & Nielsen, 1965, 22 : 27, pl. 38, fig. 71.
Sillago sihama : Ruppell, 1828 : 9-11, pl. 1 (Red Sea)/Tiller, 1902 : 297-299 (Suez Canal) / Gruvel & Chabanaud, 1937 : 25 (Suez Canal) / Mouneimne, 1977 : 45, fig. 10 (Lebanon).
Habitat, etc. Littoral, mostly on sandy bottom, probably not below 20 m. In the area : considered as an immigrant via Suez Canal ; Lebanon, Israel (Ben Tuvia, unpublished). Generally : Red Sea and entire Indo-Pacific region.
- 138 **MULLIDAE**
- 138.1.1 *Mullus barbatus* Linnaeus, 1758
Eggs, etc. Lo Bianco, 1908 : 18-50, 2 pl.
- 139 **SPARIDAE**
- 139.1 *Sparus* (Artedi) Linnaeus, 1758
The inclusion of *Pagrus* in the same genus may be objected.
- 139.1.4 *Sparus pagrus* Linnaeus, 1758
Pagrus sedecim Ginsburg, 1952, J. Wash. Acad. Sci., 42 : 9, 3 fig.
Habitat, etc. This species is present also in Western Atlantic (from North Carolina to Uruguay) because *P. sedecim* is a synonym (Manooch *et al.*, 1976).
- 139.3.1 *Dentex* (*Dentex*) *dentex* (Linnaeus, 1758)
Poll, 1971 : 7, fig. 1.
- 139.3.2 *Dentex* (*Cheimerius*) *canariensis* Steindachner, 1881
Poll, 1971 : 15, fig. 5
- 139.3.3 *Dentex* (*Cheimerius*) *gibbosus* (Rafinesque, 1810)
Poll, 1971 : 11, fig. 3.
- 139.3.4 *Dentex* (*Polysteganus*) *macrophthalmus* (Bloch, 1791)
Poll, 1971 : 25, fig. 7.
Habitat, etc. Occasional off South Africa (J.L.B. Smith, 1965).
- 139.3.5 *Dentex* (*Polysteganus*) *maroccanus* Valenciennes, 1830
Poll, 1971 : 27, fig. 8.
- 139.4.1 *Diplodus annularis* (Linnaeus, 1758)
Fowler, 1936, 2 : 843, fig. 364 (*partim*).
Habitat, etc. In the Atlantic : from the Bay of Biscay to Gibraltar.
- 139.4.2 *Diplodus cervinus* (Lowe, 1841)
Barriety, 1956 : 141 / Barriety & Percier, 1964 : 49 / Quéro, 1972 : 195 / Gueguen *et al.*, 1975 : 212 / Oliver, 1975 : 421 / Harambillet *et al.*, 1976 : 28 / Quéro *et al.*, 1976 : 188 / Du Buit *et al.*, 1977 : 187 / Quéro *et al.*, 1977 : 241.
- 139.4.3 *Diplodus sargus* (Linnaeus, 1758)
According to de la Paz, Bauchot & Daget 1974 and de la Paz 1975, two subspecies are recognized in the Clofnam area :

1) *Diplodus sargus cadenati* de la Paz, Bauchot & Daget, 1974, *Ichthyologia*, 5 : 113-128, 8 fig.

Diplodus sargus typicus Cadenat, 1964, *Bull. I.F.A.N.*, 26, ser. A, (3) : 960, fig. 4, 11, 23 (p.p.).

Sargus sargus : Cadenat, 1950 : 211.

Habitat, etc. Atlantic from the Bay of Biscay to Senegal. Azores, Madeira, Canary Islands.

2) *Diplodus sargus sargus* (Linnaeus, 1758)

Habitat, etc. Mediterranean only (Delete all references which do not refer to Mediterranean).

139.4.5 *Diplodus bellottii* (Steindachner, 1882)

Sargus bellottii Steindachner, 1882, *Denks. Akad. Wiss. Wien*, 44.45 : 6-7, pl. 3, fig. 2. (Banco d'Arguin). Holotype lost.

Diplodus annularis Osorio, 1909 : 64 / Fowler, 1936 : 843 (p.p.) and 1298.

Sargus bellottii : Metzelaar, 1919 : 249.

Diplodus bellottii : Fowler, 1936 : 842 / de la Paz, 1975 : 11, fig. 3 and 4.

Sargus (Diplodus) bellottii : Cadenat, 1951 : 209.

Diplodus senegalensis Cadenat, 1964, *Bull. I.F.A.N.*, 26, ser. A (3) : 968, fig. 6, 7, 25.

Diplodus senegalensis : Aloncle, 1965 : 39-50, 15 fig. / Bonnet, 1969 : 108 / Blache et al., 1970 : 337.

Habitat, etc. Littoral on rocky or sandy bottom, to about 40 m. West African coasts from Gibraltar to Senegal.

139.8.1 *Puntazzo puntazzo* (Gmelin, 1789)

According to de la Paz, 1975 (*Trav. Doc. ORSTOM, Paris* : 63, fig. 28, 29, 30) the species was described by Cetti, 1777, and belongs to the genus *Diplodus*, so the correct binomen is : *Diplodus puntazzo* (Cetti, 1777).

139.6.1 *Oblada melanura* (Linnaeus, 1758)

Habitat, etc. Also in the bay of Biscay (Oliver, 1975 : 422).

139.9.1 *Sarpa salpa* (Linnaeus, 1758)

Habitat, etc. Occasional off Netherland (De Groot & Nijssen, 1976 : 107).

140 GIRELLIDAE

This family is to be included in Kyphosidae (142), under the latter name (Greenwood et al., 1966 : 400).

141 CENTRACANTHIDAE

This family is now included by some authors in Emmelichthyidae.

141.2.2 *Spicara maena flexuosa* Rafinesque, 1810

It is better to consider this species as being different from *S. maena* (L.) (Tortonese, 1975 : 126, fig. 50).

144 POMACENTRIDAE

144.1 *Chromis* Cuvier apud A.D. (= A.G. Desmarest), 1814

The gender was recognized as feminine by A.R. Emery (1975).

Eggs, etc. De Buen, 1932 : 23, fig. 15.

144.2 *Abudefduf* Forsskal, 1775

Descript. anim. : 59. Type : *A. sordidus* Forsskal.

144.2.1 *Abudefduf luridus* (Cuvier, 1830)

Glyphisodon luridus Cuvier in Cuv. Val., 1830, Hist. Nat. Poiss. 5 : 356, 476. Madeira.

Abudefduf luridus : Fowler, 1923, 75 : 34 ; 1936 : 954.

Habitat, etc. Littoral. Madeira, Canary and Cabo Verde Isl., Azores (Saldanha, in litt.).

145 LABRIDAE

145.2.1 *Acantholabrus palloni* (Risso, 1810)

Maul, 1976 : 43, pl. 1, fig. 4 (Portugal).

145.4.1 *Coris julis* : (Linnaeus, 1758)

Eggs, etc. Marinaro, 1971 : 56, pl. 12, fig. 1.

145.5.1 *Ctenolabrus rupestris* (Linnaeus, 1758)

Eggs, etc. De Buen, 1932 : 21, fig. 13 / Marinaro, 1971 : 56, pl. 12, fig. 2.

145.7.1 *Lappanella fasciata* Cocco, 1833

Maul, 1976 : 43 (Josephine Bank, between Madeira and Portugal).

145.11.1 *Xyrichtys novacula* (Linnaeus, 1758)

Eggs, etc. De Buen, 1932 : 22, fig. 14.

- 146 **SCARIDAE**
 146.1.1 *Sparusoma (Euscarus) cretense* (Linnaeus, 1758)
Scarus cretensis : Kolombatovic, 1904 : 186 (Adriatic : Dubrovnik) / Ninni, 1924 : 71 (Adriatic).
Scarichthys coeruleopunctatus (nec Ruppell, 1835) : W. Steinitz, 1927 : 331 (Palestine).
Sparusoma cretensis : Tortonese, 1939 : 376, fig. 23. (Lybia, Tripoli).
- 148 **TRACHINIDAE**
 148.1 *Trachinus* (Artedi) Linnaeus, 1758
Echiichthys is to be deleted from the synonyms having been restored (see below) as a valid genus : Tortonese, 1975a : 234 / Wheeler, (*in litt.*).
 148.1.1 *Trachinus draco* Linnaeus, 1758
 Eggs, etc. Marinaro, 1971 : 57, pl. 12, fig. 3.
 148.2 *Echiichthys* Bleeker, 1861 Gender : M
Ann. Sci. nat. Zool., 4 (16) : 378) (type : *T. viperina* Cuvier, 1829, by monotypy).
 148.2.1 *Echiichthys viperina* Cuvier, *in Cuv. & Val.*, 1829.
 Eggs, etc. Marinaro, 1971 : 57, pl. 12, fig. 3-4.
- 149 **URANOSCOPIDAE**
 149.1.1 *Uranoscopus scaber* Linnaeus, 1758
 Eggs, etc. Salfi, 1933 : 303, fig. 1-8.
- 152 **SIGANIDAE**
 152.1.1 *Siganus rivulatus* Forsskal, 1775
 Ktari F. & Ktari M.H., 1974 : 95-98 (Tunisia : Gulf of Gabes).
 Eggs, etc. Popper *et al.*, 1973 : 37-44, 6 fig.
 152.1.2 *Siganus luridus* (Ruppell, 1928)
 Kaspiris, 1973 : 71 (Ionian Sea ; Greece).
153. **GEMPYLIDAE**
 153.5.1 *Nesiarchus nasutus* Johnson, 1862
 Quéro, 1973b : 338, fig. 1 / Harambillet *et al.*, 1976 : 29 / Quéro *et al.*, 1977 : 235, fig. 4.
 153.6.1 *Prometichthys prometheus* (Cuvier, 1832)
 Quéro, 1973b : 339, fig. 2 (North Spain).
 153.7.1 *Ruvettus pretiosus* Cocco, 1829 (same date for the genus)
 Quéro, 1973b : 340, fig. 3 / Harambillet *et al.*, 1976 : 29.
- 154 **SCOMBROLABRACIDAE**
 154.1.1 *Scombralabrax heterolepis* Roule, 1922
 G. Krefft (*in litt.*) reports that in Atlantic he «took more than 30 specimens along our transects mesopelagically at depths ranging from abt. 100 to 600 m over bottom depths from 3500 m to more than 5000 m. All ages from small juveniles up to what may be the largest specimen known were met with. Thus, it is a true oceanic midwater fish.
- 155 **TRICHIURIDAE**
 155.4.1 *Lepidupus caudatus* (Euphrasen, 1788)
 Karvolac, 1976 : 67 (Adriatic Sea).
 Eggs, etc. Raffaele, 1888 : 66, pl. 5, fig. 5, 6, 10 ; 1889 : 31 / Spartà, 1960 : 5-9, 2 fig.
- 156 **Scombridae**
 This family includes also Thunnidae (157) and Scomberomoridae (158).
 156.1.1 *Scomber (Scomber) scombrus* Linnaeus, 1758.
Scomber glauciscus Pallas, 1811, Zoogr. rossoasiat. 3 : 215 (Black sea).
 Eggs, etc. Sella-Ciacchi, 1925 : 10, fig. 1-2.
 156.1.2 *Scomber (Pneumatophorus) japonicus* Houttuyn, 1782
 Eggs, etc. Demir N., 1961 : 313-316, fig. 1-4.
 157.1 *Thunnus* South, 1845
 Subgenera *Thunnus* s.s., *Germo*, *Neothunnus*, *Parathunnus* are not accepted by Gibbs and Collette, 1967.
 157.1.1 *Thunnus (Thunnus) thynnus* (Linnaeus, 1758)

Delete quotations of *Th. brachypterus* (Cuv.), that is a junior synonym of *Sarda sarda* according to Collette, 1966 : 370.

157.2.1 *Auxis rochei* (Risso, 1810)

Delete quotations of *Scomber alleteratus* Raf. (see 157.3.1).

Eggs, etc. De Buen, 1932 : 36, fig. 26-27.

Correct note 1 (bottom of page) *A. thazard* is known also from Western Atlantic (Richards & Randall, 1967 : 245).

157.3.1 *Euthynnus (Euthynnus) quadripunctatus* (E. Geoffroy S.Hilaire, 1817)

The correct name is *Euthynnus alleteratus* (Raf., 1810) because Rafinesque described really this fish and not *Auxis* (Tortonese, 1975b). The note at bottom of p. 471 is therefore to be deleted.

158.1.2 *Scomberomorus (Scomberomorus) maculatus* (Michill, 1815)

Habitat, etc. According to Tortonese (1975a : 354), two specimens are known from the Clofnam area. One is from Palermo, Sicily (Doderlein, 1888 : MZUP), the other from Villefranche, France (MZUF).

158.4.1 *Sarda sarda* (Bloch, 1793)

Thunnus brachypterus Cuvier, 1832 in Cuv. Val., Hist. Nat. Poiss. 8 : 98, pl. 211 (Mediterranean). Lectotype MNHN n.A5377 by subs. design. by Collette, 1966 ; 3 paralectotypes MNHN n.A5299, A5791.

Eggs, etc. Sanzo, 1932 : 1, pl. 1 / De Buen, 1932 : 32, fig. 22-25.

159 LUVARIDAE

159.1.1 *Luvarus imperialis* Rafinesque, 1810

Eggs, etc. De Gastani, 1930 ; 1, pl. 1 / Padoa, 1956 : 526, fig. 363-370, pl. 36, fig. 10 / Abe & Kobata, 1974 : 1, fig. 1.

160 ISTOPHORIDAE

160.3.2 *Tetrapurus albidus* Poey, 1860

Tortonese, 1971 : 81, fig. 1 (Gulf of Genoa) ; 1975 : 376, fig. 163 B.

160.3.3 *Tetrapurus georgii* Lowe, 1840

Robins, 1974 : 54, fig. 1-2.

Habitat, etc. Madeira, Portugal, Strait of Gibraltar, Sicily.

162 GOBIIDAE

162.1.1 *Gobius niger* Linnaeus, 1758

Eggs, etc. Russell, 1976 : 259, fig. 63-64.

162.1.3 *Gobius auratus* Risso, 1810

Miller & El Tawil, 1974 : fig. 1b, c.

162.1.4 *Gobius bucchichi* Steindachner, 1870

Miller, 1977 : pl. 1 A / Almeida & Gomes, 1978 : 5, fig. 2, pl. I, fig. 5 (Portugal).

162.1.5 *Gobius cobitis* Pallas, 1811

Miller, 1977 : pl. 1 B.

162.1.5a *Gobius couchi* Miller & El-Tawil, 1974

Gobius couchi Miller & El-Tawil, 1974, J. Zool. London ; 546, fig. 2 (Helford, Cornwall). Holotype BMNH 1974, 2.8.1 ; paratypes BMNH 1974.2.8.2-11.

Otoliths (sagitta). Miller & El Tawil, 1974 : 548,555, fig. 3 e-f.

Habitat, etc. Benthic, inshore and intertidal, below low-water of neap tides, under stones on sheltered muddy sand. Southern Cornwall and Lough Ine, Eire.

Common names. Couch's goby (En).

162.1.7a *Gobius gasteveni* Miller, 1974

Gobius gasteveni Miller, 1974, J. Zool. London, 174 : 468, fig. 1, pl. 1 (Off Plymouth, Devon). Holotype and paratypes BMNH 1956.6.16, 39-65 (part).

? *Gobius niger* : Lebour, 1919 : 75 (nec Linnaeus, 1758).

Gobius sp. : Mar. Biol. Assoc., 1957 : 401.

Gobius auratus (nec Risso, 1810) : Miller, 1961 : 756 / Wheeler, 1969 : 419.

Eggs, etc. Lebour, 1919 : 75 (?).

Habitat, etc. Benthic, offshore 35-100 m, on muddy sand and coarser deposits. Western English Channel and Madeira.

Common names. Steven's goby (En).

162.1.9 *Gobius paganellus* Linnaeus, 1758

Pinchuk, 1976 : 601 / Miller, 1977 : pl. 1 C,D.

Eggs, etc. Russell, 1976 : 261, fig. 64.

162.1.10 *Gobius roulei* De Buen, 1928

Maul, 1976 : 46, fig. 19.

- Habitat, etc. Benthic, inshore to 320-385 m. Western Mediterranean and also off Southern Portugal (Maul, 1976). Rate.
- 162.1.12 *Gobius vittatus* Vinciguerra, 1883
Habitat, etc. Benthic, 15-85 m, on coralline grounds (Zander & Heymer, 1977) (Follows as before).
- 162.2.1 *Aphia minuta* (Risso, 1810)
Eggs, etc. Russell, 1976 : 274, fig. 65.
- 162.5.2 *Buenia jeffreysi* (Günther, 1867)
Eggs, etc. Russell, 1976 : 273, fig. 64.
- 162.9.1 *Crystallologobius linearis* (von Duben, 1845)
Crystallologobius Nilssonii : Kolombatovic, 1890 : XVII, (Adriatic : is. Vis).
Crystallologobius linearis : Relini Orsi & Fanciulli, 1977 : 111, fig. 2-3 (Gulf of Genoa).
Eggs, etc. Russell, 1976 : 276, fig. 66.
- 162.10.1 *Deltentosteus quadrinotatus* (Valenciennes, 1837)
Maul, 1976 : 47, fig. 20.
- 162.10.2 *Deltentosteus colonianus* (Risso, 1826)
Deltentosteus lichensteinii : Maul, 1976 : 47, fig. 21.
Habitat, etc. Also off southern Portugal (Maul, 1976).
- 162.13.1 *Gobiusculus flavescens* (Fabricius, 1779)
Eggs, etc. Russell, 1976 : 264, fig. 63-64.
- 162.14.3 *Knipowitschia panizzai* (Verga, 1841)
Tortonese, 1975 : 335, fig. 148 / Gandolfi & Tongiorgi, 1976 : 1-9, fig. 1.
Eggs, etc. Gandolfi, 1972 : 621-622.
Habitat, etc. Also along the western coast of central Italy and in the Lake Trasimeno.
- 162.15.1 *Lebetus scorpioides* (Collett, 1874)
Eggs, etc. Russell, 1976 : 278, fig. 67.
- 162.15.2 *Lebetus guilleti* (Le Danois, 1913)
Eggs, etc. Russell, 1976 : 280, fig. 68.
- 162.16.3 *Lesueurigobius heterofasciatus* Maul, 1971
Maul, 1976 : 48, fig. 22 (Morocco).
- 162.16.4 *Lesueurigobius sanzoi* (De Buen, 1918)
Almeida & Gomes, 1978 : 10, fig. 3, pl. II, fig. 7 (Portugal).
- 162.17a *Millerigobius* Bath, 1973a Gender : M, *Senck. Biol.*, 54 : 303 (type : *Gobius macrocephalus* Kolombatovic, 1891, by orig. design. and monotypy).
- 162.17a.1 *Millerigobius macrocephalus* (Kolombatovic, 1891)
Add to the preceding quotations (162.26.b.2) : Bath, 1973a : 304, fig. 1-3 / Miller, 1977 : 344, fig. 1A, B, 7, pl. 2, B.
Habitat, etc. Benthic, inshore shallows to 4 m, among and under stones. Northern Adriatic and eastern Mediterranean (Miller, 1977).
- 162.18.1 *Monishia ochetica* (Norman, 1927)
Miller, 1978 : 41, fig. 1 - 5, pl. 1.
- 162.19.1 *Neogobius fluviatilis* (Pallas, 1811)
Pinchuk, 1976 : 602.
- 162.19.2 *Neogobius cephalarges* (Pallas, 1811)
Neogobius platyrostris (nec Pallas, 1811) : Georgiev, 1966 : 198, fig. 36.
Note - Unpublished illustrations of *Gobius cephalarges* (Leningrad branch of USSR Academy of Sciences Archives, reference f.129, op. 7, d.760, 1.30, table 33, fig 14), to which reference was made by Pallas (1814), in fact depict *Neogobius melanostomus* (Pallas), according to Pinchuk (1976). It would seem desirable that the name *cephalarges*, as used by later authors, be conserved for the present taxon.
- 162.19.2a *Neogobius cephalargoides* Pinchuk, 1976
Neogobius cephalargoides Pinchuk, 1976, *Vopr. Ikhtiol.*, 16 : 606 (Odessa). Holotype and paratype ZIN 2134.
Gobius syrman (nec Nordmann, 1840) : Kessler, 1859 : 237.
Gobius ratan (nec Nordmann, 1840) : Pinchuk, 1963 : 1841, fig. 3.
Neogobius cephalarges (nec Pallas, 1811) : Georgiev, 1966.
Complementary iconography. Borcea, 1933 : pl. 3, fig. 18-19.
Habitat, etc. Benthic, coastal and offshore banks. Northern Black Sea and parts of Sea of Azov.
- 162.19.3 *Neogobius gymnotrachelus* (Kessler, 1857)
Pinchuk, 1977 : 593.
- 162.19.4 *Neogobius kessleri* (Günther, 1861)
Pinchuk, 1977 : 590.
Habitat, etc. Change «outside, etc.» to «outside : Caspian Sea, as *N. kessleri gorla* (Ijjin, in Berg, 1949).

- 162.19.5 *Neogobius melanostomus* (Pallas, 1811)
Gobius virescens Pinchuk, 1976, *Vopr. Ikhtiol.*, 16 : 608 (error for *G. virescens* Pallas, 1811).
- 162.19.6 *Neogobius platyrostris* (Pallas, 1811)
Neogobius platyrostris platyrostris : Pinchuk, 1977 : 587.
Neogobius platyrostris odessicus : Pinchuk, 1977, *Vopr. Ikhtiol.* 17 : 589 (North-western Black Sea).
Under *Gobius (Ponticola) platyrostris*, delete the reference to Borcea.
Complementary iconography. Delete the references to Borcea.
- 162.19.7 *Neogobius ratan* (Nordmann, 1840)
Neogobius satan : Pinchuk, 1976, *Vopr. Ikhtiol.*, 16 : 605 (error for *N. ratan*).
Neogobius ratan ratan : Pinchuk, 1976 : 604.
- 162.19.8 *Neogobius syrman* (Nordmann, 1840)
Gobius eurystomus, Kessler, 1877
Neogobius syrman : Pinchuk, 1976 : 603.
- 162.21 *Pomatoschistus* Gill, 1864
Potamochistus Swedmark, 1868, *Cah. Biol. Mar.*, 9 : 306 (error for *Pomatoschistus*).
162.21.1 *Pomatoschistus minutus* (Pallas, 1770)
Miller, 1973 : 506 (part) / Fonds, 1973 : 418, fig. 14.
Delete the following references :
Gobius minutus minutus Le Danois, 1913
Gobius minutus Lozanoi De Buen, 1923 ; 1930a
Pomatoschistus lozanoi Fonds, 1970.
Eggs, etc. Russell, 1976 : 266, fig. 63-64.
- 162.21.3a *Pomatoschistus lozanoi* (De Buen, 1923)
Gobius minutus lozanoi De Buen, 1923, *Mem. Inst. Esp. Ocean.* 3 (3) : 221, fig. 51-52 (Vigo and Santander, Spain).
Gobius minutus (part) : Steindachner, 1868 : 400 / De Buen, 1918 : 291 / Lozano Rey : 1919 : 71 / Hass, 1936 : 279 / Swedmark, 1968 : 297 / Miller, 1973 : 506, 507.
? *Gobius minutus* Osorio, 1888 : 167 (nec Pallas, 1770)
Gobius minutus minutus : Le Danois, 1913 : 88, fig. 153, 155 (nec Pallas, 1770)
Pomatoschistus (Pomatoschistus) minutus forma *lozanoi* : De Buen, 1930 : 131, fig. 5.
Pomatoschistus lozanoi : Fonds, 1970 : 621 ; 1973, fig. 14-15.
Pomatoschistus minutus : Miller, 1973 : 506 (part).
Eggs, etc. Fonds, 1973 : 467.
Habitat, etc. Benthic, inshore, rarely estuarine. North Sea to North-western Spain.
Common names. Lozano's goby (En).
- 162.21.5 *Pomatoschistus microps* (Kroyer, 1838)
Eggs, etc. Russell, 1976 : 270, fig. 63-64.
- 162.21.6 *Pomatoschistus norvegicus* Collett, 1903)
Webb & Miller, 1975 : 735, fig. 1-2, pl. 1.
Eggs, etc. Russell, 1976 : 268, fig. 64.
- 162.21.7.1 *Pomatoschistus pictus pictus* (Malm, 1865)
Eggs, etc. Russell, 1976 : 272, fig. 64.
- 162.23a *Speleogobius* Zander & Jelinek, 1976
Gender : M.
Mitt. Hamburg Zool. Mus. Inst., 73 : 275 (type : *Speleogobius trigloides* Zander & Jelinek, 1976, by monotypy).
- 162.23a.1 *Speleogobius trigloides* Zander & Jelinek, 1976
Speleogobius trigloides Zander & Jelinek, 1976, *Mitt. Hamburg Zool. Mus. Inst.*, 73 : 275, fig. 4-5 (Cave of Banjole, Rovinji, Yugoslavia). Holotype ZMH 5645.
Habitat, etc. Benthic, inshore. Only the holotype known.
- 162.24.1 *Thorogobius ephippiatus* (Lowe, 1839)
Tortonese, 1975a : 316, fig. 142 / Almeida & Gomes, 1978 : 8, pl. II, fig. 6 (Portugal).
- 162.25.1 *Zebrus zebrus* (Risso, 1826)
Miller, 1977 : 352, fig. 2, 5, pl. 2, D.
- 162.26.1 *Zosterisessor ophiocephalus* (Pallas, 1811)
After the name *Gobius ophiocephalus* add : nec Jenyns, 1842 = *Ophiogobius jenynsi* Hoese.
- 162.26b.2 *Gobius macrocephalus* Kolombatović, 1891
To be deleted (see : 162.17a.1).

- 163 CALLIONYMIDAE
 163.1.1 *Callionymus lyra* Linnaeus, 1758
 Tortonese, 1966 : 1 ; 1975a : 241, fig. 100.
 163.1.3 *Callionymus maculatus* Rafinesque, 1810
 Maul, 1976 : 50, fig. 25 (Morocco).
 163.1.4 *Callionymus phaeton* (Günther, 1861)
 Maul, 1976 : 50, fig. 23-24 (Morocco).
 Habitat, etc. In the Mediterranean : generally common, on muddy bottoms.

163a DRACONETTIDAE
 163a.1 *Draconetta* Jordan & Fowler, 1903 GENDER : F.
Proc. U.S. Nat. Mus., 25 : 939 (Type : *Draconetta xenica* Jord., Fowl., by monotypy).
 163a.1.1 *Draconetta acanthopoma* Regan, 1904
Draconetta acanthopoma Regan, 1904, *Ann. Mag. nat. Hist.* (7), 14 : 130 (North Atlantic).
Draconetta acanthopoma : Maul, 1976 : 52, fig. 29 (Madeira) / Brownell, 1976 : 51-53, 1 fig.
 Habitat, etc. Benthic. North Atlantic, west (from Georgia to Florida : 210-300 fath.) and east (Meteor and Josephine banks ; Madeira : 170-505 m).

164 BLENNIIDAE
 164.1 *Blennius* (Artedi) Linnaeus, 1758
 In his revision, Bath (1977) distributed in eight genera the species present in Clofnam area and traditionally referred to *Blennius*. A generic name is new ; the others were formerly quoted as synonyms of *Blennius*. Bath's arrangement is as follows : Gen. *Aidablennius* Whitley, 1947 (*A. sphynx*).
 Gen. *Blennius* Linnaeus, 1758 (*B. ocellaris*).
 Gen. *Lipophrys* Gill, 1896 (*L. pholis*, *adriaticus*, *canevai*, *dalmatinus*, *nigriceps*).
 Gen. *Parablennius* Ribeiro, 1915 (*P. gattorugine*, *rouxi*, *tentacularis*, *pilicornis*).
 Gen. *Paralipophrys* Bath, 1977, *Senck. Biol.*, 57, 4-6 : 200 (type : *Blennius trigloides* (Val. in Cuv. Val., 1836, by monotypy)).
 Gen. *Pictiblennius* Whitley, 1930 (*P. incognitus*, *sanguinolentus*, *parvicornis*, *zvonimiri*).
 Gen. *Salaria* Forsskal, 1775 (*S. basiliscus*, *pavo*).
 Gen. *Scartella* Jordan, 1886 (*S. cristata*).
 Different views on the classification are expressed by Zander (1977 : *in press*), who accepts three genera only : *Blennius*, *Parablennius*, *Lipophrys*.
 A series of «addenda et corrigenda» are reported here for the species of Blenniidae as they were listed and named in Clofnam.
 164.1.1 *Blennius ocellaris* Linnaeus, 1758
 Bath, 1977 : 178, fig. 9, 70.
 Eggs, etc. Cipria, 1938 : 1-10, 1 pl.
 164.1.2 *Blennius adriaticus* Steindachner & Kolombatovic, 1883
Lipophrys adriaticus : Bath, 1977 : 192, fig. 37.
 164.1.3 *Blennius basiliscus* Valenciennes, 1836
Blennius basiliscus : Tortonese, 1939a : 378 ; 1975a : 263, fig. 111.
Salaria basilisca : Bath, 1977 : 208, fig. 65.
 Habitat, etc. Locally common, sometimes on rocky bottoms, more often amongst vegetation (2-15 m). According to A. Pras (*in litt.*) about 30 specimens were captured, chiefly with a small trawl, near Toulon (France) and it was the commonest species on those bottoms with vegetation.
 Note - Being a substantive, *basiliscus* cannot be put in the feminine form.
 164.1.4 *Blennius bufo* Lowe, 1843
 This is to be deleted, being a synonym of *B. pholis* according to Bath (1977 : 192).
 164.1.5 *Blennius canevasi* Vinciguerra, 1880
Lipophrys canevae : Bath, 1977 : 192, fig. 38.
 164.1.6 *Blennius canevae* : Zander, 1972b : 219, fig. 16 C-D, 17 / Almeida & Gomes, 1978 : 14 pl. 3, fig. 9 (Portugal).
Blennius cristatus Linnaeus, 1758
Blennius cristatus : Zander, 1972b : 207, fig. 12 a-b.
Scartella cristata : Bath, 1977 : 210, fig. 68.
 164.1.7 *Blennius dalmatinus* Steindachner & Kolombatovic, 1883
Blennius dalmatinus : Zander, 1972b : 221, fig. 16 / Sardou, 1973 : 208, fig. 1, Papaconstantinou, 1975 : 1, fig. 1.

- Lipophrys dalmatinus* : Bath, 1977 : 193, fig. 59.
 Habitat, etc. Also around Toulon (A. Pras, *in litt.*) and in the Gulf of Genoa.
- 164.1.8 *Blennius gattorugine* Brünnich, 1768
Blennius gattorugine : Zander, 1972b : 208, fig. 12 c-d.
Parablennius gattorugine : Bath, 1977 : 197, fig. 46, 75.
 Eggs, etc. Emery, 1883 : 411.
- 164.1.9 *Blennius incognitus* Bath, 1968
? *Blennius canestrinii* Facciola, 1881, *Ann. Soc. Nat. Modena*, (2) 14 : 212-214.
Blennius incognitus : Zander, 1972b : 214, fig. 14 c-d / Sardou, 1975 : 1055, fig. 3-4.
Blennius ponticus incognitus : Tortonese, 1975a : 269, fig. 116A, 117A.
Pictoblennius incognitus : Bath, 1977 : 204, fig. 57.
- 164.1.10.1 *Blennius nigriceps nigriceps* Vinciguerra, 1883
Blennius nigriceps : Sardou, 1973 : 208, fig. 2.
Lipophrys nigriceps nigriceps : Bath, 1977 : 193, 194, fig. 40, 72.
- 164.1.10.2 *Blennius nigriceps cypriacus* Bath, 1972
Lipophrys nigriceps cypriacus : Bath, 1977 : 193.
- 164.1.10.3 *Blennius nigriceps portmahonis* Castanos, 1933
Blennius port-mahonis Castanos, 1933, *Inst. Catal. Hist. Nat.*, 33 : 322-323. No data on types.
Lipophrys nigriceps portmahonis : Bath, 1977 : 193.
 Habitat, etc. Menorca (Balearic Islands).
- 164.1.11 *Blennius parvicornis* Valenciennes, 1836
Pictoblennius parvicornis : Bath, 1977 : 204-206.
- 164.1.12 *Blennius pavo* Riss, 1810
Blennius pavo : Zander, 1972b : 210, fig. 13 c-d.
Blennius rubriceps : Sardou, 1972 : 114, fig. 1-4, pl. 1 (A), II (A), III (A).
Salaria pavo : Bath, 1977 : 209, fig. 67-77.
 Eggs, etc. De Buen, 1932 : 18 / Cipria, 1936 : 1, pl. 1 / Fishelson, 1963 : 81, fig. 1-9.
- 164.1.13 *Blennius pholis* Linnaeus, 1758
Lipophrys pholis : Bath, 1977 : 192-193, fig. 36.
 Eggs, etc. De Buen, 1932 : 19, fig. 10.
- 164.1.14 *Blennius rouxi* Cocco, 1833
Blennius rouxi : Heymer & Zander, 1975 : 311, fig. 1-12 / Heymer & Ferret, 1976 : 121-141, 16 fig. / Almeida & Gomes, 1978 : 12, pl. 3, fig. 8 (Portugal).
Parablennius rouxi : Bath, 1977 : 198, 200, fig. 51.
- 164.1.15 *Blennius sanguinolentus* Pallas, 1811
Blennius sanguinolentus : Zander, 1972 b : 210, fig. 13 a-b.
Pictoblennius sanguinolentus : Bath, 1977 : 204, 206, fig. 60.
 Eggs, etc. Cipria, 1934 : 1, pl. 1.
- 164.1.16 *Blennius smyrnensis* Valenciennes, 1836
According to Bath (1977 : 209) is a synonym of *Salaria basiliscus*.
- 164.1.17 *Blennius sphynx* Valenciennes, 1836
Blennius sphinx (sic) : Zander, 1972b : 211, fig. 14 a-b.
Aidablennius sphynx : Bath, 1977 : 176, fig. 7.
- 164.1.18 *Blennius tentacularis* Brünnich, 1768
Blennius tentacularis var. *rhodensis* Kahsbauer, 1965, *Ann. Naturhist. Mus. Wien*, 68 : 645-646. (Rhodes isl.). Holotype NMW 66297.
Parablennius tentacularis Bath, 1977 : 198, 200, fig. 52.
- 164.1.19 *Blennius trigloides* Valenciennes, 1836
Blennius trigloides : Zander, 1972b : 216, fig. 16 a-b.
Paralipophrys trigloides : Bath, 1977 : 201, fig. 53.
 Eggs, etc. Emery, 1883 : 415, pl. 29 / De Buen, 1932 : 17, fig. 9.
 Habitat, etc. A specimen was recently found at Concarneau (Bretagne) in a tide pool among rocks (Pras, *in litt.*).
- 164.1.20 *Blennius vandervékeni* Poll, 1959
Zander, 1972b : 209, fig. 12 e-f.
 It is now considered a synonym of the following.
- 164.1.20a *Blennius pilicornis* Cuvier, 1829 (See Clofnam, II : 321).
? *Blennius goreensis* (*nec* Valenciennes, 1836) : Alonele 1967 : 105-109, fig. 1.
Parablennius pilicornis : Bath, 1977 : 197-198, fig. 44, 74.
Blennius pilicornis euskalherriensis is a subspecies recently described from the Bay of Biscay, Basque coast (Motos & Ibanez, 1977, *Munibe*, 29, 3-4 : 233, pl. 1. Types : five specimens, no details given).
- 164.1.21 *Blennius zvonimiri* Kolombatovic, 1892

- Blennius zvonimiri* : Zander, 1972b : 215, fig. 14 e-f / Sardou, 1973 : 208, fig. 4.
Pictoblennius zvonimiri : Bath, 1977 : 205, 208, fig. 64.
- 164.1.21.2 *Blennius zvonimiri ponticus* Slasteneko, 1934
Pictoblennius zvonimiri ponticus : Bath, 1977 : 205.
Habitat, etc. Black Sea.
- 164.2 *Coryphoblennius* Norman, 1943
Lioblennius Svetovidov, 1958, *Zool. Zh. Mosk.*, 37 (4) : 591. (type : *Blennius galera* Linnaeus, by orig. design.).
- 164.2.1 *Coryphoblennius galerita* (Linnaeus, 1758)
Salaria symplocus Hilgendorf, 1888, *Arch. Naturgesch.*, 54 : 209. Azores. Holotype : ZMB 12754.
- Blennius galerita* : Zander, 1972b : 222, fig. 16 g-h, fig. 18.
Coryphoblennius galerita : Bath, 1977 : 182, fig. 15.
- 164.3.1 *Hypoleurochilus bananensis* (Poll, 1959)
Randall, 1966 : 58 / Tortonese, 1975a : 280, fig. 123 / Bath, 1977 : 184, fig. 18 / Catalano : *in press*.
Habitat, etc. Also in the Italian seas (Naples, Palermo).
- 165 **ANARHICHADIDAE**
- 165.1.1.1 *Anarhichas lupus lupus* Linnaeus, 1758
Beese & Kandler, 1969 : 21-59, fig. 1, 3a, 4-6, 9.
Otoliths (sagitta). Schmidt, 1968 : 47, pl. 9, fig. 125.
- 165.1.2 *Anarhichas denticulatus* Kroyer, 1845
Beese & Kandler, 1969 : 21-59, fig. 2, 3c, 4.
Otoliths (sagitta). Schmidt, 1968 : 47, pl. 9, fig. 127.
- 165.1.3 *Anarhichas minor* Olafsen, 1772
Beese & Kandler, 1969 : 21-59, fig. 2, 3b, 4, 7-9.
Otoliths (sagitta). Schmidt, 1968 : 47, pl. 9, fig. 126.
- 166 A **CLINIDAE**
- 166A.1.1 *Clinitrichus argentatus* (Risso, 1810)
Eggs, etc. De Buen, 1932 : 15, fig. 8 / Spartà, 1948 : 1, pl. 1.
- 166 B **TRIPTYGYIIDAE**
- 166B.1.1 *Tripterygion tripteronotus* (Risso, 1810)
Delete all the references to *T. melanurus*, which is a different species. May be other references don't really concern *T. tripteronotus*, which until recently was considered to be the only Mediterranean species.
- 166B.1.3 *Tripterygion xanthosoma* Zander & Heymer, 1971
Almeida & Gomes, 1978 : 16, pl. 4, fig. 10 (Portugal).
- 166B.1.4.1 *Tripterygion melanurus melanurus* Guichenot, 1850
Bath, 1973 : 48, fig. 1-5 / Zander & Heymer, 1976 : 41-59, fig. 1-9.
Habitat, etc. Algeria, Tunisia, Israel, Lebanon, Cyprus, South Anatolia, North Sicily.
- 166B.1.4.2 *Tripterygion melanurus minor* Kolombatovic, 1904
Zander & Heymer, 1976 : 41-59, fig. 1-9.
Habitat, etc. Gulf of Lion, South France, Tyrrhenian Sea, East Sicily, Adriatic Sea, Aegean Sea.
- 168 **PHOLIDAE**
- 168.1.1 *Pholis gunnellus* (Linnaeus, 1758)
Habitat, etc. Also in the Bay of Biscay, near La Rochelle (Quéro *et al.*, 1977 : 236, fig. 5).
- 170 **ZOARCIDAE**
- 170.6.1 *Melanostigma atlanticum* Koefoed, 1952
Habitat, etc. In the Mediterranean : also off Spain (Matallanas, 1975 : 373, fig. 1-3).
- 172 **BROTULIDAE**
This family disappears as such, because the genera formerly included in it belong to Ophidiidae or to Bythitidae (Cohen & Nielsen, *in press*).
- 173 **OPHIDIIDAE**
- 173.1.3 *Ophidion broussonetti* Müller, 1845
According to Svetovidov 1961 : 10) this is a junior synonym of *O. rochei* Müller.

- 173.2.1 *Lepophidium cernuum* (Goode & Bean, 1886)
To be deleted, being absent in the area of Clofnam (Tortonese, 1975a : 402).
- 172.5.3 *Brotulotaenia brevicauda* Cohen, 1974
Brotulotaenia brevicauda Cohen, 1974, Zool. J. Linn. Soc., 55 : 146 (off West Africa). Holotype : ISH 2640.
Habitat, etc. Meso- and bathypelagic. In the area : northwest of Spain. Generally : tropical Mid-Atlantic, Bermuda, Gulf of Mexico and the Caribbean. Rare.
Note - The following other genera belong to Ophidiidae : *Barathrites*, *Bassogigas*, *Benthocometes*, *Bathyponus*, *Monomitopus*, *Parabassogigas*, *Thalassobathia*.
- 173a BYTHITIDAE
Bellottia apoda Giglioli, 1883
Habitat, etc. Benthic, at depths of 30-500 m. Until recently only the type was known (Gulf of Naples). Found in the Gulf of Genoa (Relini Orsi, 1976 : 38), off Portugal (Maul, 1976 : 53, fig. 30) and in Saronikos Gulf (Greece) (K. Papaconstantinou et al., 1977 : 279-287, fig. 1-5).
- 172.3a *Bythites* Reinhardt, 1835 Gender : M.
Bythites, Reinhardt, 1835b. Overs. K. danske Vidensk. Selqk. Forh., 1834-35 : 7-8 (type : *Bythites fuscus* Reinhardt, by monotypy).
- 172.3a.1 *Bythites islandicus* Nielsen & Cohen, 1973
Bythites islandicus Nielsen & Cohen, 1973, Steenstrupia, 3 : 75, fig. 3 (southeast of Iceland). Holotype : ZMUC P77479.
Bythites fuscus : Jonsson, 1968 : 201 (misidentification).
Habitat, etc. Benthic, at 229-283 m of depth Southeast of Iceland. 15 specimens known, all from the same station.
- 172.6.2 *Cataetyx laticeps* Koefoed, 1927
Habitat, etc. Also in the western part of the Gulf of Genoa (Relini & Gavagnin, 1974 : 85, 4 fig. ; Relini Orsi, 1976 : 37).
Note - Other genera included in this family : *Oculospinus*, *Oligopus*.
- 174 APHYONIDAE
Leucochlamys Zugmayer, 1911
This being a junior synonym of *Sciadonus* Garman, 1899, the species *L. Leucophthalmus* (174.2.1) is now *Sciadonus leucophthalmus* (Zumayer, 1911).
- 174.2.2 *Sciadonus galatheae* (Nielsen, 1969)
Leucochlamys galatheae Nielsen, 1969, Galathea Rep., 10 : 75, fig. 51 (Kermadec Trench). Holotype : ZMUC P77456. Paratype : ZMUC P77457.
Leucochlamys galatheae : Rannou, Nielsen et Hureau, 1974 : 1253, fig. 2c, d and 3 (banc de La Chapelle, 47°03'N-8°05'W, 3360-3600 m).
- 174.5 *Aphyonus* Günther, 1878
Ann. Mag. nat. Hist., sér. 5, 2 : 22 (type : *Aphyonus gelatinosus*, by monotypy).
- 174.5.1 *Aphyonus gelatinosus* Günther, 1878
Rannou, Nielsen and Hureau, 1974 : 1250, fig. 1 and 2 a, b (Azores islands, 37°40'N-25°15,5'W, 1074-1170 m).
- 175 CARAPIDAE
Carapus acus (Brünnich, 1768)
Eggs, etc., Gustato, 1977 : 505, fig. 1-4.
- 175.2.1 *Echiodon drummondi* Thompson, 1837
Habitat, etc. A specimen from Split (Adriatic) was recorded by Arnold (1956 : 290).
- 175.2.2 *Echiodon dentatus* (Cuvier, 1829)
Tortonese & Casanova Queirolo, 1970 : 39, fig. 7 (Western part of the Gulf of Genoa) / Maul, 1976 : 54 (Morocco).
- 176 CENTROLOPHIDAE
Centrolophus niger (Gmelin, 1789)
Eggs, etc. Borsieri, 1902 : 35.
- 176.3.2 *Schedophilus ovalis* (Cuvier, in Cuv. Val., 1833)
Eggs, etc. Maul, 1964 : 93, 97.
- 178 TETRAGONURIDAE
Tetragonurus cuvieri Risso, 1810
Eggs, etc. Spartà, 1947 : 223, pl. 1.

- 180 SPHYRAENIDAE
 180.1 *Sphyraena* Klein, 1778, p. 464.
 The author of this genus is not Schneider, 1801, as it was written in Clofnam.
 A Mediterranean species, still unnamed, was described from Lebanon (George *et al.*, 1971 : 256, fig. 1-5).
- 181.1 MUGILIDAE
 181. *Mugil* (Artedi) Linnaeus, 1758
Arnion Gistel, 1848 : X (type : *Mugil cephalus* Linn.).
 181.1.1.1 *Mugil cephalus cephalus* Linnaeus, 1758
Arnion cephalus Gistel, 1848 : X.
 Eggs, etc. De Buen, 1932 : 8, fig. 5.
 181.3.2 *Liza (Liza) aurata* (Risso, 1810)
 Eggs, etc. De Buen, 1932 : 6, fig. 3.
 181.4.1 *Oedalechilus labeo* (Cuvier, 1829)
 Concerning the quotation *Mugil provensalis* (et var.) Risso, 1810, delete «et» : it was an error of printing and makes nonsense of the nomenclatorial decisions.
- 184 SCORPAENIDAE
 184.1.5 *Scorpaena loppei* Cadenat, 1943
 Maul, 1976 : 56, fig. 33 (Morocco).
 184.1.6 *Scorpaena maderensis* Valenciennes, 1833
Sebastes maderensis : Kolombatovic, 1904 : 186 (Adriatic : is. Lastovo).
 184.3.1 *Pontinus kuhli* (T.E. Bowdich, 1825)
 Habitat, etc. In the Mediterranean : Sicily (Sauvage, 1878) ; SE Spain, off Cabo Palos (Massuti & Massó, 1975 : 5, 8, fig. 20 ; Mallorca, Balearic Islands (A. Astudillo González, *in litt.*)).
 184.4.1 *Scorpaenodes arenai* Torchio, 1962
 Tortonese, 1975a : 438, fig. 193.
 184.5.1 *Sebastes marinus* (Linnaeus, 1758)
 Common names, Rotbarsch, goldbarsch (De).
 184.5.2 *Sebastes mentella* Travin, 1951
 Common names. Tiefenbarsch, Schnabelbarsch (De).
- 185 TRIGLIDAE
 185.4.1 *Lepidotrigla cavillone* (Lacepède, 1801)
 Habitat, etc. Vertical distribution : 25-500 m.
 185.4.2 *Lepidotrigla dieuzeidei* Audouin, *in* Blanc & Hureau, 1973.
 Gallotti, 1973 : 124, fig. 2 / Kartas & Bauchot, 1974 : 1786, fig. 2-4 / Maul, 1976 : 56, fig. 34-36.
 Habitat, etc. Bottom with mud and sand, 80-250 m. Also : Gulf of Taranto (Ionian Sea), NW Mediterranean coasts (Spain, Banyuls), Morocco.
- 188 COTTIDAE
 188.6 *Enophrys* Swainson, 1839 Gender : M.
Enophrys Swainson, 1839. The Natural history and classification of fishes, etc. 2 : 271 (type : *Cottus claviger* Cuvier, 1829, *in* Cuv. Val., by orig. design.).
 This generic name must replace *Taurulus* for the species quoted below and for *E. lilljeborgi* (Collett, 1875) (*fide* Bolin, 1947, and Sandercock and Wilimovsky, 1968).
 188.6.1 *Enophrys bubalis* (Euphrasen, 1786)
 Ibanez, 1977 : 106, 5 fig. (Spain : Bay of Biscay).
- 192 LIPARIDAE
 192.3.3 *Paraliparis leptochirius* (Tortonese, 1960)
 Holotype MSNG 37691.
 Relini Orsi & Relini, 1970 : 65-72, 5 fig. / Tortonese, 1975a : 460, fig. 204.
 Habitat, etc. 500-700 m. Western Mediterranean (Algeria, Banyuls, Gulf of Genoa).
- 194 CITHARIDAE
 194.1.1 *Citharus linguatula* (Linnaeus, 1758)
 This specific name can be accepted as valid (Chabanaud, 1948, : 150).
- 195 SCOPHTHALMIDAE

- 195.1.1 *Scophthalmus rhombus* (Linnaeus, 1758)
Eggs, etc. Jones, 1972 : 965-986, fig. 14-15.
- 195.2.1 *Lepidorhombus whiffagonis* Walbaum, 1792
Otoliths (sagitta). Gaemers & Scharzhans, 1973 : 30, pl. 3, fig. 8, pl. 10, fig. 7.
- 195.3.1 *Phrynorhombus regius* (Bonnaterre, 1788)
Common names. «Einfleckige Schoile» (De) is to be replaced by «Zwergbutt», applied also to *Zeugopterus punctatus* (Bloch).
- 195.4.1 *Psetta maxima* (Linnaeus, 1758)
Eggs, etc. Jones, 1972 : 965-986, fig. 3, 10, 11.
- 195.4.2 *Psetta maxima maeotica* (Pallas, 1811)
This taxon was lowered by Tortonese (1971 : 325) to subspecific level.
Common names. Calcan (Ru).
- 196 **BOTHIDAE**
196.1.2 *Bothus pantherinus* (Rüppell, 1828)
To be deleted, being absent in the Clofnam area. It was wrongly reported as an immigrant from the Red Sea (M. Dor, *in litt.*).
- 196.2.1 *Arnoglossus laterna* Walbaum, 1792
Common names. Lammzunge (De).
- 197 **PLEURONECTIDAE**
197.7.1 *Microstomus kitti* (Walbaum, 1792)
Common names. Echte Rotzunge (De).
- 197.8.1.1 *Platichthys flesus flesus* (Linnaeus, 1758)
In his revision of the subspecies, Berg (1932 : 4, fig. 2) considers subsp. *trachurus* Duncker, 1892 (North Sea) as valid.
Common names. Delete «passera nera» (It.) and «rechnaia kambala» (Ru) : both are applied to subsp. *luscus*.
- 197.8.1.3 *Platichthys flesus luscus* (Pallas, 1811)
According to Tortonese (1971 : 330), *italicus* Günther, 1862 is a junior synonym of *luscus*.
Habitat, etc. Adriatic, Black sea, Marmara.
Common names. Passera (It), Cambula (Ru).
- 198 **SOLEIDAE**
198.1 *Solea* Quesnel, 1806
In this genus can be included *Bathysolea*, *Buglossidium*, *Dicologoglossa* and *Microchirus*.
198.1.2 *Solea impar* Bennett, 1831
Eggs, etc. Marinaro, 1971 : pl. 24 / Villani, 1977 : 15-20, fig. 1-9.
- 198.1.3 *Solea kleini* Bonaparte, 1833
Solea kleini neapolitana Tirelli, 1939, *Arch. Hydrobiol.*, 34 : 521. Type unknown.
- 199 **CYNOGLOSSIDAE**
199.2.2 *Sympodus ligulatus* (Cocco, 1844)
Maul, 1976 : 63, fig. 37 (Morocco).
- 200 **ECHENEIDAE**
200.1.1 *Echeneis naucrates* Linnaeus, 1758
Echeneis veterum O.G. Costa, 1840, Fauna R. Napoli : 3, pl. 25 (Pozzuoli, near Naples). Type probably lost.
Echeneis holbrooki (nec Günther, 1860) : Perugia, 1897 : 138 (Gulf of Genoa).
Echeneis veterum : Tortonese, 1972 : 2.
- 200.3.1 *Remora remora* (Linnaeus, 1758)
Eggs, etc. According to Tortonese (1973 : 198) the young stages described by Sanzo (1928) belong to *Remora osteochir* (Cuv.).
200.3.2 *Remora australis* (Bennett, 1840)
Tortonese, 1973 : 199; 1975a : 475, fig. 207.
- 200.3.3 *Remora brachyptera* (Lowe, 1839)
Echeneis remora (nec Linnaeus, 1758) : O.G. Costa, 1840 : 6, pl. 26.
Remora brachyptera : Tortonese, 1973 : 199 ; fig. 1B ; 1975a : 474, fig. 206 B.
- 200.3.4 *Remora osteochir* (Cuvier, 1829)
Echeneis Musignani O.G. Costa, 1840, Fauna R. Napoli : 9, pl. 27-27bis (South Italy).
Lectotype MZUF 1096 (Taranto).

- 201 **BALISTIDAE**
 201.1.2 *Balistes carolinensis* Gmelin, 1789
 Quéro, 1973 : 328-336, 3 fig.

204 **TETRAODONTIDAE**
 204.2 *Lagocephalus* Swainson, 1839
 The type of this genus is *Tetraodon lagocephalus* Linnaeus by subsequent designation of Bonaparte, 1841 (Tyler, 1966).

205 **CANTHIGASTERIDAE**
 This taxon is to be considered as a subfamily (Canthigasterinae) of Tetraodontidae (Winterbottom, 1974).

207 **MOLIDAE**
 207.3.1 *Ranzania laevis* (Pennant, 1776)
 Eggs, etc. Robinson, 1975 : 27, fig. 1.

208 **GOBIOSOCIDAE**
 208.1.1.1 *Apletodon dentatus* (Facciolà, 1887)
Lepadogaster dentatus Facciolà, 1887, *Nat. Sicil.*, 6 : 25, pl. 3, fig. 1-2 (Sicily : Messina). Type lost.
Apletodon microcephalus microcephalus : see Clofnam, p. 651.
Apletodon dentatus : Tortonese, 1975a : 549, fig. 235B.
 Habitat, etc. Also in the Gulf of Genoa. Very common near Marseille, among sea grasses (A. Pras, *in litt.*).
 208.2.1.1 *Diplecogaster bimaculata bimaculata* (Bonnaterre, 1788)
 Delete *Lepadogaster dentatus* from the synonymy.

208.4.2 *Lepadogaster candollei* Risso, 1810
 Eggs, etc. Padoa, 1956 : 777, fig. 671-673.
 Habitat, etc. Abundant near Marseille (A. Pras, *in litt.*).
 208.5.1 *Opeotogenys gracilis* (Canestrini, 1864)
 Habitat, etc. Probably common among sea grasses near Marseille (A. Pras, *in litt.*).

210 **LOPHIIDAE**
 210.1.1 *Lophius piscatorius* Linnaeus, 1758
 Le Danois, 1973 : 269.
 Habitat, etc. Also in the Mediterranean and Black Sea.
 210.1.2 *Lophius budegassa* Spinola, 1807
 Le Danois, 1973 : 267.
 Habitat, etc. In the Atlantic ocean : from Britain to Senegal, to about 200 m.

212 **CHAUNACIDAE**
 212.1.1 *Chaunax pictus* Lowe, 1846.
Chaunax fimbriatus Hilgendorf, 1879, from seas of Japan, is a valid species, different from *Ch. pictus*.
Chaunax nuttingi Garman, 1896, is also a valid species (Florida, Virginia, New Jersey).

215 **HIMANTOLOPHIDAE**
 215.1.1 *Himantolophus groenlandicus* Reinhardt, 1837.
Himantolophus reinhardti (Lütken, 1878. (not 1880)).
Himantolophus danae Regan & Trewavas, 1932, might be considered as a valid species (sea of China), different from *H. groenlandicus*.

216 **DICERATIIDAE**
 The following changes are according to the revision of this family by Ken Roger Uwate, soon to be published in *Copeia*. (G.E. Maul).
 216.1 *Phrynidichthys* Pietschmann, 1926 Gender : M.
Anz Akad. Wiss., 63 (11) : 88 (type : *Ph. wedli* Pietschmann, 1926, by orig. design. and monotypy).

- Bufoceratias* Whitley, 1931, *Austral. Zool.*, 6 (4) : 334 (type : *Phrynidichthys wedli* Pietschmann, 1926).
- Paroneirodes* Regan & Trewavas, 1932, *Dana Report*, 2 : 31, 58, fig. 29 B, 85 B (type : *Paroneirodes glomerulosus* Alcock, 1890).
- Paraneirodes* Maurin et al., 1970, *Rapp. Proc. Verb. Cons. Perm. int. Explor. Mer*, 159 : 21 (erroneous spelling for *Paroneirodes*).
- Diceratias* Karrer, 1973, *Mitt. Zool. Mus. Berlin*, 49 (1) : 246-249, fig. 28 (type : *Ceratias* (*Diceratias*) *bispinosus* Günther, 1887).
- 216.1.1 *Phrynidichthys wedli* Pietschmann, 1926
Phrynidichthys wedli Pietschmann, 1926, *Anz. Akad. Wiss. Wien*, 63 (11 : 89. Holotype : NMW 3524).
- Phrynidichthys wedli* : Pietschmann, 1930 : 419, fig. / Fowler, 1936 : 1344, fig. 564.
- Paroneirodes wedli* : Regan & Trewavas, 1932 : 58 / Grey, 1956 : 243 / Bertelsen, 1951 : 70.
- Paroneirodes glomerulosus* : Maul, 1962, *Bol. Mus. Mun. Funchal*, 16 (54) : 12-17, fig. 4-6 (partim).
- Eggs, etc. Uwate in MS, specimen of 18 mm SL, BMNH 1930.1.12.1101.
- Habitat, etc. Bathypelagic. North-western, North-eastern and South-eastern Atlantic. Uncommon.

- 217 ONEIRODIDAE
The revision by Pietsch, (1974a) requires radical changes all round and many new records for the Clofnam area.
- 217.1 *Oneirodes* Lütken, 1871
See for synonyms : Pietsch, 1974a : 33.
- 217.1.1 *Oneirodes eschrichtii* Lütken, 1871
Oneirodes eschrichtii Lütken, 1871, *Overs. K. danske Vidensk. Selsk. Forhandl.* : 58, pl. 11 (Greenland). Holotype : ZMUC 64.
Oneirodes eschrichtii : Regan, 1926 : 26, fig. 17 / Regan & Trewavas, 1932 : 63 / Bertelsen, 1951 : fig. 33B & 34 (from Lütken, 1871) / Pietsch, 1974b : 37 : 44-52, frontespiece, fig. 60B, 65-70, 109, pl. 1, 6-9 (extensive synonymy).
Dolopichthys frondosus Regan & Trewavas, 1932, *Dana Report*, (2) : 70, fig. 101 (type locality : 15°31'N, 18°05'W).
Dolopichthys frondosus : Bertelsen, 1951 : 79 (referred to «*Oneirodes eschrichtii*-group»).
Dolopichthys megacephalus Holt & Byrne, 1908, *Ann. Mag. nat. Hist.*, (8) 1 : 93 (type locality : 51°02'N, 11°36'W).
Dolopichthys megacephalus : Regan & Trewavas, 1932 : 71, fig. 103 / Bertelsen, 1951 : 80 (referred to «*Oneirodes eschrichtii*-group»).
Dolopichthys pilosus Regan & Trewavas, 1932, *Dana Report*, (2) : 73, fig. 107 (type locality : 24°36'N, 17°27'W).
Dolopichthys pilosus : Bertelsen, 1951 : 80 (referred to «*Oneirodes eschrichtii*-group»).
Dolopichthys hibernicus Fraser-Brunner, 1935, *Proc. R. Irish Acad.*, 42 (B-9) : 325, fig. 4 (type locality : 53°15'N, 12°28'W).
Dolopichthys hibernicus : Bertelsen, 1951 : 80 (doubtfully referred to «*Oneirodes eschrichtii*-group»).
Eggs, etc. Pietsch, 1974b : 49 (ovaries) / Bertelsen, 1951 : 81, fig. 32 (larvae).
Habitat, etc. Bathypelagic. Nearly cosmopolitan. Not common.
- 217.1.2 *Oneirodes carlsbergi* (Regan & Trewavas, 1932)
Oneirodes inimicus Fraser-Brunner, 1935, *Proc. R. Irish Acad.*, 42 (B-9) : 324, fig. 3 (Irish Atlantic Slope). Holotype : BMNH 1934.8.8.90.
Oneirodes inimicus : Bertelsen, 1951 : 85.
Oneirodes carlsbergi : Pietsch, 1974b : 39, fig. 60B, 62, 107, pl. 1 & 4 (extensive synonymy).
- 217.1.3 *Oneirodes anisacanthus* (Regan, 1925)
Dolopichthys anisacanthus Regan, 1925, *Ann. Mag. nat. Hist.*, (9) 15 (89) : 562. Lectotype : ZMUC P9267.
Oneirodes anisacanthus : Pietsch, 1974a : 54-57, fig. 60B, 73-74, 106, pl. 1 & 11.
Oneirodes eschrichtii (sensu lato) Maul, 1949, *Bol. Mus. Mun. Funchal*, 4 (11) : 34-40, fig. 13-17.
Oneirodes (specimen MMF 3101) Maul, 1961, *op. cit.* 14 (50) : 123-126, fig. 19-21, pl. 1.
Eggs, etc. One specimen, 10.5 mm, UMML n. 454 ; one, 13 mm, UMML n. 30269 ; one, 16 mm, BMNH n. 1932.5.3.11.

- Habitat, etc. Bathypelagic. Off Madeira (type locality), Gulf of Guinea and Caribbean Sea. Rare.
- 217.1.4 *Oneirodes macronema* (Regan & Trewavas, 1932)
Dolopichthys macronema Regan & Trewavas, 1932, *Dana Report*, (2) : 66-67, fig. 91 (Caribbean Sea, near St Croix). Holotype : ZMUC P9282.
- Oneirodes macronema* : Bertelsen (single juvenile female from «Dana» St. 4180, 32° 56'N, 23°47'W, 1931, not previously recorded. Personal communication to G.E. Maul) / Pietsch, 1974a : 75-76, fig. 96-97, 110, pl. 1.
- Eggs, etc. One juvenile from «Dana» St. 4180 (see above).
- Habitat, etc. Bathypelagic. In Caribbean Sea and Clofnam area (see above). Apparently extremely rare. Only two specimens known.
- 217.1.5 *Oneirodes myrionemus* Pietsch, 1974a
Oneirodes myrionemus Pietsch, 1974a, *Sci. Bull. Los Angeles County Nat. Hist. Mus.*, 18 : 58-59, fig. 60B, 77, 78 A-B, 110, pl. 1-3 (two females from 32°47'N, 16°24'W). Holotype : ISH 3100a/71; paratype : ISH 3100b/71.
- Oneirodes myrionemus* : Bertelsen & Pietsch, 1977 : 176, fig. 1 (one specimen questionably identified as *O. myrionemus* : 65°N, 28°W).
- Habitat, etc. Bathypelagic. East of Madeira. Very rare.
- 217.1.6 *Oneirodes macrosteus* Pietsch, 1974
Oneirodes macrosteus Pietsch, 1974b, *Sci. Bull. Nat. Hist. Mus.* 18 : 61-62, fig. 60B, 81-82, 110, pl. 1 & 15 (Atlantic Ocean West of Clofnam area). Holotype : ROM 27265, ROM 27259, USNM 207855, USNM 207856.
- Oneirodes macrosteus* : Bertelsen & Pietsch, 1977 : 177, fig. 1 & 4 (one female out of several ISH 233/73, from 65°N, 29°W).
- Eggs, etc. USNM 207856, 11.5 mm.
- Habitat, etc. Bathypelagic. Off the Grand Bank, Newfoundland ; off Bermuda ; West of Iceland. Rare.
- 217.2 *Chaenophryne* Regan, 1925
Revised by Pietsch, 1975 : 79-94. The following entries under 217.2.1 and 217.2.2 replace same in Clofnam, 1973.
- 217.2.1 *Chaenophryne longiceps* Regan, 1925
Chaenophryne longiceps Regan, 1925, *Ann Mag. nat. Hist.*, (9) 15 : 564 (in part ; original description ; 14 specimens). Lectotype : ZMUC P92106.
- Chaenophryne longiceps* : Parr, 1927 : 22, fig. 8 / Regan & Trewavas, 1932 : 86-87, fig. 135 (lectotype) / Bertelsen, 1951 : 111, 113, fig. 66A, 71, pl. 23 / Pietsch, 1975 : 82-87, fig. 6-7, pl. 1 (list of synonyms).
- Chaenophryne longiceps quadrifilis* Parr, 1927, *Bull. Bingham Ocean. Coll.*, 3 (1) : 22, fig. 8.
- Chaenophryne quadrifilis* : Regan & Trewavas, 1932, *Dana Report*, (2) : 85, 87, fig. 136 (original description based on *longiceps quadrifilis* n. var. of Parr, 1927) (Atlantic, 21 - 32°N, 64-72°W). Lectotype : BOC 2910.
- Chaenophryne quadrifilis* : Koefoed, 1944 : 8, pl. 1, fig. 2-3 (Gibraltar) / Bertelsen, 1951 : 113.
- Eggs, etc. Larval and Metamorphosing females : Bertelsen, 1951.
- Habitat, etc. Bathypelagic. All oceans ; both sides of North Atlantic. Not common.
- 217.2.2 *Chaenophryne draco* Beebe, 1932
Chaenophryne draco Beebe, 1932, *Zoologica*, 13 (4) : 84-86, fig. 22 (Ten miles south-east of Nonsuch). Holotype : USNM 170943 (originally NYZS 22396).
- Chaenophryne draco* : Pietsch, 1975 : 87-90, fig. 1B, 2A, 3-5, 8, 11-12, pl. 1-3.
- Chaenophryne parviconus* Regan & Trewavas, 1932, *Dana Report*, (2) : 35, 85, 87, fig. 39, 41, 138 (Gulf of Panama). Lectotype : ZMUC P92110.
- Chaenophryne melanodactylus* Regan & Trewavas, 1932, *Dana Report*, (2) : 85-88, fig. 141 (Atlantic : 36°36'N, 26°14'W). Holotype : ZMUC P92116 (Synonym of *C. draco* according to Pietsch, 1975 : 87-88).
- Eggs, etc. Bertelsen, 1951 : 14-18, fig. 72, female larvae and males under «*Chaenophryne draco*-group» / Pietsch, 1975 : 87.
- Habitat, etc. Bathypelagic. All oceans ; both sides of the Atlantic, including Clofnam area. Relatively rare.
- 217.4.3 *Dolopichthys jubatus* Regan & Trewavas, 1932
Dolopichthys jubatus Regan & Trewavas, 1932, *Dana Report*, (2) : 79-80, fig. 126 (Atlantic and Indian Oceans). Lectotype : ZMUC 9299 (Indian ocean, 1°06'S, 26° 14'W).
- Habitat, etc. Bathypelagic. Eastern north Atlantic, south Atlantic, Pacific ocean off Chile, Indian ocean. Rare.

- 217.6 *Lophodolos* Lloyd, 1909
Revised by Pietsch, 1974.

217.6.1 *Lophodolos acanthognathus* : Regan, 1925
Pietsch, 1974a : 10 (off southern tip of Portugal / Bertelsen & Pietsch, 1977 : 188
(six specimens referred to in Pietsch, 1974a).

217.8 *Phyllorhinichthys* Pietsch, 1969 Gender : M.
Phyllorhinichthyes Pietsch, 1969, *Copeia*, 2 : 365-366 (type : *Ph. micractis* Pietsch,
by monotypy).

217.8.1 *Phyllorhinichthys micractis* Pietsch, 1969
Phyllorhinichthys micractis Pietsch, 1969, *Copeia*, 2 : 366-369, fig. 1-4 (Northern
end of Guadalupe Island, Mexico).

Phyllorhinichthys micractis : Bertelsen & Pietsch, 1977 : 178-182, fig. 5-7 (a specimen
collected by the «Walter Herwig» in the eastern North Atlantic within Clofnam
area : ISH 536/73).

Habitat, etc. Bathypelagic. All the oceans ; eastern and western North Atlantic. Rare.

217a **THAUMATHICHTHYIDAE**
This family was resurrected by Pietsch (1972c) and Bertelsen & Struhsaker (1977)
to accomodate the genera *Lasiognathus* and *Thaumathichthys*.

217a.1.1 *Lasiognathus saccostoma* Regan, 1925
Lasiognathus saccostoma Regan, 1925, *Ann. Mag. nat. Hist.* (9) 15 : 563 Caribbean Sea). Holotype : ZMUC P92121.

Lasiognathus saccostoma : Regan, 1926 : 31, pl. 7a, b, c / Nolan & Rosenblatt, 1975 :
60-64, fig. 1-3, pl. 1.

Lasiognathus ancistrophorus Maul, 1962, *Bol. Mus. Mun. Funchal*, 16 (56) : 39, fig.
4-6 (Madeira). Holotype : MMF 19019 ; paratype : MMF 19020.

Habitat, etc. Bathypelagic. Madeira ; Caribbean Sea ; tropical southeastern Pacific.
Rare.

220. **LINOPHYRNIDAE**
«Revision by Bertelsen under preparation. Some published additional species and re-
cords from Clofnam area» (G.E. Maul).

220.1.1 *Linophryne lucifera* Collett, 1886
Bertelsen, 1976 : 8-10, fig. 1.
Note - According to Krefft (*in litt.*) the specific name must be *lucifer* because «this is
clearly a noun meaning «diable de mer» in the author's intention». However, the
latin adjective *lucifer-a-um* means «which brings light». In agreement with the gen-
der of *Linophryne* (F), the feminine form *lucifera* is therefore correct.

220.1.6 *Linophryne sexfilis* Bertelsen, 1973
Linophryne sexfilis Bertelsen, 1973, *Steenstrupia*, 3 (7) : 65-69, fig. 1-2a, b, c
(North Atlantic, 30°04'N, 23°00'W). Holotype : NIO uncatalogued, Discovery
st. 7856.

Habitat, etc. Bathypelagic. Eastern North Atlantic (only the holotype known). Rare.

220.1.7 *Linophryne coronata* Parr, 1927
Linophryne coronata Parr, 1927, *Bull. Bingham Ocean. Coll.*, 3 (1) : 6 & 13-14,
fig. 4 A, B, C (North Atlantic : 22°42'N, 74°23'W). Holotype : BOC 2005.

Linophryne coronata : Bertelsen, 1951 : 176 ; 1976 : 10, fig. 2A-D and 4 (First record
and parasitic male from Clofnam area).

Habitat, etc. Bathypelagic. Off south coast of Iceland (about 63°N, 19°W) and western
north Atlantic. Rare.

Additions to the Alphabetical index of common names

Additions concernant l'Index alphabétique des noms communs

Calcan	195.4.2	Meersan	15.1.1
Cambula	197.8.1.3	Merluzzo	101.1.1.1
Conger eel	82.1.1	Migri	82.1.1
Congre	82.1.1	Mongrif	82.1.1
Congrio	82.1.1		
Congro	82.1.1	Passera	197.8.1.3
Cungri	82.1.1	Petermännchen	148.1.1
		Potassolo	101.8.1
Echter Bonito	157.3.2		
Echter Rotzunge	197.7.1	Qonger mazuy	82.1.1
Franzoserdorsch	101.11.3	Riesenhai	8.1.1
		Rotbarsch	184.5.1
Gelbflossenthun	157.1.3	Roter Knurrhahn	185.1.2
Goldbarsch	184.5.1	Roter Thun	157.1.1
Grauer Knurrhahn	185.3.1		
Gringou	82.1.1	Sanoure	182.1.1
Gronga	82.1.1	Schnabelbarsch	184.5.2
Grossenaugenthun	185.3.1	Stierhai	5.1.1
Köhler	101.9.2	Tiefenbarsch	184.5.2
Kongrif	82.1.1		
Lammzunge	196.2.1	Ugor	82.1.1
Lufar	129.1.1	Wasserkatze	165.1.2
Lufer	129.1.1	Weisser Thun	157.1.2
		Wittling	101.7.1.1
Meeraal	82.1.1		
Meeräsche	181.2.1	Zwergbutt	195.3.1 & 195.5.1

Additions to the Alphabetical index of scientific names

Additions concernant l'Index alphabétique des noms scientifiques

<i>Abudefduf</i>	144.1	<i>Ceratias bispinosus</i>	216.1
<i>Abudefduf luridus</i>	144.1.1	<i>Chaenophryne draco</i>	217.2.2
<i>Ahliosaurus</i>	56.2	<i>Clupea argyrotaenia</i>	33.8
<i>Ahliosaurus berryi</i>	56.2.1	<i>Clupea delicatula</i>	33.8.1
<i>Aidablennius sphynx</i>	164.1.17	<i>Clupea punctata</i>	33.4a.1
<i>Alepocephalus atlanticus</i>	30.7.2	<i>Conger simulatus</i>	82.5
<i>Alepocephalus australis</i>	30.1.3	<i>Conocara salmonea</i>	30.6.2a
<i>Anodontus</i>	68.2	<i>Cyclothona megalops</i>	30.4.1
<i>Anodontus mauritanicus</i>	68.2.1	<i>Cyclothona pseudoacclinidens</i>	37.4.1
<i>Aphyonus gelatinosus</i>	174.5.1	<i>Dasyatis tortonesei</i>	22.1.4
<i>Apletodon dentatus</i>	208.1.1.1	<i>Diaphus adenomus</i>	58.6.11
<i>Ariosa mellissi</i>	79.1.1	<i>Diaphus anteorbitalis</i>	58.6.11
<i>Arnion</i>	181.1	<i>Diplodus bellottii</i>	139.4.5
<i>Arnion cephalus</i>	181.1.1	<i>Diplodus puntazzo</i>	139.8.1
<i>Authistes</i>	125.2	<i>Diplodus sargus cadenati</i>	139.4.3
<i>Authistes argenteus</i>	125.2	<i>Diplodus sargus sargus</i>	139.4.3
<i>Authistes puta</i>	125.2.1	<i>Diplodus sargus typicus</i>	139.4.3
<i>Bajacalifornia drakei</i>	30.4.1	<i>Diplodus senegalensis</i>	139.4.5
<i>Bajacalifornia megalops</i>	30.4.1	<i>Diretmus pauciradiatus</i>	113.1.2
<i>Bathylaco</i>	30.4a	<i>Dolopichthys anisacanthus</i>	217.1.3
<i>Bathylaco kreffti</i>	30.7a.1	<i>Dolopichthys frondosus</i>	217.1.1
<i>Bathylaco nigricans</i>	30.4a.1	<i>Dolopichthys hibernicus</i>	217.1.1
<i>Bathylagus greyae</i>	47.1.4	<i>Dolopichthys megaceros</i>	217.1.1
<i>Bathyprion</i>	30.4.b	<i>Dolopichthys ptilotus</i>	217.1.1
<i>Bathyprion danae</i>	30.4b.1	<i>Draconetta</i>	163a. 1
<i>Bathypterois phenax</i>	53.1.4	<i>Draconetta acanthopoma</i>	163a. 1.1
<i>Bathytroctes aequatorialis</i>	30.12.1	<i>Draconetta xenica</i>	163a.1
<i>Bathytroctes alvifrons</i>	30.5.1	<i>Dysomma</i>	81.1
<i>Bathytroctes antillarum</i>	30.12a	<i>Dysomma brevirostre</i>	81.1.1
<i>Bathytroctes homopterus</i>	30.12a	<i>Dysomma bucephalus</i>	81.1
<i>Bathytroctes koefoedi</i>	30.5.1	<i>Echeneis holbrooki</i>	200.1.1
<i>Bathytroctes longifilis</i>	30.12a	<i>Echeneis Musignani</i>	200.3.4
<i>Bathytroctes michaelsarsi</i>	30.5.2	<i>Echeneis veterum</i>	200.1.1
<i>Bathytroctes nasutus</i>	30.11b.1	<i>Einara edentula</i>	30.7.2
<i>Belloccia koefoedi</i>	30.5.1	<i>Enophrys</i>	188.6.
<i>Belloccia michaelsarsi</i>	30.5.2	<i>Epigonus constanciae</i>	127.2.3
<i>Belloccia vaillanti</i>	30.5.1	<i>Epigonus trewavasae</i>	127.2.3
<i>Binghamia</i>	30.12a	<i>Ericara</i>	30.6
<i>Binghamia microphos</i>	30.12a	<i>Ericara salmonaea</i>	30.6.2a
<i>Binghamichthys</i>	30.12a	<i>Glyphtisodon luridus</i>	144.2.1
<i>Blennius pilicornis</i>		<i>Gnathophis codoniphorus</i>	82.3.2
<i>euskalherriensis</i>	164.1.20a	<i>Gobius couuchi</i>	162.1.5a
<i>Blennius portmahonis</i>	164.1.10.3	<i>Gobius gasteveni</i>	162.1.7a
<i>Breviraja caerulea</i>	21.2a.1	<i>Grimatrocetes bullisi</i>	30.4c
<i>Brotulotaenia brevicauda</i>	172.5.3	<i>Guntherus</i>	68.2
<i>Bythites</i>	172.3a	<i>Guntherus altivelia</i>	68.2.1
<i>Bythites fuscus</i>	172.3a.1	<i>Gymnothorax anatinus</i>	73.2.1
<i>Bythites islandicus</i>	172.3a.1	<i>Gymnothorax vicinus</i>	73.2.3
<i>Bythitidae</i>	173a		

(1) The names printed in italics are valid, the others are synonyms. It was sometimes necessary to mention here some names of genera or species which already exist in Clofnam indexes.

<i>Herklotischthys punctatus</i>	33.4a	<i>Phyllorhinichthys micractis</i>	217.8.1
<i>Herklotischthys punctatus</i>	33.4a.1	<i>Pictiblennius incognitus</i>	164.1.9
<i>Herwigia</i>	30.7a	<i>Pictiblennius parvicornis</i>	164.1.11
<i>Herwigia kreffti</i>	30.7a.1	<i>Pictiblennius sanguinolentus</i>	164.1.15
<i>Holocentrus servus</i>	125.2	<i>Pictiblennius zvonimiri</i>	164.1.21
<i>Hymenocephalus gracilis</i>	99.5.2	<i>Pictiblennius zvonimiri ponticus</i>	164.1.21.2
<i>Lesiognathus saccostoma</i>	217a 1.1	<i>Pomatoschistus lozanoi</i>	162.21.3a
<i>Leigoster atlanticus spinulosus</i>	115.2.2	<i>Pseudophichthys splendens</i>	82.5.1
<i>Leptocephalus curvirostris</i>	76.1.2	<i>Pteroplatea binotata</i>	22.2.1
<i>Leptocephalus polymerus</i>	76.1.2		
<i>Leptochilichthys</i>	30.2	<i>Raja ackleyi</i>	21.1.17b
<i>Leptochilichthys agassizii</i>	30.2.1	<i>Raja africana</i>	21.1.1a
<i>Leptochilichthys agassizii macrops</i>	30.2.1	<i>Raja bathyphila</i>	21.1.17a
<i>Leptoderma lubricum</i>	30.10.3	<i>Raja kreffti</i>	21.1.16a
<i>Leucochlamys galathea</i>	174.2.2	<i>Rinocetes</i>	30.11b
<i>Linophryne coronata</i>	220.1.7	<i>Rinocetes nasutus</i>	30.11b.1
<i>Linophryne sexfilis</i>	220.1.6	<i>Rouleina mollis</i>	30.12.1
<i>Lioblennius</i>	164.2		
<i>Lipophrys canevae</i>	164.1.5	<i>Salaria pavo</i>	164.1.12
<i>Lipophrys dalmatinus</i>	164.1.7	<i>Salarias symlocus</i>	164.2.1
<i>Lipophrys nigriceps cypriacus</i>	164.1.10.2	<i>Sargus bellottii</i>	139.4.5
<i>Lipophrys nigriceps portmahonis</i>	164.1.10.3	<i>Scarichthys caeruleopunctatus</i>	146.1.1
<i>Lipophrys pholis</i>	164.1.13	<i>Scartella cristata</i>	164.1.6
<i>Macromastax</i>	30.4a	<i>Sciadonus</i>	174.2
<i>Macromastax gymnos</i>	30.4a.1	<i>Sciadonus galathea</i>	174.2.2
<i>Megalopidae</i>	28a	<i>Sciadonus leucophthalmus</i>	174.2.1
<i>Megalops atlanticus</i>	28a.1.1	<i>Scomber glauucus</i>	156.1.1
<i>Melanogloea</i>	68.2	<i>Scylium acanthonotum</i>	11.1.1
<i>Melanogloea ventralis</i>	68.2.1	<i>Sillaginidae</i>	137a
<i>Millerigobius</i>	162.17a	<i>Sillago</i>	137a.1
<i>Millerigobius macrocephalus</i>	162.17a.1	<i>Sillago sihama</i>	137a.1.1
<i>Mirognathus</i>	30.10a	<i>Solea kleini neapolitana</i>	198.1.3
<i>Mirognathus normani</i>	30.10a.1	<i>Somniosus bauchotae</i>	16.11.3
<i>Nemabathytroctes</i>	30.12a	<i>Sparus sedecim</i>	139.1.4
<i>Nemichthys curvirostris</i>	76.1.2	<i>Speleogobius</i>	162.23a
<i>Neogobius cephalargooides</i>	162.19.2a	<i>Speleogobius trigloides</i>	162.23a.1
<i>Nomoctes</i>	30.5	<i>Sphagmacrurus</i>	99.17a
<i>Nomoctes koefoedi</i>	30.5.1	<i>Sphagmacrurus grenadae</i>	99.17a.1
<i>Nomoctes michaelsarsi</i>	30.5.2	<i>Sphagmacrurus hirundo</i>	99.17a.1
<i>Notoscopelus bolini</i>	58.17.5	<i>Sphyraena mokarran</i>	14.1.4
<i>Notosudidae</i>	56	<i>Spratelloides</i>	33.8
<i>Oneirodes anisacanthus</i>	217.1.3	<i>Spratelloides delicatulus</i>	33.8.1
<i>Oneirodes macronema</i>	217.1.4		
<i>Oneirodes macrosteus</i>	217.1.6	<i>Talismania grandisquamis</i>	30.12a.2
<i>Oneirodes myrioneurus</i>	217.1.5	<i>Talismania homoptera</i>	30.12a.1
<i>Ophiogobiusjenynsii</i>	162.26.1	<i>Talismania mekistonema</i>	30.12a.2
<i>Pagrus sedecim</i>	139.1.4	<i>Talismania oregoni</i>	30.12a.1
<i>Parablennius gattorugine</i>	164.1.8	<i>Tarpon</i>	28a.1
<i>Parablennius rouxi</i>	164.1.14	<i>Tarpon atlanticus</i>	28a.1.1
<i>Parablennius tentacularis</i>	164.1.18	<i>Thaumathichthyidae</i>	217a
<i>Paralipophrys</i>	164.1.	<i>Thaumathichthys</i>	217a
<i>Paralipophrys trigloides</i>	164.1.19	<i>Therapon</i>	125.2.
<i>Pareiophus</i>	58.17	<i>Therapon puta</i>	125.2.1
<i>Photostylus</i>	30.11a.	<i>Torictus</i>	30.7
<i>Photostylus pycnopterus</i>	30.11a.1	<i>Torictus edentulus</i>	30.7.2
<i>Phyllorhinichthys</i>	217.8	<i>Trutta adriatica</i>	45.1.2.1
		<i>Tylurus curvirostris</i>	76.1.2
		<i>Xenognathus profundorum</i>	30.6.2a
		<i>Zygaena mokarran</i>	14.1.4

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Errata

CORRECTIONS TO THE LIST OF ABBREVIATIONS (Vol. I) CORRECTIONS CONCERNANT LA LISTE DES ABRÉVIATIONS

Omissions:	MZUP	Museo Zoologico, Università di Palermo
	ORIT	Oceanographic Research Institute, Tokyo
	UMML	Rosenstiel School of Marine and Atmospheric Sciences, University of Miami
	ZMH	Zoologisches Museum der Universität Hamburg
	ZSI	Zoological Survey of India
	GMNG(Z)	Glasgow Museum and Art Galleries (Natural History, Zoology)

Corrections: UBNM instead of URNM

Note: Museu Bocage, Lisboa (MB), was completely destroyed by fire (March 1978) and all the types of fishes preserved there were lost

CORRECTIONS TO VOLUME I (TEXT) CORRECTIONS PORTANT SUR LE TEXTE DU VOLUME I

Pag. XVI	:	Searsiidae instead of Searsidae.
Pag. XVI	:	Saccopharyngidae instead of Saccopharyndidae.
Pag. XVIII	:	Priacanthidae instead of Pricanthidae.
6.1.1	:	line 5,1911a instead of 1909, 1912 instead of 1911.
13.2.1	:	<i>Galeocerdo cuvieri</i> instead of <i>cuvier</i> . (1)
15.1.1	:	line 9 from the bottom ; read «meersan» instead of «meersau».
22.3	:	gender F instead of M.
37.4.6	:	line 4, 1019 instead of 19.
37.4.7	:	line 3, 1018 instead of 18.
38.1.1 , 38.2.1 , 38.2.2 , 38.2.4 , 38.2.5	:	Koefoed, 1962 instead of 1961.
76.1.1	:	line 20 : after Caziot & Isnard, 1920 : 248 (instead of 87-88).
94.1.1	:	<i>Aphanius fasciatus</i> Nardo, 1827, instead of (Nardo, 1827).
96.1.2	:	line 7, delete 442 and read 440, f. 178.
106.1.1	:	line 8 from the bottom, instead of «D'Ancona <i>et al.</i> » read «Spartà».
107.2.1	:	line 5 (pag. 332), instead of D'Ancona read Spartà.
117.3.1	:	3rd line from the bottom, read <i>Poromitra</i> instead of <i>Promitra</i> .
124.2.1	:	line 17, «sublittoral» instead of «subtropical».
132.1.2	:	line 18, delete «North Sea».
133.2	:	lines 4-5, delete «y del Rio» ; line 4, add pl. 35 fig. 2.
137.1	:	line 3, 988 instead of 93 ; 1972 instead of 1926.
137.3	:	2nd line of the footnote ; read «synonymy» instead of synonym.

(1) The Code of Zoological Nomenclature (Art. 11,g,3 and art. 31) requires that the specific names formed by personal names be in the genitive form, ending in *-i*, *-ae*, etc. according to the sex. Therefore, the name of this and other species is to be slightly corrected.

- 146.1 : 6th line, read 1895 instead of 1875.
 157.1.2 : *Thynnus alalunga* : the author must be in parentheses.
 158.2.1 : *Acanthocybium so landeri* instead of *Solandri*.
 160.3.3 : *Tetrapturus georgii* instead of *georgii*.
 162.1.7 : last line (bottom of page) : delete the question mark before *Cabotia schmidti*.
 162.11.1 : *Didogobius bentuviai* instead of *bentuvit*.
 162.14.3 : *Knipowitschia panizzae* instead of *panizzae*.
 162.15.1 : 15th line from the bottom : Russell instead of Russel.
 164.1.5 : *Blennius canevasi* instead of *canevae*.
 181.2.1 : line 25, 1838 instead of 1839.
 181.3.2 : line 9, 442 instead of 422 ; line 26, 1838 instead of 1837.
 181.4.1 : line 4th, *Mugil provensalis* (var.) instead of *Mugil provensalis* (et var.) ; line 6th, 55 instead of 233.
 182.1.1 : line 9th, 332 instead of 322.

CORRECTIONS TO THE BIBLIOGRAPHY (Vol. II)

CORRECTIONS PORTANT SUR LA BIBLIOGRAPHIE

- P. 13 : Badcock, J., 1970 ... 50 : 1001-1044 (instead of 1-44).
 P. 31 : Buen, F. de, 1935 : 91-149 (instead of 91-143).
 P. 42 : Cuvier, G. Le Règne animal ... : the four volumes are announced in the n° 49 (7 December 1816), page 536, under the number 3463 in *Bibliographie de la France*, 5th year, vol. 19. So the date of publication is 1816 and not 1817. (See Whitehead, 1967 and Roux, 1976).
 P. 44 : The author De Gaetani, D. is the same as Gaetani, D. de (p. 59).
 P. 62 : The author Giacomo, C. is the same as Cipria, G. The latter name is correct.
 P. 96 : The correct date of «Lowe, R.T., A synopsis of the fishes of Madeira» is 1838 and not 1841 (See Duncan, 1937).
 P. 110 : there were two «Ninni» (father and son) : Ninni, A.P. (papers from 1880 to 1883) and Ninni, E. (subsequent papers).
 P. 331 : line 11th, read *Callanthias* instead of *Callathias*.

DELETION OF COMMON NAMES

SUPPRESSION DE NOMS COMMUNS

agone	33.6.3.2
einfleckige Scholle	195.3.1
Franz	101.11.3
Grauer	185.3.1
melú	101.8.1
Neunauge	168.1.1
Seelachs	101.9.2
Schildzahnhai	5.1.1
Schnauzenhai	5.1.3
Stachelfisch	148.1.1
Thune	157.1.1