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Monograph

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Updated checklist of marine fishes (Chordata: Craniata) from Portugal and the proposed extension of the Portuguese continental shelf

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Abstract. The study of the Portuguese marine ichthyofauna has a long historical tradition, rooted back in the 18th Century. Here we present an annotated checklist of the marine fishes from Portuguese waters, including the area encompassed by the proposed extension of the Portuguese continental shelf and the Economic Exclusive Zone (EEZ). The list is based on historical literature records and taxon occurrence data obtained from natural history collections, together with new revisions and occurrences. It comprises a total of 1191 species, distributed among 3 superclasses, 4 classes, 42 orders, 212 families and 617 genera. If considering only the EEZ and present territorial waters, this list represents an increase of 230 species (27.8%) and of 238 species (29.0%), when compared to the information available in FishBase (2012) and in the last checklist of marine and estuarine fishes of Portugal (1993), respectively. The order Perciformes shows the highest diversity, with 54 families, 162 genera and 299 species. Stomiidae (80 species), Myctophidae (71 species) and Macrouridae (37 species) are the richest families. From the listed species, 734 are present off mainland Portugal, 857 off the Azores and 766 off Madeira. Within the limits of the examined area, three species are reported for the first time in mainland Portugal and twenty-nine records are identified as doubtful. A total of 133 species have been recorded from the extended Portuguese continental shelf (2 off mainland Portugal, 117 off the Azores and 14 off Madeira), two of which are common to the Azores and Madeira extensions. Biogeographically, the Atlantic group is the most important (548 species – 46.01%), followed by the Lusitanian group (256 species – 21.49%), the African group (71 species – 5.96%), the Boreal group (34 species – 2.85%), the Mediterranean group (31 species – 2.60%), the Macaronesian group (21 species – 1.76%), the Atlantic/African group (19 species – 1.60%) and the Mediterranean/African and the Arctic groups, each with only 1 species (0.08%). Regarding the preferences for vertical habitat, the demersal fishes are the most important group (305 species – 25.61%), followed by the mesopelagic group (228 species – 19.14%), the bathypelagic group (164 species – 13.77%), the benthopelagic group (147 species – 12.34%), the bathydemersal group (115 species – 9.66%), the reef-associated group (88 species – 7.39%), the pelagic group (74

species – 6.21%), the epipelagic group (58 species – 4.87%) and 1 species (0.08%) of the benthic group. The oceanic habitat is the best represented group comprising 446 species (37.45%), followed by the shelf group (199 species – 16.71%), the slope group (164 species – 13.77%), the inner shelf group (89 species – 7.47%), the coastal group (70 species – 5.88%), the outer shelf group (29 species – 2.43%) and the oceanic/shelf group (7 species – 0.59%).

Key words. North East Atlantic, ichthyofauna, biodiversity, biogeography, Economic Exclusive Zone.

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Introduction

Portugal has the third largest Exclusive Economic Zone (EEZ) of the EU and the twentieth largest EEZ in the world, with a total of 1.727.408 km^2 divided between mainland Portugal (327.667 km^2), the Archipelago of the Azores (953.633 km^2) and the Archipelago of Madeira (446.108 km^2). In 2005, a task group was created with the mission to prepare a proposal for the extension of the EEZ beyond 200 nautical miles, to be presented to the United Nations Commission on the Limits of the Continental Shelf (CLCS). With this proposal, over 2.500.000 km^2 may potentially be added to the EEZ, therefore amounting to a total Portuguese area of 4.227.408 km^2.

The Portuguese EEZ includes a variety of geographic zones. The northeastern Atlantic Ocean may be divided into two main biogeographic regions: the Lusitanian (west of the British Isles, Bay of Biscay, Iberian coast as far as Gibraltar) and northern European seas (including North Sea and Baltic Sea). The Portuguese mainland, with a coastline of approximately 850 km, is included in the Lusitanian biogeographical region. A clearly distinct area is also the Macaronesian Islands region. The Macaronesian biogeographical region includes volcanic islands in the Atlantic Ocean, namely the Archipelago of the Azores, the Archipelago of Madeira, the Canary Islands and the Cabo Verde Islands.

The variety of ecosystems in this vast area and the geographic position of Portugal determine and affect the abundance and distribution of marine organisms. As a result, Portugal's EEZ is a dynamic biodiversity hotspot, where marine fishes from many different adjacent source areas converge (Costa *et al*. 2012). The marine icthyofauna of Portugal is probably one of the richest among all European countries and it appears particularly well suited to monitor changes in the marine fish species composition. Annotated species checklists constitute invaluable tools to help taking snapshots of the biodiversity characterizing a geographic area and assessing its spatial and temporal dynamics.

The annotation of the Portuguese marine ichthyofauna has a long historical tradition, rooted back to 1771, when the first checklist was compiled (Table 1). The expeditions carried out during the 18th and 19th centuries represented a unique opportunity for compiling new and updated lists, and since then the number of species recorded has increased.

Here we provide an updated checklist of the Portuguese ichthyofauna, including the area of the proposed extension of the Portuguese continental shelf, which builds upon the two most comprehensive checklists of marine fishes from Portugal, published in 1954 and 1993 (Albuquerque 1954–1956; Magalhães & Rogado 1993). We also integrate data and accessory information aquired from later checklists with a regional scope, namely for the archipelagos of the Azores and Madeira. This checklist presents information as correctly and exhaustive as possible, although possible errors cannot be excluded. The authors cannot be made responsible for any errors, any misuse of data or any erroneous information reported in the citations.

Table 1. Annotated list of historical publications reporting on marine fish species from Portugal.

Date	N. species	Comment	Source
1771	60	Domenico Vandelli, naturalist and chemist, published an elementary fish list.	Vandelli (1771)
1797	83	Domenico Vandelli published an updated list of fish species.	Vandelli (1797)
1850	79	Charles Bonnet, a mining engineer, published a book which included a list of fish species.	Bonnet (1850)
1867	84	The naturalist Felix de Brito Capello published his first fish list.	Capello (1867a) (1867b)
1868-1876	254	During these years Cappello added several appendices to the list.	Capello (1868) (1869a) (1869b) (1873) (1876)
1880	267	The naturalist J.V. Barbosa du Bocage concluded and published, posthumously, the work of his colleague and friend F. B. Capello.	Capello (1880)
1888-1909	209	Balthazar Osório published appendices and addenda of 209 species to the "Catálogo dos peixes de Portugal" of F. B. Capello.	Osório (1888) (1895) (1896) (1905) (1909)
1888	316	The publication "Éxpeditions scientifiques du Travailleur et du Talisman pendant les années 1880, 1881, 1882, 1883 – Poissons" included a list with fish captured off the Portuguese mainland and Madeira.	Vaillant & Milne-Edwards (1880)
1885–1915	197	During 29 oceanographic campaigns directed by Prince Albert I of Monaco, mostly in the northeastern Atlantic (Azores), 197 fish species were annotated.	Porteiro (2009)
1896–1906	306	D. Carlos de Bragança carried out oceanographic campaigns along the Atlantic Portuguese coast. From these campaigns several fish collections were obtained, including 2700 specimens. A. A. Girard, with the collaboration of the King, organized and prepared the results for publication. In 1941, the naturalist B. C. Gonçalves published "Colecção Oceanográfica de D. Carlos I–Catálogo dos Peixes".	Gonçalves (1941)
1911	340	The naturalist A. F. Seabra edited and published "Catalogue Systématique des Vertébrés du Portugal–Poissons".	Seabra (1911)
1935	324	The naturalist A. Nobre published "Fauna Marinha de Portugal".	Nobre (1935)
1954–1956	674	R. M. Albuquerque published "Peixes de Portugal e Ilhas Adjacentes–Chaves para a sua determinação", including 655 marine species.	Albuquerque (1954–1956)
1948–1971	388	During these years G. E. Maul published several marine fish monographs "Monografias dos peixes do Museu Municipal do Funchal" (Madeira).	Maul (1948a) (1948b) (1948c) (1949) (1951a) (1951b) (1952a) (1952b) (1954a) (1954b) (1955) (1956a) (1956b) (1957) (1959) (1961) (1962a) (1962b) (1965) (1971a) (1971b)

1993	820	List of marine and estuarine fishes of mainland Portugal, Azores and Madeira.	Magalhães & Rogado (1993)
1997	510	List of marine fishes from the coastal waters (Azores).	Santos *et al.* (1997)
2007	18	M. E. Costa published a list of Chondrichthyes fish of South Portugal.	Costa (2007)
	101	J. Gomes and S. Olim published a list of Actinopterygii fish of South Portugal.	Gomes & Olim (2007)
2008	226	List of marine fishes from the coastal waters (Madeira).	Wirtz *et al.* (2008)
2010	543	Marine Fish (Chondrichthyes, Actinopterygii) (Azores).	Porteiro *et al.* (2010)
2012	77	Annotated list of demersal fishes which occur in a part of the area of the Azores EEZ. This list adds 3 species to previous checklists of the Azores.	Menezes *et al.* (2012)

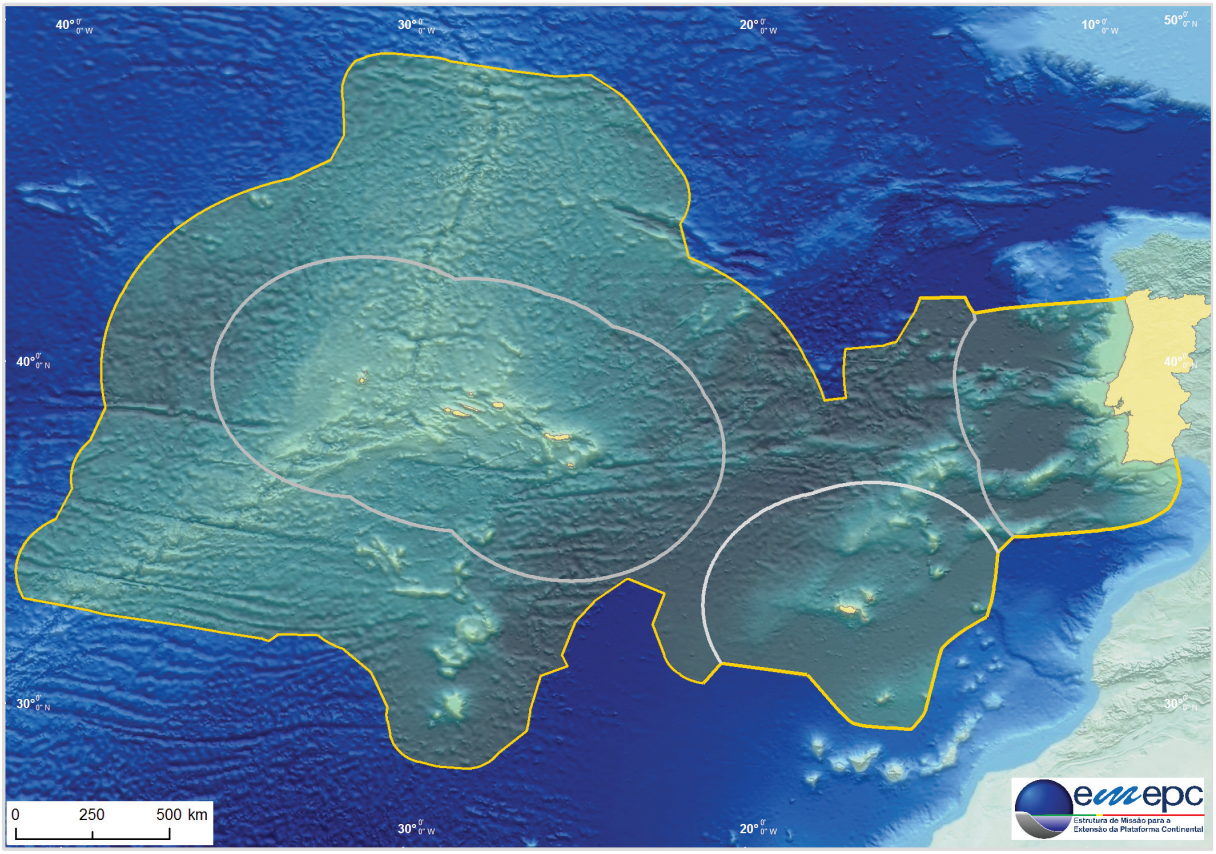

Fig. 1. Map of the study area, the Portuguese EEZ, that includes the territorial waters and the area proposed for the extension of the Portuguese continental shelf (source: EMEPC–Mission Structure for the Extension of the Continental Shelf).

Table 2. List of electronic databases and collections databases consulted in this study.

Acronym	Name	Author and/or access link	Accessed since
AVG	Aquário Vasco da Gama. Oceanographic Collection of D. Carlos I, Lisboa, Portugal	http://aquariovgama.marinha.pt	2 March 2011
BMNH	Natural History Museum, London, U.K.	http://www.nhm.ac.uk	2 March 2011
BOLDSYSTEMS	BOLD: The Barcode of Life Data System	Ratnasingham & Hebert (2007), http://www.barcodinglife.org	5 February 2012
CAS	The Catalog of Fishes. California Academy of Sciences San Francisco, California, U.S.A.	Eschmeyer (2013), http://researcharchive.calacademy.org, http://collections.calacademy.org	2 March 2011
CLOFETA	Checklist of the Fishes of the Eastern Tropical Atlantic	Quéro *et al*. (1990)	20 February 2012
CLOFNAM	Check-list of the fish of the northeastern Atlantic and of the Mediterranean	Hureau & Monod (1979)	
EMODnet	European Marine Observation and Data Network. Vlaams Instituut voor de Zee	Hernandez (2013), http://bio.emodnet.eu	14 February 2013
FISHBASE	Global Information System on Fishes	Froese & Pauly (2012), http://www.fishbase.org	5 February 2012
FNAM	Fishes of the northeastern Atlantic and Mediterranean	Whitehead *et al.* (1984, 1986)	
GBIF	Global Biodiversity Information Facility	http://data.gbif.org	2 March 2011
GNI	Global Names Index	Patterson *et al.* (2010), http://gni.globalnames.org	13 February 2013
ITIS	Integrated Taxonomic Information System	http://www.itis.gov	2 March 2011
MB	Museu Bocage, Zoologia e Antropologia in Museu Nacional de História Natural Universidade de Lisboa, Lisboa, Portugal	http://www.mnhn.ul.pt	2 March 2011
MCM	Museu Carlos Machado, Ponta Delgada, Azores, Portugal	http://museucarlosmachado.azores.gov.pt	2 March 2011
MCZ	Museum of Comparative Zoology, Harvard University, Ichthyology Department, Cambridge, Massachusetts, U.S.A.	http://www.mcz.harvard.edu	2 March 2011
MHNF	Museu de História Natural do Funchal, Câmara; Municipal do Funchal, Funchal, Madeira, Portugal	http://www1.cm-funchal.pt	2 March 2011
MNHN	Muséum National d'Histoire Naturelle, Systématique et Évolution, Laboratoire d'Ichthyologie Générale et Appliquée, Paris, France	http://coldb.mnhn.fr	2 March 2011
MOM	Musée Oceanographique du Mónaco, Mónaco	http://www.oceano.mc	2 March 2011
NARMS	North Atlantic Register for Marine Species	Vanden Berghe *et al.* (2005), http://www.vliz.be	8 January 2012
NMNH	National Museum of Natural History, Division of Fishes Collections, Washington D.C.	Williams (2013), http://collections.mnh.si.edu	2 March 2011
OBIS	Ocean Biogeographic Information System	http://iobis.org	2 March 2011
ROM	Royal Ontario Museum, Department of Natural History, Toronto, Ontario, Canada	http://www.rom.on.ca	2 March 2011
WoRMS	World Register of Marine Species	WoRMS Editorial Board (2013), http://www.marinespecies.org	2 March 2011

Material and methods

In drafting of the present checklist, we included historical records reporting on the occurrence of marine fish species from Portugal and published between the 18th and the early 21st centuries (Table 1). In addition to the publications listed in Table 1, other sources were consulted, such as electronic databases and records from museum collections where the specimens captured in the study area are deposited (Table 2).

The geographic areas considered here are: the territorial waters, the Portuguese Economic Exclusive Zone – EEZ, and the proposed area for the extension of the Portuguese continental shelf (PECS) (Fig. 1). The species with occurences in the proposed area for the extension are indicated as "in the PECS area".

We followed Nelson's (2006) classification system for taxonomic categories[1], Froese & Pauly (2012) for the scientific nomenclature[2], and we used FAO names based on the Aquatic Science and Fisheries Information System (ASFIS) for the majority of the English common names. The taxonomic categories considered in the checklist were: superclass, class, order, family and species. Within each family, species were sorted alphabetically.

For each species, we provide the English common name according to FAO's global designation, or the English vernacular in case no name was provided by FAO. "No common name" indicates that the common name is not available. Occurrences within a geographic area were marked as: mainland Portugal ①, the Archipelago of the Azores ②, and the Madeira Archipelago ③. The use of one or more of these symbols, ①②③, indicates the presence of the same species in each of the mentioned geographic areas. Local names, when available in registers and documents, are reported followed by symbols for the species' relative geographic area of occurrence. Taking into account the extension of the study area, the number of fishing communities covered, and the diversity and richness of local fish names used in a certain area, we decided to indicate, for each species, the most frequently used vernacular names in Portuguese. Thus, for a given geographic area and species more than one common name can be provided.

The most important references for Portuguese vernacular fish names are Albuquerque (1954–1956), Castro (1967), Sanches (1986, 1989) and the list of common names of the Portuguese legislation (Annex I and II of the "Portaria nº 587/2006" – List of Authorized Commercial Names for Fishery and Aquaculture Products, and "Declaração de Rectificação nº 52/2006").

The species present in the collection of the Museu de História Natural – Museu Bocage[3], University of Lisbon, in the collection of the Science Museum of the University of Coimbra, and in "Oceanographic Collection of D. Carlos I" – Aquário Vasco da Gama, are marked with an asterisk (✳). The species archived in the collection of the Department of Oceanography and Fisheries of the University of the Azores (Horta) and in the Museu Carlos Machado (São Miguel) are marked with a diamond (◇). The species stored in the collection of the Museu de História Natural do Funchal are marked with a square (□).

As criteria for inclusion, we considered all species recorded in the EEZ plus the Portuguese territorial waters, and the proposed extension area of the Portuguese continental shelf. All records of occurrence from the PECS are indicated. Furthermore, all species considered native to one of the three EEZ's (mainland Portugal, Azores and Madeira), but without records, are indicated.

[1] With the exception of the families Arhynchobatidae (Aschliman *et al*. 2012; Naylor *et al.* 2012), Howellidae (Prokofiev 2006), Phycidae and Gadidae (Nolf 2013).

[2] In addition, other sources (electronic databases) were also consulted, such as: ITIS (Integrated Taxonomic Information System); CAS (California Academy of Sciences, Eschmeyer 2013); GNI (Global Names Index; Patterson *et al.* 2010).

[3] The Museu Bocage (MB) was completely destroyed by fire in March 1978 and consequently all the types of fishes preserved there to that date were lost.

For the biogeographical distribution we referred to Ellis *et al*. (2008). In terms of horizontal habitat preference, fish were broadly classified as: coastal, shelf, inner and outer shelf, slope, oceanic and oceanic/shelf (adapted from Ellis *et al*. 2008). Considering the fish distribution in the vertical habitat we used the following terminology: benthic, benthopelagic, mesopelagic, pelagic, epipelagic, demersal, bathydemersal, and reef-associated (adapted from Ellis *et al*. 2008).

In the list, NM stands for nautical miles.

Results

Global appraisal of species richness, biogeographic groups, and habitat distribution

The checklist comprises a total of 1191 species, representing 3 superclasses, 4 classes, 42 orders, 212 families and 617 genera (Table 3). The order Perciformes shows the highest diversity, with 54 families, 162 genera and 299 species. Of all the families, Stomiidae (80 species), Myctophidae (71 species) and Macrouridae (37 species) were the richest (Table 3).

The highest number of species was detected off the Azores (857), followed by Madeira (766), and the Portuguese mainland (734). A total of 133 species occurrences were included for the PECS area (2 in the Portuguese mainland, 117 off the Azores and 14 in Madeira), two of which are common to the Azores and Madeira extensions. For the first time we report three species observed off mainland Portugal (*Bajacalifornia megalops* (Lütken, 1898), *Fistularia petimba* Lacepède, 1803 and *Scombrolabrax heterolepis* Roule, 1921) and, for the whole study area, thirty records are annotated as doubtful.

Table 3. Number of valid families, genera and species of fish from Portugal included in the checklist, according to Nelson's (2006) classification.

Order	Families	Genera	Species	Order	Families	Genera	Species
Myxiniformes	1	1	1	Stomiiformes	5	38	118
Petromyzontiformes	1	2	2	Ateleopodiformes	1	1	1
Chimaeriformes	2	3	6	Aulopiformes	10	24	49
Orectolobiformes	1	1	1	Myctophiformes	2	24	74
Lamniformes	5	7	10	Lampriformes	6	7	8
Carcharhiniformes	5	11	28	Polymixiiformes	1	1	1
Hexanchiformes	2	3	4	Gadiformes	6	40	73
Echinorhiniformes	1	1	1	Ophidiiformes	5	26	35
Squaliformes	6	15	27	Batrachoidiformes	1	1	1
Squatiniformes	1	1	2	Lophiiformes	14	30	64
Torpediniformes	1	1	3	Mugiliformes	1	4	6
Pristiformes	1	1	1	Atheriniformes	1	1	3
Rajiformes	3	9	21	Beloniformes	4	8	16
Myliobatiformes	3	9	12	Stephanoberyciformes	6	16	31
Elopiformes	1	1	1	Beryciformes	5	7	10
Albuliformes	2	6	14	Zeiformes	5	7	8
Anguilliformes	10	33	54	Gasterosteiformes	5	9	20
Saccopharyngiformes	4	4	13	Scorpaeniformes	8	20	35
Clupeiformes	2	5	7	Perciformes	54	162	297
Argentiniformes	6	39	63	Pleuronectiformes	7	22	37
Salmoniformes	1	2	3	Tetraodontiformes	6	14	28

As a result of the update of the two most comprehensive checklists of marine fishes from Portugal published in 1954 and 1993 (Albuquerque 1954–1956; Magalhães & Rogado 1993), the Portuguese ichthyofauna included in the three EEZ's (mainland Portugal, Azores and Madeira) increased by 230 species (27.8%) or 238 species (29.0%), compared to Fishbase (2012) and to the last checklist of marine and estuarine fishes of Portugal (1993), respectively.

In terms of biogeographical affinities, 9 of the 13 groups referred to by Ellis *et al.* (2008) were identified, namely the Atlantic, the Lusitanian, the African, the Boreal, the Mediterranean, the Macaronesian, the Atlantic/African, the Mediterranean/African and the Arctic groups. Among these, the Atlantic, the Lusitanian and the African groups are the largest represented, with a total of 46.01%, 21.49% and 5.96% respectively, when EEZ and the proposed area of extension are considered. The remaining groups are residual (Table 4). Because 209 species currently lack biogeographical classification, they were included in the uncertain group.

Regarding the vertical habitat preferred by fish, all 9 groups referred by Ellis *et al.* (2008) were identified, namely the demersal, the mesopelagic, the bathydemersal, the bathypelagic, the benthopelagic, the reef-associated, the pelagic, the epipelagic, and the benthic group (Table 5). In what concerns the horizontal habitat, all 7 groups suggested by Ellis *et al.* (2008) were characterized. The oceanic is the most important group, followed by the shelf group, the slope group, the inner shelf group, the coastal group, the outer shelf group, and the oceanic/shelf group (Table 6). Because 11 species currently lack vertical habitat classification and 187 species lack horizontal habitat classification, they were included in the uncertain group and an unknown group respectively.

Table 4. Percentage of species by biogeographic group. Number of species is provided within parentheses for each area, including the EEZ and the area corresponding to the proposed extention of the continental shelf (PECS).

Species Number	Atlantic	Lusitanian	African	Boreal	Mediterranean	Macronesian	Atlantic / African	Mediterranean / African	Arctic	Uncertain
Total EEZ (n =1058)	41.65	20.82	5.63	2.43	2.18	1.76	1.51	0.08	0.08	12.77
Total PECS (n =133)	4.37	0.67	0.34	0.42	0.42	-	0.08	-	-	4.79
Mainland Portugal EEZ (n =732)	45.37	33.24	5.45	4.22	2.72	0.54	0.82	0.14	-	7.23
Mainland Portugal PECS (n =2)	0.27	-	-	-	-	-	-	-	-	-
Azores EEZ (n =740)	49.94	15.40	4.55	1.17	1.05	2.10	1.75	-	0.12	10.37
Azores PECS (n =117)	5.37	0.82	0.35	0.47	0.47	-	0.12	-	-	5.95
Madeira EEZ (n =752)	53.39	20.37	6.79	0.91	1.17	2.22	1.70	-	-	11.62
Madeira PECS (n =14)	0.39	0.39	0.13	0.13	0.13	-	-	-	-	0.66

Table 5. Proportion of fish species according to preferred vertical habitat, distributed by the total study area, EEZ plus territorial waters, and the area corresponding to the proposed extension of the Portuguese continental shelf (PECS).

	Dermersal	Mesopelagic	Bathypelagic	Benthopelagic	Bathydemersal	Reef-associated	Pelagic	Epipelagic	Benthic	Uncertain
Total (n = 1191)	25.61	19.14	13.77	12.34	9.66	7.39	6.21	4.87	0.08	0.93
EEZ (n =1058)	24.27	17.13	9.57	11.25	8.73	6.88	5.37	4.87	0.08	0.77
PECS (n =133)	1.34	2.02	4.20	1.09	0.92	0.50	0.84	-	-	0.17

Table 6. Proportion of fish species by preferred horizontal habitat, distributed by the total study area, EEZ plus territorial waters, and the area corresponding to the proposed extension of the Portuguese continental shelf (PECS).

	Oceanic	Shelf	Slope	Inner shelf	Coastal	Outer shelf	Oceanic / shelf	Unknown
Total (n = 1191)	37.45	16.71	13.77	7.47	5.88	2.43	0.59	15.70
EEZ (n =1058)	32.91	16.12	12.26	7.30	5.88	2.35	0.42	11.68
PECS (n =133)	4.53	0.59	1.51	0.17	-	0.08	0.17	4.03

Annotated Checklist

Superclass Myxinomorphi
Class Myxini
Order Myxiniformes
Family Myxinidae

*□ *Myxine glutinosa* Linnaeus, 1758 – Hagfish; Enguia-de-casulo①

Superclass Petromyzontomorphi
Class Petromyzontida
Order Petromyzontiformes
Family Petromyzontidae

Lampetra fluviatilis (Linnaeus, 1758) – River lamprey; Lampreia-do-rio①
* *Petromyzon marinus* Linnaeus, 1758 – Sea lamprey; Lampreia-do-mar①③

Superclass Gnathostomata
Class Chondrichthyes
Sub-Class Holocephali
Order Chimaeriformes
Family Rhinochimaeridae

Rhinochimaera atlantica Holt & Byrne, 1909 – Straightnose rabbitfish; ①②
The species *R. atlantica* is regarded as being present off mainland Portugal, based on its geographical distribution (Ebert & Stehmann 2013).

Family Chimaeridae

*□ *Chimaera monstrosa* Linnaeus, 1758 – Rabbit-fish; Ratazana①, Quimera②③
□ *Hydrolagus affinis* (de Brito Capello, 1868) – Smalleyed rabbitfish; Ratazana-da-fundura①, ②③
Hydrolagus lusitanicus Moura, Figueiredo, Bordalo-Machado, Almeida & Gordo, 2005 – No common name; ①
Hydrolagus mirabilis (Collett, 1904) – Large-eyed rabbitfish; ①②
The species *H. mirabilis* is regarded as being present off mainland Portugal, based on its geographical distribution (Ebert & Stehmann 2013).
Hydrolagus pallidus Hardy & Stehmann, 1990 – Ghost shark; ②

Sub-Class Elasmobranchii
Order Orectolobiformes
Family Rhincodontidae

Rhincodon typus Smith, 1829 – Whale shark; Tubarão-baleia①②, Pintado②, ③

Order Lamniformes
Family Odontaspididae

Odontaspis ferox (Risso, 1810) – Smalltooth sand tiger; Tubarão-areia, ②③
□ *Odontaspis noronhai* (Maul, 1955) – Bigeye sand tiger shark; ③

Family Mitsukurinidae

* *Mitsukurina owstoni* Jordan, 1898 – Goblin shark; Tubarão-demónio①, ③

Family Alopiidae

*□ *Alopias superciliosus* Lowe, 1841 – Bigeye thresher; Tubarão-raposo-olhudo①, Tubarão-raposo②, ③
*□ *Alopias vulpinus* (Bonnaterre, 1788) – Thresher; Tubarão-raposo①②, Romano or Romão②, Peixe-rato③

Family Cetorhinidae

*□ *Cetorhinus maximus* (Gunnerus, 1765) – Basking shark; Tubarão-frade①②, Peixe-frade②③

Family Lamnidae

* *Carcharodon carcharias* (Linnaeus, 1758) – Great white shark; Tubarão-de-São-Tomé①, Tubarão-branco②, ③

*□ *Isurus oxyrinchus* Rafinesque, 1810 – Shortfin mako; Tubarão-anequim①, Rinquim②, Marracho②③, Anequim③

Isurus paucus Guitart, 1966 – Longfin mako; Tubarão-anequim-de-gadanha①, Marrajo-negro②

*□ *Lamna nasus* (Bonnaterre, 1788) – Porbeagle; Tubarão-sardo①, Marracho②③

The species *L. nasus* is indicated as native to Madeira (Compagno 1984a), although Wirtz *et al*. (2008) considered the presence of this species off Madeira as doubtful.

Order Carcharhiniformes
Family Scyliorhinidae

□ *Apristurus laurussonii* (Saemundsson, 1922) – Iceland catshark; ②③

Apristurus manis (Springer, 1979) – Ghost catshark; Tubarão-gato-fantasma②

Apristurus profundorum (Goode & Bean, 1896) – Deep-water catshark; ②

* *Galeus atlanticus* (Vaillant, 1888) – Atlantic sawtail cat shark; ①

*□ *Galeus melastomus* Rafinesque, 1810 – Blackmouth catshark; Leitão①③, ②

The presence of this species off the Azores needs further evaluation (Santos *et al*. 1997). According to Ebert & Stehmann (2013), the occurrence of *G. melastomus* off the Azores is possible.

Galeus murinus (Collett, 1904) – Mouse catshark; ①②

The species *G. murinus* is regarded as being present off mainland Portugal, based on its geographical distribution (Ebert & Stehmann 2013).

*◇ *Scyliorhinus canicula* (Linnaeus, 1758) – Small-spotted catshark; Pata-roxa①, ②③

* *Scyliorhinus stellaris* (Linnaeus, 1758) – Nursehound; Pata-roxa-gata①, ②

Family Pseudotriakidae

* *Pseudotriakis microdon* de Brito Capello, 1868 – False catshark; Tubarão-mona①, Mamôna②, Mona③

Family Triakidae

*□ *Galeorhinus galeus* (Linnaeus, 1758) – Tope shark; Cação①②③, Perna-de-moça①

Mustelus asterias Cloquet, 1821 – Starry smooth-hound; Cação-pintado①, ③

*□ *Mustelus mustelus* (Linnaeus, 1758) – Smooth-hound; Cação-liso①,②, Caneja③

The presence of this species off the Azores needs further documentation (Santos *et al*. 1997). According to Ebert & Stehmann (2013), the occurrence of *M. mustelus* off the Azores is possible.

Mustelus punctulatus Risso, 1827 – Blackspotted smooth-hound;①

Family Carcharhinidae

Carcharhinus brachyurus (Günther, 1870) – Copper shark; Tubarão-cobre①

Carcharhinus brevipinna (Müller & Henle, 1839) – Spinner shark; Tubarão-tecelão①, ②

Arruda (1997) considered the occurrence of this species off the Azores as doubtful. Quéro *et al.* (2003) indicated the presence of the species off Portugal, without referring to the geographical area of occurrence. According to Ebert & Stehmann (2013), the presence of *C. brevipinna* off southern Portugal is possible.

Carcharhinus falciformis (Müller & Henle, 1839) – Silky shark; Tubarão-luzidio①, ②③

The occurrence of this species off Madeira needs confirmation (Wirtz *et al.* 2008). Ebert & Stehmann (2013) indicated its presence off Madeira, based on known geographical distribution. Arruda (1997) considered the presence of *C. falciformis* off the Azores doubtful.

□ *Carcharhinus galapagensis* (Snodgrass & Heller, 1905) – Galapagos shark; Tubarão-dos-Galápos②, ③

According to Ebert & Stehmann (2013), the species *Carcharhinus obscurus* is very closely related to this species (*C. galapagensis*) and they are difficult to distinguish from each other. Recent molecular studies suggest that these two species may in fact be a single one, with one of the two forms being found far from

landmasses (*C. galapagensis*) and the other one (*C. obscurus*) occurring in association with continental shelves and upper slopes (G. Naylor, pers comm. *in* Ebert & Stehmann 2013). Studies are currently ongoing to determine the relationship between these two species.

Carcharhinus leucas (Müller & Henle, 1839) – Bull shark; Tubarão-buldogue, ②

□ *Carcharhinus limbatus* (Müller & Henle, 1836) – Blacktip shark; Tubarão-de-pontas-negras①, ②, Tubarão or Anequim③

Arruda (1997) considered a doubtful presence of *C. limbatus* off the Azores. Quéro *et al.* (2003) indicated the presence of the species in Portugal, without mentioning the geographical area of occurrence. Ebert & Stehmann (2013) indicated the presence of the species to southern mainland Portugal, based on its geographical distribution.

□ *Carcharhinus longimanus* (Poey, 1861) – Oceanic whitetip shark; Tubarão-de-pontas-brancas①②, Marracho②, ③

□ *Carcharhinus obscurus* (Lesueur, 1818) – Dusky shark; Tubarão-faqueta①, ②, Faqueta③

According to Ebert & Stehmann (2013) the records of this species from the Azores might concern *C. galapagensis*. Details are given above for the species *C. galapagensis*.

Carcharhinus plumbeus (Nardo, 1827) – Sandbar shark; Tubarão-corre-costa①, ②③

Arruda (1997) considered a doubtful presence of this species off the Azores. According to Ebert & Stehmann (2013) the occurrence of *C. plumbeus* in Madeira is possible.

◇ *Galeocerdo cuvier* (Péron & Lesuer, 1822) – Tiger shark; Tubarão-tigre②, ③

Ebert & Stehmann (2013) indicated the presence of the species in Madeira based on its geographical distribution.

*□ *Prionace glauca* (Linnaeus, 1758) – Blue shark; Tintureira①②③, Tubarão-azul②

Rhizoprionodon acutus (Rüppell, 1837) – Milk shark; Tubarão-bicudo③

The species *R. acutus* is indicated as native to Madeira (Compagno 1984b), but its presence was not confirmed by any geographic records. Wirtz *et al.* (2008) considered it very doubtful for Madeira.

Family Sphyrnidae

Sphyrna lewini (Griffith & Smith, 1834) – Scalloped hammerhead; Tubarão-martelo-recortado①②③

Sphyrna mokarran (Rüppell, 1837) – Great hammerhead; Tubarão-martelo-gigante①

The species *S. mokarran* is indicated as present off mainland Portugal, based on its geographical distribution (Ebert & Stehmann 2013).

*□ *Sphyrna zygaena* (Linnaeus, 1758) – Smooth hammerhead; Tubarão-martelo①②, Cornuda or Peixe-martelo②, Cornuda③

Order Hexanchiformes
Family Chlamydoselachidae

* *Chlamydoselachus anguineus* Garman, 1884 – Frilled shark; Tubarão-cobra①, ②③

Family Hexanchidae

* *Heptranchias perlo* (Bonnaterre, 1788) – Sharpnose sevengill shark; Boca-doce①, Bico-doce①②③, Albafar-bravo②

Hexanchus griseus (Bonnaterre, 1788) – Bluntnose sixgill shark; Tubarão-albafar①, Albafar①②③, Tubarão-albafar-bravo②

Hexanchus nakamurai Teng, 1962 – Bigeyed sixgill shark; ①

This species is regarded as being present off mainland Portugal based on its geographical distribution (Ebert & Stehmann 2013).

Order Echinorhiniformes
Family Echinorhinidae

* *Echinorhinus brucus* (Bonnaterre, 1788) – Bramble shark; Tubarão-prego①, Peixe-prego②

Order Squaliformes
Family Squalidae

According to Ebert & Stehmann (2013), three species of the genus *Squalus* are recognized in the North Atlantic (*S. acanthias*, *S. blainvillei* and *S. megalops*), but *S. blainvillei* and *S. megalops* may represent a species complex. The taxonomic arrangement of *Squalus* species is provisional, pending the review and resolution of the *S. blainvillei* and *S. megalops* complexes.

* *Squalus acanthias* Linnaeus, 1758 – Piked dogfish; Galhudo-malhado①, ②③
The presence of this species off the Azores needs further confirmation (Santos *et al*. 1997). According to Ebert & Stehmann (2013) its occurrence off the Azores is probable.

*□ *Squalus blainvillei* (Risso, 1827) – Longnose spurdog; Galhudo①, ②
Arruda (1997) considered the presence of this species off the Azores as doubtful.
Squalus megalops (Macleay, 1881) – Shortnose spurdog; Galhudo-de-focinho-curto①
The species *S. megalops* is regarded as being present to the south of mainland Portugal, based on its geographical distribution (Ebert & Stehmann 2013).

Family Centrophoridae

Muñoz-Chapuli & Ramo (1989) reviewed the systematics of *Centrophorus* from the eastern North Atlantic and recognized four different species: *C. squamosus*, *C. granulosus*, *C. lusitanicus* and *C. niaukang*. However, recent studies indicated that *C. niaukang* may be restricted to the western Indo-Pacific (Ebert & Stehmann 2013). The taxonomic arrangement of *Centrophorus* species is provisional, and a comprehensive systematic review of *Centrophorus*, including detailed descriptions of external morphological, anatomical and molecular characters (Muñoz–Chapuli & Ramo 1989), are necessary both to elucidate the variation and interrelationships of *Centrophorus* species and to rectify several outstanding problems within the genus. According to Ebert & Stehmann (2013), the species *Centrophorus uyato* Rafinesque, 1810, is not actually a *Centrophorus* species, but rather a *Squalus* of uncertain identity.

*□ *Centrophorus granulosus* (Bloch & Schneider, 1801) – Gulper shark; Barroso①②, Quelma②, Ramudo③

*□ *Centrophorus lusitanicus* Bocage & Capello, 1864 – Lowfin gulper shark; ①, Ramudo③

□ *Centrophorus niaukang* Teng, 1959 – Taiwan gulper shark; ③

*□ *Centrophorus squamosus* (Bonnaterre, 1788) – Leafscale gulper shark; Lixa①, Lixa-de-escama②, Xara-branca③

*□ *Deania calcea* (Lowe, 1839) – Birdbeak dogfish; Sapata①②③, Pífaro, Pife or Tutia②
Deania hystricosa (Garman, 1906) – Rough longnose dogfish; ①②③

*□ *Deania profundorum* (Smith & Ratcliffe, 1912) – Arrowhead dogfish; ①, Sapata or Sapa-branca②, ③

Family Etmopteridae

Centroscyllium fabricii (Reinhardt, 1825) – Black dogfish; ①②

□ *Etmopterus princeps* Collet, 1904 – Great lanternshark; ①, Lixinha-da-fundura-grada②, ③

*□ *Etmopterus pusillus* (Lowe, 1839) – Smooth lanternshark; Xarinha-preta①, Lixinha-da-fundura or Quelmazinha②, Gata-preta or Xara-preta③

*□ *Etmopterus spinax* (Linnaeus, 1758) – Velvet belly; Lixinha-da-fundura①②③, Quelmazinha②, Lixinha③

Family Somniosidae

*□ *Centroscymnus coelolepis* Barbosa du Bocage & de Brito Capello, 1864 – Portuguese dogfish; Carocho①②, Tubarão-português②, Xara-preta③

□ *Centroscymnus owstonii* Garman, 1906 – Roughskin dogfish; ①③, Xara-preta-de-natura②
The species *Centroscymnus cryptacanthus* Regan, 1906 is a synonym of *C. owstonii* (Compagno 2003).

*□ *Centroselachus crepidater* (Bocage & Capello, 1864) – Longnose velvet dogfish; Sapata-preta①②, Sapata-de-natura③

Scymnodalatias garricki Kukuev & Konovalenko, 1988 – Azores dogfish; ②

*□ *Scymnodon ringens* Barbosa du Bocage & de Brito Capello, 1864 – Knifetooth dogfish; Arreganhada①, Boca③

□ *Somniosus microcephalus* (Bloch & Schneider, 1801) – Greenland shark; Tubarão-da-Gronelândia①②, ③

Somniosus rostratus (Risso, 1827) – Little sleeper shark; Pailona①, ②③

□ *Zameus squamulosus* (Günther, 1877) – Velvet dogfish; Arreganhada-de-focinho-comprido①②, Arreganhada②, ③
The species *Scymnodon obscurus* (Vaillant, 1888) is a synonym of *Z. squamulosus* (Compagno 2003).

Family Oxynotidae

* *Oxynotus centrina* (Linnaeus, 1758) – Angular roughshark; Peixe-porco①

Oxynotus paradoxus Frade, 1929 – Sailfin roughshark; Peixe-porco-de-vela①, ②③
The species *O. paradoxus* is regarded as being present in Madeira, based on its geographical distribution (Ebert & Stehmann 2013).

Family Dalatiidae

*□ *Dalatias licha* (Bonnaterre, 1788) – Kitefin shark; Gata①③, Gata-lixa or Gato②, Trabolha③

Isistius plutodus Garrick & Springer, 1964 – Largetooth cookiecutter shark; ②
This species is reported to occur off the Azores, in the PECS area (95 NM southwest of the Olympus Knoll), SAMC, SAMS-SHARKS-006797, 28.5333° W, 43.9667° N.

□ *Squaliolus laticaudus* Smith & Radcliffe, 1912 – Spined pygmy shark; Tubarão-anão②, ③

Order Squatiniformes
Family Squatinidae

Squatina oculata Bonaparte, 1840 – Smoothback angelshark; Anjo-de-malhas①

* *Squatina squatina* (Linnaeus, 1758) – Angelshark; Anjo①

Order Torpediniformes
Family Torpedinidae

*□ *Torpedo* (*Torpedo*) *marmorata* Risso, 1810 – Spotted torpedo; Tremelga-marmoreada①, Tormentim or Tremedeira③

* *Torpedo* (*Tetronarce*) *nobiliana* Bonaparte, 1835 – Electric ray; Tremelga-negra①, Arraia or Tremelga②, Tormentim, Dormideira or Tremedeira③

*□ *Torpedo* (*Torpedo*) *torpedo* (Linnaeus, 1758) – Common torpedo; Tremelga-de-olhos①, ②, Tormentim, Dormideira or Tremedeira③

The presence of this species off the Azores needs further documentation (Santos *et al*. 1997).

Order Pristiformes
Family Pristidae

Pristis pristis (Linnaeus, 1758) – Common sawfish; Espadarte-serra①, Espadarte③

Order Rajiformes
Family Rhinobatidae

Rhinobatos (*Glaucostegus*) *cemiculus* Geoffroy Saint-Hilaire, 1817 – Blackchin guitarfish; Viola-barba-negra①

* *Rhinobatos* (*Rhinobatos*) *rhinobatos* (Linnaeus, 1758) – Common guitarfish; Viola①

Family Arhynchobatidae

Bathyraja pallida (Forster, 1967) – Pale ray; ②
Bathyraja richardsoni (Garrick, 1961) – Richardson's ray; ②

Family Rajidae

Amblyraja radiata (Donovan, 1808) – Starry ray; Raia-repregada①②
The species *A. radiata* is reported to occur off the Azores, in the PECS area (70 NM southwest of Albany Seamount), TCWC, Ichthyology, No. 3450.01, 38.2333º W, 37.7333º N, 26 Apr. 1960.

* *Dipturus batis* (Linnaeus, 1758) – Blue skate; Raia-oirega, Airoga, Arrai or Raia
Based on morphological analyses and on molecular phylogenetic relationships, Iglésias *et al.* (2010) revealed the existence of four distinct species in the northeastern Atlantic (namely *D*. cf. *flossada*, *D*. cf. *intermedia*, *D. oxyrinchus* and *D. nidarosiensis*). The records of *D. batis* off mainland Portugal, off the Azores and off Madeira can only be reclassified upon the formal revision of the *Dipturus* species from the northeastern Atlantic, and taking into consideration the resurrections and the fully documented re-descriptions of both *Dipturus* sp. cf. *flossada* (Risso, 1826) and of *Dipturus* sp. cf. *intermedia* (Parnell, 1837). Therefore, the species *D. batis* was not counted in the total number of species in the current list.

*◇□ *Dipturus oxyrinchus* (Linnaeus, 1758) – Longnosed skate; Raia-bicuda①, Arrai②, Raia②③

* *Leucoraja circularis* (Couch, 1838) – Sandy ray; Raia-de-São-Pedro①
Leucoraja fullonica (Linnaeus, 1758) – Shagreen ray; Raia-pregada①②, Arraia or Raia②, Raia③

* *Leucoraja naevus* (Müller & Henle, 1841) – Cuckoo ray; Raia-de-dois-olhos①
Neoraja iberica Stehmann, Séret, Costa & Baro, 2008 – Iberian pygmy skate; Raia-pigméia-ibérica①

* *Raja asterias* Delaroche, 1809 – Starry ray; Raia-pintada①

*□ *Raja brachyura* Lafont, 1873 – Blonde ray; Raia-pontuada①②, Arraia or Raia②, Raia③

*□ *Raja clavata* Linnaeus, 1758 – Thornback ray; Raia-lenga①②, ③

□ *Raja maderensis* Lowe, 1839 – Madeira ray; Raia-da-Madeira①, Arraia②, Raia②③

* *Raja microocellata* Montagu, 1818 – Small-eyed ray; Raia-zimbreira①, Arrai or Raia②
The presence of this species off the Azores needs further documentation (Santos *et al*. 1997).

* *Raja miraletus* Linnaeus, 1758 – Brown ray; Raia-de-quatro-olhos①, ③

*□ *Raja montagui* Fowler, 1910 – Spotted ray; Raia-manchada①

* *Raja undulata* Lacepède, 1802 – Undulate ray; Raia-curva①
Rajella bathyphila (Holt & Byrne, 1908) – Deep-water-ray; ②
Rajella bigelowi (Stehmann, 1978) – Bigelow's ray; ①, Arraia or Raia②
The species *R. bigelowi* is regarded as being present off mainland Portugal, based on its geographical distribution (Ebert & Stehmann 2013).

*□ *Rostroraja alba* (Lacepède, 1803) – Bottlenosed skate; Raia-tairoga①, ③

Order Myliobatiformes
Family Dasyatidae

◇ *Dasyatis centroura* (Mitchill, 1815) – Roughtail stingray; Uge-de-cardas①, Ratão②, ③
*□ *Dasyatis pastinaca* (Linnaeus, 1758) – Common stingray; Uge①②, Rato-do-mar②, Ratão②③
□ *Pteroplatytrygon violacea* (Bonaparte, 1832) – Pelagic stingray; Uge-violeta①, Ratão or Raia-pelágica②, ③
◇□ *Taeniura grabata* (Geoffroy Saint-Hilaire, 1817) – Roundstingray; Ratão②③

Family Gymnuridae

□ *Gymnura altavela* (Linnaeus, 1758) – Spiny butterfly ray; Uge-manta①, Raia or Andorinha-do-mar③
Gymnura hirundo (Lowe, 1843) – Madeira butterfly ray; Raia-borboleta③
Compagno (1999) considered the validity of this species as doubtful.

Family Myliobatidae

□ *Manta birostris* (Walbaum, 1792) – Giant manta; Manta①③, Urjamanta or Marona②, Urjamanta③
□ *Mobula mobular* (Bonnaterre, 1788) – Devil fish; Jamanta①②③, Jimanta, Uge or Uja②, Urjamanta③
Mobula tarapacana (Philippi, 1892) – Chilean devil ray; Manta-cornuda②, ③
*□ *Myliobatis aquila* (Linnaeus, 1758) – Common eagle ray; Ratão-águia①, Arreião or Ratão②, Raia③
Pteromylaeus bovinus (Geoffroy Saint-Hilaire, 1817) – Bull ray; Ratão-bispo①, Raia③
Rhinoptera marginata (Geoffroy Saint-Hilaire, 1817) – Lusitanian cownose ray; Gavião-do-mar①, ②
The presence of this species off the Azores needs further confirmation (Santos *et al*. 1997). The species *R. marginata* is regarded as being present off southern mainland Portugal, based on its geographical distribution (Ebert & Stehmann 2013).

Class Actinopterygii
Order Acipenseriformes
Family Acipenseridae

* *Acipenser sturio* Linnaeus, 1758 – Sturgeon; Esturjão, Esturgião, Peixe-rei, Soilho or Sôlho-rei
The last known records of sturgeon in Portugal refer to the presence of small specimens (20-30 cm long), during the early 1980s, in the lower Guadiana (Almaça 1988). The species is considered extinct (Rogado *et al*. 2005). In Portugal there are specimens of *A. sturio* only in museums and in captivity. For these reasons, *A. sturio* was not counted in the total number of species in the current list.

Order Elopiformes
Family Megalopidae

◇□ *Megalops atlanticus* Valenciennes, 1847 – Trapon; Trapão-do-Atlântico①, Trapão①②, Peixe-prata②, ③

Order Albuliformes
Family Halosauridae

□ *Aldrovandia affinis* (Günther, 1877) – No common name; ①②③
Aldrovandia gracilis Goode & Bean, 1896 – No common name; ③

This species occurs off Madeira, in the PECS area (Josephine Bank), BMNH, No. 1995.8.4.67-69, 14.5177º W, 36.7683º N, 12 Apr. 1972.

Aldrovandia oleosa Sulak, 1977 – No common name; ②

The presence of the species *A. oleosa* is reported off the Azores, in the PECS area (Atlantis Seamout); (Shcherbachev *et al.* 1985) AMK 4 – Academician Mstislav Keldysh, FISH 1556546, 29.9800º W, 34.4500º N, depth 1240-1320 m.

□ *Aldrovandia phalacra* (Vaillant, 1888) – Hawaiian halosaurid fish; ①②

Aldrovandia rostrata (Günther, 1878) – No common name; ②

The occurrence of *A. rostrata* is reported off the Azores, in the PECS area (Great Meteor Tablemount), SDSC, No. 15910, 28.2833º W, 36.8500º N; FISH 1556510, 28.2800º W, 29.8500º N (Shcherbachev *et al.* 1985).

Halosauropsis macrochir (Günther, 1878) – Abyssal halosaur; ①②③

□ *Halosaurus jonhsonianus* Vaillant, 1888 – Halosaur; ①②

*□ *Halosaurus ovenii* Johnson, 1864 – Halosaur; ①②③

Family Notacanthidae

Leptocephalus giganteus Castle, 1959 – No common name; ①③

According to Froese & Pauly (2012), *Coloconger giganteus* (Castle, 1959) is a senior synonym of *L. giganteus*. The WoRMS Editorial Board (2013) indicates *C. giganteus* as an accepted species. The presence of *C. giganteus* is reported in the Madeiran EEZ (40 NM south of Madeira Is.), BMNH 1994.11.1.3922, 17.0º W, 32.0º N, and off mainland Portugal EEZ (16 NM NE of the Carlos Ribeiro Gap), BMNH. 1994.11.1.3931, 10.0º W, 32.0º N. According to Smith (1989), *L. giganteus* is probably the larva of a *Notacanthus* species. Moser & Charter (1996) indicated it as a larva of *Notacanthus chemitzii* Bloch, 1788. According to Eschmeyer (2013), *L. giganteus* is uncertain in the family Notacanthidae. This record should be considered provisional and confirmation is still needed.

* *Notacanthus bonaparte* Risso, 1840 – Shortfin spiny eel; ①②③

The occurrence of this species is reported off the Azores, in the PECS area (113 NM and 152 NM WNW of Freen Trough), MAR-ECO, No. 4768, 29.5359º W, 42.9329º N, 2004.07.09; MAR-ECO, No. 6241, 28.5520º W, 43.0340º N, 2004.

* *Notacanthus chemnitzii* Bloch, 1788 – Spiny eel; ①③

Polyacanthonotus africanus (Gilchrist & von Bonde, 1924) – No common name; ②

Polyacanthonotus challengeri (Vaillant, 1888) – No common name; ②③

Polyacanthonotus rissoanus (De Filippi & Verany, 1857) – Smallmouth spiny eel; ①②

Order Anguilliformes
Family Anguillidae

* □*Anguilla anguilla* (Linnaeus, 1758) – European eel; Enguia-europeia①, Eiró①②③, Iró③

Anguilla rostrata (Lesueur, 1817) – American eel; Enguia-americana②

Family Chlopsidae

□ *Chlopsis bicolor* Rafinesque, 1810 – Bicouloured false moray; Congrinho-bicolor②

Family Muraenidae

According to Smith (2012) the classification of moray eels is still a work in progress, and has not yet resulted in a stable phylogeny. The family is imperfectly known since the definitions and boundaries of genera are still uncertain. Moreover, new species are continually being discovered and described.

Anarchias euryurus (Lea, 1913) – No common name; Peixe-lobo②, ③

□ *Anarchias longicauda* (Peter, 1877) – Bluenose moray; ③

Anarchias similis (Lea, 1913) – Pygmy moray; ②

□ *Enchelycore anatina* (Lowe, 1838) – Fangtooth moray; Moreia-víbora or Víbora②, Moreia-serpente③

Gymnothorax afer Bloch, 1795 – Dark moray; Moreão-escuro, ②

The presence of this species off the Azores needs verification (Santos *et al*. 1997).

□ *Gymnothorax bacalladoi* Böhlke & Brito, 1987 – Bacallado's moray; ③

□ *Gymnothorax maderensis* (Johnson, 1862) – Sharktooh moray; ②, Moreia-da-Madeira or Moreão③

◇ *Gymnothorax miliaris* (Kaup, 1856) – Goldentail moray; Moreia-dourada, ②

□ *Gymnothorax polygonius* Poey, 1875 – Polygon moray; Moreão③

□ *Gymnothorax unicolor* (Delaroche, 1809) – Brown moray; Moreão-castanho①, Moreão or Moreia-castanha②, Moreão③

□ *Gymnothorax vicinus* (Castelnau, 1855) – Purplemouth moray; Moreão-amarelo, ②③

□ *Muraena augusti* (Kaup, 1856) – No common name; Moreia-preta②③, Moreão②

*□ *Muraena helena* Linnaeus, 1758 – Mediterranean moray; Moreia①②③, Moreia-pintada②

Family Synaphobranchidae

□ *Dysomma brevirostre* (Facciolà, 1887) – Pignosed arrowtooth eel; ①③

Dysommina proboscideus (Lea, 1913) – No common name; ②

Histiobranchus australis (Regan, 1913) – No common name; ②③

Histiobranchus bathybius (Günther, 1877) – Deep-water arrowtooth eel; ①③, Moreão②

□ *Ilyophis blachei* Saldanha & Merrett, 1982 – No common name; ②

Ilyophis brunneus Gilbert, 1891 – Muddy arrowtooth eel; ②③

□ *Simenchelys parasitica* Gill, 1879 – Snubnosed eel; Fluta①, ②③

□ *Synaphobranchus affinis* Günther, 1877 – No common name; ①, Moreão-do-golfo②, ③

□ *Synaphobranchus brevidorsalis* Günther, 1887 – Shortdorsal cutthroat eel; ②

Synaphobranchus dolichorhynchus (Lea, 1913) – No common name; ②

This species is reported to occur off the Azores, in the PECS area (85 NM northwest of the Marsala Seamount), Scientific results of the Michael Sars North Atlantic Deep-Sea Expedition 1910, Sta. 53, 33.0166º W, 34.9833º N, depth 150 m. Known from larval specimens, adults not known (Eschmeyer 2013).

*□ *Synaphobranchus kaupii* Johnson, 1862 – Kaup's arrowtooth eel; Moreão-de-natura①③, Congrinho or Moreão②, Moreia-de-natura③

Family Ophichthidae

Apterichtus anguiformis (Peters, 1877) – Slender finless eel; ③

□ *Aptherichthus caecus* (Linnaeus, 1758) – European finless eel; Congrinho-da-areia②, ③

* *Dalophis imberbis* (Delaroche, 1809) – Armless snake eel; ①

Echelus myrus (Linnaeus, 1758) – Painted eel; Cobra-de-orelhas①, ③

Myrophis plumbeus (Cope, 1871) – No common name; ②

The presence of *M. plumbeus* is reported off the Azores, in the PECS area (155 NM southwest of the Georgiy Zima Seamount), BMNH, No. 1994.11.1.1413, 20.3016º W, 39.8900º N.

*□ *Ophisurus serpens* (Linnaeus, 1758) – Serpent eel; Cobra-do-mar①, ③

Family Derichthyidae

Derichthys serpentinus Gill, 1884 – Narrownecked oceanic eel; ①②

Nessorhamphus ingolfianus (Schmidt, 1912) – Duckbill oceanic eel; ①②③

Family Nemichthyidae

Avocettina infans (Günther, 1878) – Avocet snipp eel; Cobra-centopeia②③
Labichthys carinatus Gill & Ryder, 1883 – No common name; ②
The species *L. carinatus* is reported to occur to the south of the Azores, in the PECS area (46 NM SSW of the Oceanographer Fracture Zone, 62 NM SSW of the Konstantinov Ridge and 114 NM south of the Lucky Strike Seamount), MAR-ECO HamPelFish, No. 34845372, 32.0169º W, 35.4000º N, 24 Apr. 1979; BMNH, No. 1994.11.1.1493, 31.5000º W, 32.5450º N; MAR-ECO HamPelFish, No. 34844931, 35.4830º W, 34.3499º N, 28 Apr. 1979.
Nemichthys curvirostris (Strömman, 1896) – Boxer snipe eel; ②③
*□ *Nemichthys scolopaceus* Richardson, 1848 – Slender snipe eel; Cobra-de-bico①, ②③

Family Congridae

□ *Ariosoma balearicum* (Delaroche, 1809) – Bandtooth conger; Congro-das-Baleares①, ②③
Bathyuroconger vicinus (Vaillant, 1888) – Large-toothed conger; ①
*□ *Conger conger* (Linnaeus, 1758) – European conger; Congro①②③
Conger triporiceps Kanazawa, 1958 – Manytooth conger; ③
□ *Gnathophis codoniphorus* Maul, 1972 – No common name; ②
The species *G. codoniphorus* is regarded as being present off the Azores (Maul 1972; Bauchot & Saldanha 1986), in the PECS area (Great Meteor Tablemount), SDSC, No. 22978, 28.3966º W, 29.8366º N, 1967.07.22; SDSC, No. 22979, 28.6667º W, 30.0499º N, 25 Jul. 1967.
*□ *Gnathophis mystax* (Delaroche, 1809) – Thinlip conger; Coreano①, ②③
□ *Heteroconger longissimus* Günther, 1870 – Garden eel; Enguia-de-jardim③
Paraconger macrops (Günther, 1870) – Blackspot conger; Congro-da-areia or Ortiga②, Congro-de-natura③
Pseudophichthys splendens (Lea, 1913) – Purplemouthed conger; ②

Family Nettastomatidae

*◇□ *Facciolella oxyrhyncha* (Bellotti, 1883) – Facciola's sorcerer; Cobra-cabeça-de-pato①, ②③
* *Nettastoma melanurum* Rafinesque, 1810 – Blackfin sorcerer; Cobra-bico-de-pato①, ②③
* *Venefica proboscidea* (Vaillant, 1888) – Whipsnout sorcerer; ①

Family Serrivomeridae

□ *Serrivomer beanii* Gill & Ryder, 1883 – Bean's sawtoothed eel; Cobra-couraça①, ②③
Serrivomer brevidentatus Roule & Bertin, 1929 – Black sawtoothed eel; ①②③
Serrivomer lanceolatoides (Schmidt, 1916) – Short-tooth sawpalate; ②

Order Saccopharyngiformes
Family Cyematidae

Cyema atrum Günther, 1878 – Bobtail eel; Cobra-de-leme①, ②③

Family Saccopharyngidae

* *Saccopharynx ampullaceus* (Harwood, 1827) – Gluper eel; Enguia-pelicano①, ②③
Saccopharynx harrisoni Beebe, 1932 – No common name; ③
Saccopharynx hjorti Bertin, 1938 – No common name; ②

This species is present off the Azores (86 NM northeast of the Marsala Seamount), and it is also regarded as being present off the Azores by Arruda (1997), although outside its EEZ. URNM, ZMB 6041, 33.0166º W, 34.9833ºN, 9 Jun. 1910.

Saccopharynx paucovertebratis Nielsen & Bertelsen, 1985 – No common name; ③

Saccopharynx ramosus Nielsen & Bertelsen, 1985 – No common name; ②③

The species *S. ramosus* is reported in the south of the Azores, but outside the EEZ (90 NM east of the Great Meteor Tablemount), Holotype, BMNH, No. 1983.11.19.2, 26.7166º W, 30.3066º N.

Saccopharynx thalassa Nielsen & Bertelsen, 1985 – No common name; ③

Saccopharynx trilobatus Nielsen & Bertelsen, 1985 – No common name; ②

The species *S. trilobatus* is reported to occur southwest of the Azores (Arruda, 1997), in the PECS area (75 NM southeast of the Marsala Seamount). Holotype: BMNH, No. 1983.11.19.1, 33.2433º W, 32.9666º N.

Family Eurypharyngidae

Eurypharynx pelecanoides Vaillant, 1882 – Pelican eel; Peixe-pelicano①,②③

Family Monognathidae

The species *Monognathus jesperseni* Bertin, 1936 is regarded as being occurring off Portugal. One specimen was caught outside the Portuguese EEZ and also outside the proposed extension of the Portuguese continental shelf (17.0016º W, 41.8630º N, Discovery Stn. 9801 # 82(9)). For these reasons, *M. jesperseni* was not included in the total number of species in the current list. The specimen is deposited in the Natural History Museum, BMNH 1987.2.3.2.

Monognathus bertini Bertelsen & Nielsen, 1987 – No common name; ①

Monognathus boehlkei Bertelsen & Nielsen, 1987 – No common name; ③

Monognathus herringi Bertelsen & Nielsen, 1987 – No common name; ③

Monognathus nigeli Bertelsen & Nielsen, 1987 – No common name; ②

The species *M. nigeli* is reported to occur in the south of the Azores (Quéro *et al*. 2003), but outside EEZ (85 NM northeast of the Marsala Seamount); Paratype, ZMUC, No. P2340540, 32.9333ºW, 34.9666º N, 14 Jun. 1981.

Order Clupeiformes
Family Engraulidae

*□ *Engraulis encrasicolus* (Linnaeus, 1758) – European anchovy; Biqueirão①, ②③

Family Clupeidae

* *Alosa alosa* (Linnaeus, 1758) – Allis shad; Sável①

* *Alosa fallax* (Lacepède, 1803) – Twaite shad; Savelha①, ③

*□ *Sardina pilchardus* (Walbaum, 1792) – European pilchard; Sardinha①②③, Petinga②

* *Sardinella aurita* Valenciennes, 1847 – Round sardinella; Sardinela-lombuda①, ③

□ *Sardinella maderensis* (Lowe, 1838) – Madeiran sardinella; Sardinela-da-Madeira or Sardinela-palheta①, Arenque②③

* *Sprattus sprattus* (Linnaeus, 1758) – European sprat; Espadilha①, ②

Order Argentiniformes
Family Argentinidae

*□ *Argentina sphyraena* Linnaeus, 1758 – Argentine; Argentina-branca①, ②③

The occurrence of this species is reported off Madeira, in the PECS area (Josephine Bank), FISH 1556601 (Shcherbachev *et al.* 1985).

□ *Glossanodon leioglossus* (Valenciennes, 1848) – Smalltoothed argentine; Argentina-dourada①, ②③

The species *G. leioglossus* is reported to occur off the Azores, in the PECS area (Great Meteor Tablemount), SDSC, No. 22959, 28.4833º W, 29.8258º N, 18 Jul. 1967; SDSC, No. 22960, 28.6399º W, 30.0849º N, 26 Jul. 1967.

Family Opisthoproctidae

Bathylychnops brachyrhynchus (Parr, 1937) – No common name; ②

The presence of the species *B. brachyrhynchus* is reported off the Azores, in the PECS area (62 NM north of the Kings Trough), ISH, No. 2638-1979, 22.2670º W, 44.9000º N, 5 Mar. 1979.

Bathylychnops exilis Cohen, 1958 – Javelin spookfish; ②

Dolichopteryx longipes (Vaillant, 1888) – Brown-snout spookfish; ②③

Opisthoproctus grimaldii Zugmayer, 1911 – Mirrorbelly; ①, Peixe-sola②, ③

□ *Opisthoproctus soleatus* Vaillant, 1888 – Barrel-eye; ①, Peixe-sola②, ③

□ *Rhynchohyalus natalensis* (Gilchrist & von Bonde, 1924) – No common name; ②③

The presence of this species is reported to the south and west of the Azores, in the PECS area (61 NM northeast of the Albany Seamount, 45 NM southwest of the Oceanographer Fracture Zone and 105 NM northwest of the Atlantis Seamount); MCZ, No. 66429, 35.9666º W, 39.5000º N, 27 Sep. 1964; ISH, No. 2411-1979, 31.8829º W, 35.4000º N, 29 Apr. 1979; MAR-ECO HamPelFish, No. 34844137, 35.4830º W, 34.3499º N, 28 Apr. 1979.

Family Microstomatidae

Bathylagichthys greyae (Cohen, 1958) – Grey's deepsea smelt; ①②③

Bathylagus euryops Goode & Bean, 1896 – Goiter blacksmelt; ①②③

□ *Dolicholagus longirostris* (Maul, 1948) – Longsnout blacksmelt; ①②③

Melanolagus bericoides (Borodin, 1929) – No common name; ①②③

□ *Microstoma microstoma* (Risso, 1810) – Slender argentine; ②③

Nansenia atlantica Blache & Rossignol, 1962 – No common name; ②

Nansenia groenlandica (Reinhardt, 1840) – Greenland argentine; ①②

Nansenia iberica Matallanas, 1985 – No common name; ②

The species *N. iberica* is present off the Azores, in the PECS area (106 NM SSW of the Olympus Knoll and at the Olympus Knoll), ISH, No. 967-1982, 28.4419º W, 43.6969º N, 19 Jun. 1982; ISH, No. 465-1982, 27.6800º W, 45.4000º N, 11 Jun. 1982.

Nansenia longicauda Kawaguchi & Butler, 1984 – No common name; ③

Nansenia tenera Kawaguchi & Butler, 1984 – No common name; ②

Family Platytroctidae

Barbantus curvifrons (Roule & Angel, 1931) – Palebelly searsid; ①②③

The presence of *B. curvifrons* is reported to the south and northeast of the Azores in the PECS area (Plato Seamount and 157 NM southwest of the Georgiy Zima Seamount), SOC, Discovery No. 740618_8_FIS_066001, 20.1633º W, 40.0107º N, 3 Oct. 1970; SOC, Discovery No. 1022202_85_FIS_066001, 30.0850º W, 33.0975º N, 29 Oct. 1980.

Holtbyrnia anomala Krefft, 1980 – Bighead searsid; ②

□ *Holtbyrnia macrops* Maul, 1957 – Bigeye searsid; ②③

Maulisia argipalla Matsui & Rosenblatt, 1979 – Palegold searsid; ②③

□ *Maulisia mauli* Parr, 1960 – Maul's searsid; ②③

Maulisia microlepis Sazonov & Golovan, 1976 – Smallscale searsid; ②

Mentodus facilis (Parr, 1951) – No common name; ③
Mentodus mesalirus (Matsui & Rosenblatt, 1987) – No common name; ②
Mentodus rostratus Günther, 1878 – No common name; ②③
Normichthys operosus Parr, 1951 – Multipore searsid; ①②
Persparsia kopua (Phillipps, 1942) – No common name; ①
Platytroctes apus Günther, 1878 – Legless searsid; ①②③
Sagamichthys schnakenbecki (Krefft, 1953) – Schnakenbeck's searsid; ①②③
□ *Searsia koefoedi* Parr, 1937 – Koefoed's searsid; ①②③

Family Bathylaconidae

Bathylaco nigricans Goode & Bean, 1896 – Black warrior; ②③
Herwigia kreffti (Nielsen & Larsen, 1970) – Krefft's smooth-head; ②

Family Alepocephalidae

Alepocephalus agassizii Goode & Bean, 1883 – Agassiz' slickhead; ②
Alepocephalus australis Barnard, 1923 – Small scaled brown slickhead; ②
*□ *Alepocephalus bairdii* Goode & Bean, 1879 – Baird's slickhead; Celindra①, ②③
Alepocephalus productus Gill, 1883 – Smalleye smooth-head; ①②
*□ *Alepocephalus rostratus* Risso, 1820 – Risso's smooth-head; Celindra①③, ②
Asquamiceps hjorti (Koefoed, 1927) – No common name; ②
Asquamiceps velaris Zugmayer, 1911 – Fanfin smooth-head; ①
* *Bajacalifornia megalops* (Lütken, 1898) – Bigeye smooth-head; ①②
New record for the Portuguese mainland waters, the first specimen of *B. megalops* (Fig. 2), (280 mm TL and 104.68 g) was caught by fishermen from Peniche, on the 7th of April 2008 (39º30'3.23"N, 9º30'32.37"W). Bold Systems Sample ID–MLFPI111, available on the Barcode of Life Data Systems (BOLD; under the project titled "Fish of Portugal and Italy [MLFPI]": http://www.barcodinglife.org/).
Bathyprion danae Marshall, 1966 – Fangtooth smooth-head; ②③
Bathytroctes macrolepis Günther, 1887 – Koefoed's smooth-head; ②
Bathytroctes michaelsarsi Koefoed, 1927 – Michael Sars' smooth-head; ①②
Bathytroctes microlepis Günther, 1878 – Smallscale smooth-head; ①②③
Conocara fiolenti Sazonov & Ivanov, 1979 – Fiolenti's smooth-head; ②
Conocara macropterum (Vaillant, 1888) – Longfin smooth-head; ①, Celindra②
Conocara murrayi (Koefoed, 1927) – Murray's smooth-head; ①②

Fig. 2. *Bajacalifornia megalops* (Lütken, 1898).

Conocara werneri Nybelin, 1947 – Werner's smooth-head; ①
Einara edentula (Alcock, 1892) – Toothless smooth-head; ②③
Einara macrolepis (Koefoed, 1927) – Loosescale smooth-head; ②③
Leptochilichthys agassizii Garman, 1899 – Agassiz' smooth-head, ①
Leptoderma macrophthalmum Byrkjedal, Poulsen & Galbraith, 2011 – No common name; ②
Mirognathus normani Parr, 1951 – Norman's smooth-head; ①
Narcetes erimelas Alcock, 1890 – No common name; ②
Narcetes stomias (Gilbert, 1890) – Blackhead salmon; ②
Photostylus pycnopterus Beebe, 1933 – Starry smooth-head; ①②③
Rinoctes nasutus (Koefoed, 1927) – Abyssal smooth-head; ②
Rouleina attrita (Vaillant, 1888) – Softskin smooth-head; ①②
□ *Rouleina maderensis* Maul, 1948 – Madeira smooth-head; ②③
Talismania mekistonema Sulak, 1975 – Threadfin smooth-head; ②
* *Xenodermichthys copei* (Gill, 1884) – Bluntsnout smooth-head; ①②③

Order Salmoniformes
Family Salmonidae

Oncorhynchus mykiss (Walbaum, 1792) – Rainbow trout; Truta-arco-íris①②③
O. mykiss is an alien and invasive species introduced in Portugal. This species is primarily a freshwater fish, although sea-run populations, often known as steelhead, exist in some areas. However, populations of *O. mykiss* are capable of migrating to and surviving in the sea (Jonsson 2011).
* *Salmo salar* Linnaeus, 1758 – Atlantic salmon; Salmão-do-Atlântico or Salmão①
* *Salmo trutta* Linnaeus, 1758 – Sea trout; Truta-marisca①

Order Stomiiformes
Family Diplophidae

◇ *Diplophos taenia* Günther, 1873 – No common name; ①②③
The presence of this species is reported to the south and west of the Azores, in the PECS area (30 NM west of the Plato Seamount, 60 NM south of the Pico Fracture Zone and 48 NM north of the Oceanographer Fracture Zone), SOC, Discovery No. 1022207_84_FIS_218002, 30.0225º W, 33.07830º N, 30 Oct. 1980; SOC, Discovery No. 1022216_84_FIS_218002, 30.0357º W, 33.0900º N, 31 Oct. 1980; SOC, Discovery No. 1022207_84_FIS_218002, 30.0225º W, 33.0783º N, 30 Oct. 1980; SOC, Discovery No. 1022221_84_FIS_218002, 30.0241º W, 33.0716º N, 30 Oct. 1980; SOC, Discovery No. 1022217_85_FIS_218002, 30.0625º W, 33.0633º N, 31 Oct. 1980; SOC, Discovery No. 1022218_86_FIS_218002, 30.0892º W, 33.0383º N, 31 Oct. 1980; SOC, Discovery No. 1022205_85_FIS_218002, 30.1291º W, 33.1458º N, 30 Oct. 1980; SOC, Discovery No. 1022206_86_FIS_218002, 30.1566º W, 33.1724º N, 30 Oct. 1980; MCZ, No. 62618, 35.0350º W, 37.0933º N, 29 Aug. 1984; MCZ, No. 81305, 35.0280º W, 35.9150º N, 25 Aug. 1984.

Family Gonostomatidae

Bonapartia pedaliota Goode & Bean, 1896 – No common name; ①②③
Cyclothone acclinidens Garman, 1899 – Benttooth bristlemouth; ①②③
Cyclothone alba Brauer, 1906 – Bristlemouth; ②③
* *Cyclothone braueri* Jespersen & Tåning, 1926 – Garrick; ①②③
Cyclothone livida Brauer, 1902 – Bristlemouth; ①②③
Cyclothone microdon (Günther, 1878) – Bristlemouth; ①②③
Cyclothone obscura Brauer, 1902 – No common name; ③
Cyclothone pallida Brauer, 1902 – Bristlemouth; ①②③
Cyclothone parapallida Badcock, 1982 – No common name; ③
Cyclothone pseudopallida Mukhacheva, 1964 – Slender bristlemouth; ①②③

Cyclothone signata Garman, 1899 – Showy bristlemouth; ①②
Gonostoma atlanticum Norman, 1930 – No common name; ③
* *Gonostoma denudatum* Rafinesque, 1810 – Bristlemouth; ①②③
Gonostoma elongatum Günther, 1878 – Elongated bristlemouth fish; ①②③
□ *Manducus maderensis* (Johnson, 1890) – No common name; ③
Margrethia obtusirostra Jespersen & Tåning, 1919 – Bristlemouth; ①②③
Sigmops bathyphilus (Vaillant, 1884) – Bristlemouth; ①②③

Family Sternoptychidae

□ *Argyripnus atlanticus* Maul, 1952 – No common name; ②③
* *Argyropelecus aculeatus* Valenciennes, 1850 – Hatchetfish; Pai-velho①②, ③
Argyropelecus affinis Garman, 1899 – No common name; Pai-velho②③
□ *Argyropelecus gigas* Norman, 1930 – Hatchetfish; ①, Pai-velho②③
* *Argyropelecus hemigymnus* Cocco, 1829 – Hatchetfish; Pai-velho①②③
*□ *Argyropelecus olfersii* (Cuvier, 1829) – Hatchetfish; ①, Pai-velho②③
Argyropelecus sladeni Regan, 1908 – Sladen's hatchet fish; ②③
Maurolicus amethystinopunctatus Cocco, 1838 – Pearlsides; ①②③
Maurolicus muelleri (Gmelin, 1789) – Silvery lightfish; ①②③
Polyipnus polli Schultz, 1961 – No common name; ②③
□ *Sternoptyx diaphana* Hermann, 1781 – Diaphanous hatchetfish; ①②, Pai-velho②③
Sternoptyx pseudobscura Baird, 1971 – Highlight hatchetfish; ①②③
Valenciennellus tripunctulatus (Esmark, 1871) – No common name; ①②③

Family Phosichthyidae

Ichthyococcus ovatus (Cocco, 1838) – Lightfish; ①②③
Pollichthys mauli (Poll, 1953) – No common name; ②
The presence of this species is recorded off the Azores, in the PECS area (208 NM southwest of the Georgiy Zima Seamount, 74 NM west of the Freen Trough, 70 NM southwest of the Albany Seamount, 61 NM southwest of the Hayes Fracture Zone and 110 NM south of the Marsala Seamount), MCZ, Nº. 140261, 20.7333º W, 41.0833º N, 24 Jul. 1972; MAR-ECO 2004, No. 33278599, 27.7000º W, 42.8269º N, 27 Jun. 2004; MCZ, No. 140405, 38.0000º W, 37.6666º N, 8 Aug. 1931; MAR-ECO HamPelFish, No. 34850288, 39.5670º W, 33.0169º N, 27 Apr. 1979; SOC, Discovery No. 827000_8_FIS_644001, 34.3716º W, 32.0575º N, 1 Mar. 1973.
*□ *Polymetme corythaeola* (Alcock, 1898) – No common name; ①②③
P. corythaeola is reported to occur off the Azores, in the PECS area (Great Meteor Tablemount), SDSC, No. 22957, 28.6667º W, 30.0499º N, 25 Jul. 1967.
Polymetme thaeocoryla Parin & Borodulina, 1990 – No common name; ②③
There are occurrences of the species *P. thaeocoryla* near Madeira, in the PECS area (Josephine Bank) (Froese & Pauly 2012; Parin & Borodulina 1990) and in the south of the Azores, in the PECS area (Great Meteor Tablemount) (Froese & Pauly 2012; Parin & Borodulina 1990).
□ *Vinciguerria attenuata* (Cocco, 1838) – Lightfish; ①②③
□ *Vinciguerria nimbaria* (Jordan & Williams, 1895) – Oceanic lightfish; ①②③
□ *Vinciguerria poweriae* (Cocco, 1838) – Power's deep-water bristle-mouth fish; ①②③

Family Stomiidae

Aristostomias grimaldii Zugmayer, 1913 – No common name; ②③
Aristostomias lunifer Regan & Trewavas, 1930 – No common name; ②③

The presence of this species is reported at the Azores, in the PECS area (60 NM northwest of the Marsala Seamount and 53 NM WSW of the Hayes Fracture Zone), ISH, No. 2049-1979, 35.4000ºW, 34.3330ºN, 26 Apr. 1979; ISH, No. 221-1979, 39.4800ºW, 33.0700ºN, 27 Apr. 1979.

Aristostomias tittmanni Welsh, 1923 – Loosejaw; ②③

Aristostomias xenostoma Regan & Trewavas, 1930 – No common name; ②

There are recorded occurrences of *A. xenostoma* off the Azores, in the PECS area (158 NM southwest of the Georgiy Zima Seamount and 13 specimens in the area between Konstantinov Ridge and South Atlantis Seamount), MNHN, Paratype No. 1938-0124, 20.0000º W, 40.0000ºN.

Astronesthes atlanticus Parin & Borodulina, 1996 – No common name; ③

Astronesthes cyaneus (Brauer, 1902) – No common name; ②

The presence of this species is reported off the Azores, in the PECS area (51 NM SSW of the Konstantinov Ridge), SOC, Discovery No. 1023214_85_FIS_013010, 31.4666º W, 32.7649º N, 13 Nov. 1980.

□ *Astronesthes gemmifer* Goode & Bean, 1896 – Snaggletooth; ①②③

Astronesthes indicus Brauer, 1902 – No common name; ③

Astronesthes leucopogon Regan & Trewavas, 1929 – No common name; ①②③

Astronesthes macropogon Goodyear & Gibbs, 1970 – No common name; ③

Astronesthes micropogon Goodyear & Gibbs, 1970 – Snaggletooth; ②③

□ *Astronesthes neopogon* Regan & Trewavas, 1929 – Snaggletooth; ①②③

Parin & Borodulina (2000) indicated the species *Astronesthes cyclophotus* Regan & Trewavas, 1929 as a synonym of *A. neopogon*. Porteiro (2005) indicated *A. cyclophotus* as a valid species, but the Catalog of Fishes (Eschmeyer 2013) and Fishbase (Froese & Pauly 2012) continue to indicate the species *A. cyclophotus* as synonym of *A. neopogon*.

Astronesthes niger Richardson, 1845 – Snaggletooth; ①②③

Astronesthes similus Parr, 1927 – No common name; ②

This species occurs off the Azores, in the PECS area (63 NM southwest of the Hayes Fracture Zone), ISH, No. 2178-1979, 39.5670ºW, 33.0169º N, 27 Apr. 1979.

Astronesthes zharovi Parin & Borodulina, 1998 - No common name; ②

There are occurrences of this species off the Azores, in the PECS area (52 NM SSW of the Konstantinov Ridge), SOC, Discovery No. 1023215_86_FIS_013006, 31.4608º W, 32.7425º N, 13 Nov. 1980; SOC, Discovery No. 1023217_86_FIS_013006, 31.4750º W, 32.5180º N, 14 Nov. 1980.

Bathophilus brevis Regan & Trewavas, 1930 – No common name; ③

B. brevis occurs to the southwest of the Azores, at 1000 m (Fowler 1936, without indicating the geographical coordinates).

Bathophilus digitatus (Welsh, 1923) – No common name; ②③

Bathophilus longipinnis (Pappenheim, 1912) – No common name; ②③

Bathophilus nigerrimus Giglioli, 1882 – Scaleless dragonfish; ②③

Bathophilus pawneei Parr, 1927 – No common name; ②

The species *B. pawneei* is reported to occur off the Azores, in the PECS area (Plato Seamount and 63 NM SSW of the Konstantinov Ridge), SOC, Discovery No. 1022207_84_FIS_067006, 30.0220º W, 33.0780ºN, 30 Oct. 1980; SOC, Discovery No. 1023216_84_FIS_067004, 31.4880º W, 32.5510º N, 14 Nov. 1980.

Bathophilus proximus Regan & Trewavas, 1930 – No common name; ②

This species is recorded from the Azores, in the PECS area (37 NM southwest of the Konstantinov Ridge), SOC, Discovery No. 1024104_84_FIS_067008, 31.8025º W, 33.1858ºN, 18 Nov. 1980.

Bathophilus vaillanti (Zugmayer, 1911) – Scaleless dragonfish; ①②③

Borostomias antarcticus (Lönnberg, 1905) – Snaggletooth; ①②

Borostomias elucens (Brauer, 1906) – No common name; ②③

B. elucens is recorded off the Azores, in the PECS area (Plato Seamount), SOC, Discovery No. 1022203_86_FIS_076001, 30.1158º W, 33.1208º N, 29 Oct. 1980.

Borostomias mononema (Regan & Trewavas, 1929) – No common name; ③

Chauliodus danae Regan & Trewavas, 1929 – Dana viperfish; ①②③

*□ *Chauliodus sloani* Bloch & Schneider, 1801 – Sloane's viperfish; Demónio or Peixe-demónio①②③

Chirostomias pliopterus Regan & Trewavas, 1930 – Scaleless dragonfish; ①②③

□ *Echiostoma barbatum* Lowe, 1843 – No common name; ①②③

Eustomias braueri Zugmayer, 1911 – No common name; ①②③

Eustomias contiguus Gomon & Gibbs, 1985 – No common name; ②③

This species is recorded from the Azores, in the PECS area (59 NM northwest of the Marsala Seamount, 52 NM southwest and 87 NM northwest of the Hayes Fracture Zone), ZMH, Holotype No. 137943, 35.3670º W, 34.3499º N; USNM, No. 322759, 35.4830º W, 34.3500º N, 28 Apr. 1979; ZMH, Paratype No. 137942, 39.5666º W, 35.0333º N; ZMH, Paratype No. 138424, 39.4833º W, 33.0666º N.

Eustomias dubius Parr, 1927 – No common name; ②

This species is reported to occur off the Azores, in the PECS area (30 NM SSW of the Konstantinov Ridge), SOC, Discovery No. 1024307_86_FIS_261017, 31.5155º W, 33.0941º N, 20 Nov. 1980.

Eustomias enbarbatus Welsh, 1923 – No common name; ②

The presence of *E. enbarbatus* is confirmed from the Azores, in the PECS area (40 NM southwest of the Oceanographer Fracture Zone), USNM, No. 379984, 35.4830º W, 34.3500º N, 28 Apr. 1979; USNM, No. 372074, 35.3670º W, 34.3500º N, 28 Apr. 1979.

Eustomias filifer (Gilchrist, 1906) – No common name; ②③

There are records of *E. filifer* from the Azores, in the PECS area (53 NM NNW of the Maxwell Fracture Zone, Olympus Knoll and 46 NM southwest of the Oceanographer Fracture Zone), MAR-ECO – HamPelFish, No. 34847890, 27.5330º W, 48.5880º N, 14 Jun. 1982; MAR-ECO – HamPelFish, No. 34847888, 27.8029º W, 45.6669º N, 11 Jun. 1982; MAR-ECO – HamPelFish, No. 34847889, 27.6870º W, 45.3969º N, 11 Jun. 1982; MAR-ECO – HamPelFish, No. 34847889, 27.6870º W, 45.3699º N, 11 Jun. 1982; USNM, No. 322960, 35.4830º W, 34.3499º N, 28 Apr. 1979.

Eustomias fissibarbis (Pappenheim, 1912) – No common name; ②③

The presence of this species is reported from the Azores, in the PECS area (47 NM southwest of the Oceanographer Fracture Zone), MAR-ECO – HamPelFish, No. 34847895, 35.4830º W, 34.3499º N, 28 Apr. 1979.

Eustomias furcifer Regan & Trewavas, 1930 – Scaleless dragonfish; ②

Eustomias lipochirus Regan & Trewavas, 1930 – No common name; ②③

E. lipochirus is reported to occur off the Azores, in the PECS area (56 NM southwest of the Hayes Fracture Zone), USNM, No. 358647.5268115, 39.5000º W, 33.0999º N, 27 Apr. 1979.

Eustomias longibarba Parr, 1927 – No common name; ②③

E. longibarba is reported off the Azores, in the PECS area (45 NM southwest of the Oceanographer Fracture Zone), MAR-ECO – HamPelFish, No. 348447902, 35.4830º W, 34.3499º N, 28 Apr. 1979.

Eustomias macronema Regan & Trewavas, 1930 – No common name; ③

Eustomias macrurus Regan & Trewavas, 1930 – Yellowstem dragonfish; ②

Eustomias monodactylus Regan & Trewavas, 1930 – No common name; ②

This species is recorded off the Azores, in the PECS area (60 NM southwest of the Hayes Fracture Zone), USNM, No. 322963, 39.5670º W, 33.0170º N, 27 Apr. 1979.

Eustomias obscurus Vaillant, 1884 – Scaleless dragonfish; ①②③

Eustomias parri Regan & Trewavas, 1930 – No common name; ②

Eustomias paucifilis Parr, 1927 – No common name.

The species *E. paucifilis* was regarded as being present to the southwest of the Azores, at a depth of 2000 m (Fowler 1936, without indication of the geographical coordinates). In later years, there was one record in the southwest of the Azores (Post 1987), but the specimen was caught outside the EEZ and outside the proposed extension of the Portuguese continental shelf. Because of uncertainties in its distribution, this species was not considered for the estimation of the total number of species in the checklist.

Eustomias radicifilis Borodin, 1930 – No common name; ②

The species is reported off the Azores, in the PECS area (108 NM SSW of the Marsala Seamount), SOC, Discovery No. 827000_8_FIS_261016, 34.3716º W, 32.0575º N, 2 Mar. 1973.

Eustomias satterleei Beebe, 1933 – No common name; ②

This species is recorded off the Azores, in the PECS area (44 NM southwest of the Oceanographer Fracture Zone), MAR-ECO – HamPelFish, No. 34849205, 35.4830º W, 34.3499º N, 28 Apr. 1979.

Eustomias schmidti Regan & Trewavas, 1930 – No common name; ②③
There are records of the species *E. schmidti* off the Azores, in the PECS area (59 NM WSW of the Hayes Fracture Zone and 33 NM SSW of the Konstantinov Ridge), USNM, No. 292889, 39.5670º W, 33.0170º N, 27 Apr. 1979; SOC, Discovery No. 1022825_85_FIS_261013, 31.5567º W, 32.9758º N, 3 Nov. 1980; SOC, Discovery No. 1022824_84_FIS_261013, 31.5233º W, 32.9400º N, 3 Nov. 1980; SOC, Discovery No. 1022826_86_FIS_261013, 31.5900º W, 33.0141º N, 3 Nov. 1980.
Eustomias simplex Regan & Trewavas, 1930 – No common name; ②③
There are records of the species *E. simplex* to the south of the Azores, in the PECS area (43 NM southwest of the Oceanographer Fracture Zone and 35 NM southwest of the Konstantinov Ridge), USNM, No. 372019, 35.3670º W, 34.3500º N, 28 Apr. 1979; USNM, No. 379335, 35.4830º W, 34.3500º N, 28 Apr. 1979; SOC, Discovery No. 1022804_85_FIS_261010, 31.4583º W, 33.0342º N, 1 Jan. 1980; SOC, Discovery No. 1022805_86_FIS_261010, 31.4550º W, 33.0725º N, 1 Nov. 1980.
Eustomias tetranema Zugmayer, 1913 – No common name; ②③
Flagellostomias boureei (Zugmayer, 1913) – Scaleless dragonfish; ①②③
Grammatostomias circularis Morrow, 1959 – No common name; ③
Grammatostomias dentatus Goode & Bean, 1896 – No common name; ①②③
G. dentatus occurs off the Azores, in the PECS area (60 NM northwest of the Marsala Seamount), MAR-ECO – HamPelFish, No. 34849221, 35.4830º W, 34.3499º N, 28 Apr. 1979.
Grammatostomias flagellibarba Holt & Byrne, 1910 – No common name; ③
Idiacanthus fasciola Peters, 1877 – Sawtailfish; ①②③
Leptostomias gladiator (Zugmayer, 1911) – Scaleless dragonfish; ①②③
Leptostomias haplocaulus Regan & Trewavas, 1930 – No common name; ①②③
Leptostomias longibarba Regan & Trewavas, 1930 – No common name; ②
□ *Malacosteus niger* Ayres, 1848 – Stoplight loosejaw; ①②③
Melanostomias bartonbeani Parr, 1927 – Scaleless dragonfish; ①②③
Melanostomias biseriatus Regan & Trewavas, 1930 – No common name; ②③
There are occurrences of the species *M. biseriatus* off the Azores, in the PECS area (39 NM southwest and 42 NM south of the Konstantinov Ridge), SOC, Discovery No. 1024117_84_FIS_518003, 31.8266º W, 33.1958º N, 19 Nov. 1980; SOC, Discovery No. 1024405_84_FIS_518003, 31.2608º W, 32.8441º N, 21 Nov. 1980.
Melanostomias macrophotus Regan & Trewavas, 1930 – No common name; ①②③
Melanostomias melanopogon Regan & Trewavas, 1930 – No common name; ②
Melanostomias melanops Brauer, 1902 – No common name; ②③
This species is recorded off the Azores, in the PECS area (Plato Seamount and 64 NM southwest of the Hayes Fracture Zone), USNM, No. 358822, 29.6000º W, 33.0999º N, 27 Apr. 1979; USNM, No. 358821, 39.567ºº W, 32.9830º N, 27 Apr. 1979.
Melanostomias tentaculatus (Regan & Trewavas, 1930) – No common name; ②③
There are records of the species *M. tentaculatus* in the north and in the southwest of the Azores, in the PECS area (29 NM WNW of the Sherkis Seamount, 48 NM southwest of the Oceanographer Fracture Zone and 63 NM WSW of the Hayes Fracture Zone), MAR-ECO – HamPelFish, No. 34849776, 26.2469º W, 43.2420º N, 9 Jun. 1982; USNM, No. 358831.5268546, 35.4000º W, 34.2999º N, 28 Apr. 1979; USNM, No. 358662.5268130, 39.5999º W, 33.0000º N, 27 Apr. 1979.
Melanostomias valdiviae Brauer, 1902 – Valdivia black dragon fish; ①②③
Neonesthes capensis (Gilchrist & von Bonde, 1924) – Cape snaggletooth; ①②③
Pachystomias microdon (Günther, 1878) – Smalltooth dragonfish; ①②
Photonectes braueri (Zugmayer, 1913) – Scaleless dragonfish; ②③
Photonectes dinema Regan & Trewavas, 1930 – No common name; ②③
Photonectes margarita (Goode & Bean, 1896) – No common name; ②③
Photonectes mirabilis Parr, 1927 – No common name; ②③
The occurrence of this species is reported off the Azores, in the PECS area (58 NM WNW of the Marsala Seamount), MAR-ECO – HamPelFish, No. 34848521, 35.4000º W, 34.3330º N, 28 Apr. 1979.
Photonectes parvimanus Regan & Trewavas, 1930 – No common name; ①②③

The species *P. parvimanus* is regarded as being present southwest of the Azores (Albuquerque 1954–1956) and there is one record off the Azores, in the PECS area (95 NM WNW of the Hyeres Seamount), MCZ, No. 132081, 30.6166º W, 31.8333º N, 5 Sep. 1973.

Photostomias atrox (Alcock, 1890) – No common name; ③

Photostomias goodyeari Kenaley & Hartel, 2005 – No common name; ②③

Photostomias guernei Collett, 1889 – Loosejaw; ①②③

Rhadinesthes decimus (Zugmayer, 1911) – Slender snaggletooth; ①②③

Stomias boa boa (Risso, 1810) – Boa dragonfish; ①③

Stomias boa ferox Reinhardt, 1842 – Scaly dragonfish; ①②③

□ *Stomias brevibarbatus* Ege, 1918 – No common name; ①②③

Stomias longibarbatus (Brauer, 1902) – No common name; ①②③

Trigonolampa miriceps Regan & Trewavas, 1930 – Threelight dragonfish; ②

Order Ateleopodiformes
Family Ateleopodidae

Guentherus altivela Osório, 1917 – Jellynose; ①

Order Aulopiformes
Family Aulopodidae

*□ *Aulopus filamentosus* (Bloch, 1792) – Royal flagfin; Lagarto-do-mar①③, Lagarto-do-alto or Peixe-lagarto②, Lagarto③

Family Synodontidae

Synodus foetens (Linnaeus, 1766) – Inshore lizardfish; ②

There are records of the species *S. foetens* off the Azores, in the PECS area (80 NM west of the Great Meteor Tablemount), ROM, No. 23913, 30.2500º W, 30.2916º N, 29 Jan. 1966.

Synodus myops (Forster, 1801) – Snakefish; Lagarto-focinho-rombo, ②

*□ *Synodus saurus* (Linnaeus, 1758) – Atlantic lizardfish; Lagarto-da-costa①②③, Peixe-lagarto②

□ *Synodus synodus* (Linnaeus, 1758) – Diamond lizardfish; Lagarto-de-rolo③

Family Chlorophthalmidae

*□ *Chlorophthalmus agassizi* Bonaparte, 1840 – Shortnose greeneye; Olho-verde①; Olho-vivo②, ③

Family Notosudidae

Ahliesaurus berryi Bertelsen, Krefft & Marshall, 1976 – No common name; ①②③

□ *Scopelosaurus argenteus* (Maul, 1954) – Waryfish; ①②③

Scopelosaurus lepidus (Krefft & Maul, 1955) – Waryfish; ①②③

□ *Scopelosaurus smithii* Bean, 1925 – No common name; ②③

Family Ipnopidae

Bathymicrops multispinis Nielsen & Merrett, 1992 – No common name; ③

There are occurrences of *B. multispinis* off Madeira in the PECS area (Madeira Plain), USNM, No. 344624.5250741, 21.1250º W, 31.2483º N, 20 Aug. 1990; BMNH, No. 1997.1.2.2, 21.1180º W, 31.2358º N.

Bathymicrops regis Hjort & Koefoed, 1912 – No common name; ②③

There are records of this species to the south of the Azores, in the PECS area (15 NM west of the Great Meteor Tablemount), SDSC, No. 16042, 27.8999º W, 29.7999º N, 29 Jun. 1982 (Shcherbachev *et al.* 1985).

□ *Bathypterois dubius* Vaillant, 1888 – Spiderfish; ①, Peixe-tripé②
Bathypterois grallator (Goode & Bean, 1886) – Tripodfish; ①, Peixe-tripé②
Bathypterois longipes Günther, 1878 – Abyssal spiderfish; ①, Peixe-tripé-abissal②, ③
Bathypterois phenax Parr, 1928 – Blackfin spiderfish; Peixe-tripé-de-barbatana-negra②
Bathytyphlops sewelli (Norman, 1939) – No common name; ②

Family Scopelarchidae

Benthalbella infans Zugmayer, 1911 – Zugmayer's pearleye; ①②③
Rosenblattichthys hubbsi Johnson, 1974 – Hubb's pearleye; ②
The species *R. hubbsi* is reported off the Azores, in the PECS area (90 NM WNW of the Irving Seamount), MCZ, No. 52225, 30.6833º W, 31.7333º N, 6 Sep. 1973; MCZ, No. 52223, 30.6166º W, 31.8333º N, 5 Sep. 1973.

□ *Scopelarchus analis* (Brauer, 1902) – Short fin pearleye; ①②③
Scopelarchus guentheri Alcock, 1896 – Staring pearleye; ②
Scopelarchus michaelsarsi Koefoed, 1955 – Bigfin pearleye; ②
The species *S. michaelsarsi* is reported off the Azores, in the PECS area (34 NM southwest of the Konstantinov Ridge), MCZ, No. 71113, 30.6166º W, 31.8333º N, 5 Sep. 1973.

Family Evermannellidae

Coccorella atlantica (Parr, 1928) – Atlantic sabertooth; ②③
Coccorella atrata (Alcock, 1894) – No common name; ②
This species is reported off the Azores, in the PECS area (78 NM WSW of the Plato Seamount), SOC, Discovery No. 1024504_84_FIS_134001, 30.7150º W, 32.4366º N, 22 Nov. 1980.

□ *Evermannella balbo* (Risso, 1820) – Balbo sabertooth; ①②③
Evermannella melanoderma Parr, 1928 – India sabertooth; ①③
This Atlantic species has the same English common name as *E. indica* Brauer, 1906. A revision of the genus *Evermannella* resulted in the distinction between the species (Swinney 1994). Therefore, all previous records of *E. indica* in the Atlantic are now known as *E. melanoderna*. In our opinion the common name should be modified.

Family Alepisauridae

Alepisaurus brevirostris Gibbs, 1960 – Short snouted lancetfish; Peixe-cavalo②
*□ *Alepisaurus ferox* Lowe, 1833 – Long snouted lancetfish; Lírio-ferro①, ②, Peixe-cavalo or Peixe-água③
□ *Omosudis lowii* Günther, 1887 – Omosudid; ①②③

Family Paralepididae

□ *Anotopterus pharao* Zugmayer, 1911 – Daggertooth; ①②③
□ *Arctozenus risso* (Bonaparte, 1840) – Spotted barracudina; ①②③
Lestidiops affinis (Ege, 1930) – Barracudina; Barracudina ②③
□ *Lestidiops jayakari pseudosphyraenoides* (Ege, 1918) – No common name; ①, Barracudina ②③
Lestidiops similis (Ege, 1933) – No common name; ②
There are records of this species to the north and in the south of the Azores, in the PECS area (five specimens in the Mid-Atlantic Ridge between northwest of the Sherkis Seamount and NNW of the Maxwell Fracture Zone; 81 NM SSW of the Crumb Seamount and 46 NM southwest of the Oceanographer Fracture Zone), MAR-ECO – HamPelFish, No. 34847972, 27.8020º W, 48.1500º N, 14 Jun. 1982; MAR-ECO – HamPelFish, No. 348447970, 27.3320º W, 47.0449º N, 12 Jun. 1982; MAR-ECO – HamPelFish, No. 34847971, 27.2380º W, 46.4900º N, 12 Jun. 1982; MAR-ECO – HamPelFish, No. 34847969, 27.6870º W, 45.3969º N, 11 Jun. 1982;

MAR-ECO – HamPelFish, No. 34847968; 28.5820º W, 43.6049º N, 10 Jun. 1982; MAR-ECO – HamPelFish, No. 34847964, 23.4920º W, 42.1080º N, 2 May 1979; MAR-ECO – HamPelFish, No. 34847552, 35.4830º W, 34.3499º N, 28 Apr. 1979.

Lestidiops sphyrenoides (Risso, 1820) – Barracudina; ①, Barracudina②, ③

□ *Macroparalepis affinis* Ege, 1933 – Barracudina; Barracudina②, ③

Macroparalepis brevis Ege, 1933 – No common name; ②

□ *Macroparalepis nigra* (Maul, 1965) – No common name; ③

□ *Magnisudis atlantica* (Krøyer, 1868) – Duckbill barracudine; ①, Barracudina②, ③

□ *Paralepis brevirostris* (Parr, 1928) – No common name; ②③

□ *Paralepis coregonoides* Risso, 1820 – Lancet fish; ①, Barracudina②, ③

Paralepis elongata (Brauer, 1906) – No common name; ②

The species *P. elongata* is reported to occur off the Azores, in the PECS area (105 NM SSW of the Konstantinov Ridge), SOC, Discovery No. 1023306_86_FIS_647004, 31.5842º W, 31.8633º N, 14 Nov. 1980.

Paralepis speciosa Bellotti, 1878 – No common name; Barracudina②, ③

Sudis atrox Rofen, 1963 – Fierce pike smelt; ②

There are records of this species in the south of the Azores, in the PECS area (80 NM west of the Hyères Seamount), MCZ, No. 67382, 30.6166º W, 31.8333º N, 5 Sep. 1973; MCZ, No. 67361, 30.6833º W, 31.7333º N, 6 Sep. 1973.

□ *Sudis hyalina* Rafinesque, 1810 – Barracudina; ①, Barracudina②, ③

□ *Uncisudis longirostra* Maul, 1956 – No common name; ③

Uncisudis quadrimaculata (Post, 1969) – Barracudina; Barracudina②

Family Bathysauridae

Bathysaurus ferox Günther, 1878 – Deep-sea lizardfish; ②③

Bathysaurus mollis Günther, 1878 – No common name; ①③, Lagarto-da-costa or Peixe-lagarto②

Order Myctophiformes
Family Neoscopelidae

□ *Neoscopelus macrolepidotus* Johnson, 1863 – Large-scaled lantern fish; ②, Lanterna-vermelha③

Neoscopelus microchir Matsubara, 1943 – No common name; ①③

Scopelengys tristis Alcock, 1890 – Pacific blackchin; ③

Family Myctophidae

Benthosema glaciale (Reinhardt, 1837) – Glacier lantern fish; Romeirinho①, Divertido, Escolarinho or Lobisomem②, ③

Benthosema suborbitale (Gilbert, 1913) – Smallfin lanternfish; Romeirinho①, Divertido, Escolarinho or Lobisomem②, ③

Bolinichthys indicus (Nafpaktitis & Nafpaktitis, 1969) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, ③

Bolinichthys longipes (Brauer, 1906) – No common name; ③

Brauer (1906) described a new species as *Myctophum* (*Lampanyctus*) *longipes*, caught at 75 NM southeast of Madeira (Valdivia, Stat. 26 – 31º 59.050' N, 15º 5.000'W) during the German Deep-Sea Expedition of the "Valdivia", during 1898-1899. According to Haulley & Duhamel (2009), the type specimen caught near Madeira (*Myctophum longipes* Brauer, 1906, accepted as *B. longipes*) is apparently referable to *B. indicus*. The occurrence of this species in Madeira, however, is questionable.

Bolinichthys photothorax (Parr, 1928) – Spurcheek lanternfish; ③

The species *B. photothorax* is regarded as being present off Madeira (Haulley & Duhamel 2009) (eastern Atlantic between 33ºN-35ºS).

Bolinichthys pyrsobolus (Alcock, 1890) – No common name; ①

Bolinichthys supralateralis (Parr, 1928) – No common name; ②③

Centrobranchus nigroocellatus (Günther, 1873) – No common name; Romeirinho②, ③

□ *Ceratoscopelus maderensis* (Lowe, 1839) – Madeira lantern fish; Peixinho-preto①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

◇□ *Ceratoscopelus warmingii* (Lütken, 1892) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Diaphus adenomus Gilbert, 1905 – No common name; ③

Diaphus bertelseni Nafpaktitis, 1966 – No common name; ①②, Romeirinho③

◇ *Diaphus brachycephalus* Tåning, 1928 – Short-headed lantern fish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

◇□ *Diaphus dumerilii* (Bleeker, 1856) – Lantern fish; Ferreiro①, Divertido, Escolarinho or Lobisomem②, ③

Diaphus effulgens (Goode & Bean, 1896) – Headlight fish; Divertido, Escolarinho or Lobisomem②, ③

Diaphus holti Tåning, 1918 – Small lantern fish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Diaphus lucidus (Goode & Bean, 1896) – No common name; ②, Romeirinho③

There are records of this species to the south of the Azores, in the PECS area (37 NM and 103 NM SSW of the Konstantinov Ridge, 109 NM south of the Marsala Seamount, 43 NM SSW of the Oceanographer Fracture Zone and 58 NM southwest of the Hayes Fracture Zone), SOC, Discovery No. 1022804_85_FIS_214006, 314583º W, 33.0342º N, 1 Nov. 1980; SOC, Discovery No. 1024405_84_FIS_214006, 31.2608º W, 32,8441º N, 21 Nov. 1980; SOC, Discovery No. 1024401_84_FIS_214006, 31.2608º W, 32.8549º N, 20 Nov. 1980; SOC, Discovery No. 1023305_85_FIS_214006, 31.5675º W, 31.8924º N, 14 Nov. 1980; SOC, Discovery No. 827000_8_FIS_214006, 34.3716º W, 32.0575º N, 2 Mar. 1973; MAR-ECO – HamPelFish, No. 34846583, 35.3670º W, 34.3499º N, 28 Apr. 1979; MAR-ECO – HamPelFish, No. 34846582, 35.4830º W, 34.3499º N, 28 Apr. 1979; MAR-ECO – HamPelFish, No. 34846173, 39.4830º W, 33.0670º N, 27 Apr. 1979; ; MAR-ECO – HamPelFish, No. 34846172, 39.5670º W, 33.0169º N, 27 Apr. 1979.

Diaphus luetkeni (Brauer, 1904) – No common name; ②③

The presence of the species *D. luetkeni* is reported off the Azores, in the PECS area (160 NM southwest of the Georgiy Zima Seamount), SOC, Discovery No. 740614_8_FIS_214005, 20.1666º W, 39.9741º N, 3 Oct. 1970.

Diaphus metopoclampus (Cocco, 1829) – Spothead lantern fish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Diaphus mollis Tåning, 1928 – Lanternfish; Divertido, Escolarinho or Lobisomem②, Romeirinho③

Diaphus perspicillatus (Ogilby, 1898) – Transparent lantern fish; ②

There are records of the species *D. perspicillatus* off the Azores, in the PECS area (56 NM southwest of the Hayes Fracture Zone, 40 NM SSW of the Konstatinov Ridge and 41 NM NNE of the Albany Seamount), SOC, Discovery No. 1022825_85_FIS_214015, 31.5567º W, 32.9758º N, 3 Nov. 1980; SOC, Discovery No. 1022826_86_FIS_214015, 31.0141º W, 33.0141º N, 3 Nov. 1980; MAR-ECO – HamPelFish, No. 34847868, 39.4830º W, 33.0670º N, 27 Apr. 1979; MCZ, No. 126609, 36.9333º W, 39.4166º N, 27 Sep. 1964.

* *Diaphus rafinesquii* (Cocco, 1838) – White-spoted lantern fish; Ferreiro①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Diaphus splendidus (Brauer, 1904) – Horned lanternfish; ②

The occurrence of this species is reported off the Azores, in the PECS area (63 NM southwest of the Hayes Fracture Zone), MAR-ECO – HamPelFish, No. 34844386, 39.5670º W, 33.0169º N, 27 Apr. 1979.

Diaphus subtilis Nafpaktitis, 1968 – No common name; ②, Romeirinho③

There are records of the species *D. subtilis* off the Azores, in the PECS area (30 NM SSW of the Konstatinov Ridge and 110 NM south of the Marsala Seamount), SOC, Discovery No. 1023202_85_FIS_214010, 31.6016º W, 33.0525º N, 13 Nov. 1980; SOC, Discovery No. 1023204_84_FIS_214010, 31.5625º W, 32.9842º N, 13 Nov. 1980; SOC, Discovery No. 827000_8_FIS_214010, 34.3716º W, 32.0575º N. 1 Mar. 1973.

Diaphus termophilus Tåning, 1928 – Taaning's lantern fish; ③

Diogenichthys atlanticus (Tåning, 1928) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Electrona risso* (Cocco, 1829) – Electric lantern fish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Gonichthys cocco* (Cocco, 1829) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Hygophum benoiti* (Cocco, 1838) – Benoit´s lantern fish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Hygophum hygomii* (Lütken, 1892) – Bermuda lantern fish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Hygophum macrochir (Günther, 1864) – No common name; ②③

Hygophum reinhardtii (Lütken, 1892) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Hygophum taaningi Becker, 1965 – Lanternfish; Divertido, Escolarinho or Lobisomem②, Romeirinho③

Lampadena anomala Parr, 1928 – Lanternfish; Divertido, Escolarinho or Lobisomem②, ③

Lampadena chavesi Collett, 1905 – Lanternfish; Pirilampo①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Lampadena luminosa (Garman, 1899) – Luminous lanternfish; Pirilampo, ③

Lampadena speculigera Goode & Bean, 1896 – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Lampadena urophaos atlantica* Maul, 1969 – No common name; ②, Romeirinho③

Lampanyctus alatus Goode & Bean, 1896 – No common name; ①②, Romeirinho③

There are records of this species to the south and in the west of the Azores, in the PECS area (Cruiser Tablemount, 40 NM southwest of the Konstantinov Ridge and 70 NM southwest of the Albany Seamount), SOC, Discovery No. 826500_8_FIS_461003, 27.1967º W, 32.0650º N, 27 Feb. 1973; SOC, Discovery No. 1023204_84_FIS_461003, 31.5625º W, 32.9842º N, 13 Nov. 1980; SOC, Discovery No. 1022825_85_FIS_461003, 31.5567º W, 32.9758º N, 3 Nov. 1980; MCZ, No. 113874, -37.6000º W, 37.4833º N, 2 Jul. 1969.

* *Lampanyctus crocodilus* (Risso, 1810) – Jewel lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Lampanyctus festivus Tåning, 1928 – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Lampanyctus intricarius Tåning, 1928 – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Lampanyctus macdonaldi (Goode & Bean, 1896) – No common name; ①②

Lampanyctus photonotus Parr, 1928 – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Lampanyctus pusillus* (Johnson, 1890) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Lepidophanes gaussi (Brauer, 1906) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Lepidophanes guentheri (Goode & Bean, 1896) – Lanternfish; Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Lobianchia dofleini* (Zugmayer, 1911) – Dofleini's lantern fish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Lobianchia gemellarii (Cocco, 1838) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Loweina interrupta* (Tåning, 1928) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②

Loweina rara (Lütken, 1892) – Lanternfish; Divertido, Escolarinho or Lobisomem②, Romeirinho③

Myctophum affine (Lütken, 1892) – Metallic lanternfish; ②

This species is reported off the Azores, in the PECS area (65 NM northeast of the Marsala Seamount), Station 53, 33.0166º W, 34.9833º N (Murray & Hjort 1912).

Myctophum nitidulum Garman, 1899 – Spotted lanterfish; Divertido, Escolarinho or Lobisomem②, Romeirinho③

*□ *Myctophum punctatum* Rafinesque, 1810 – Spotted lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Myctophum selenops Tåning, 1928 – Wisner's lantern fish; ②, Romeirinho③

There are records of *M. selenops* off the Azores, in the PECS area (110 NM northwest of the Atlantis Seamount, 45 NM SSW of the Oceanographer Fracture Zone and 54 NM southwest of the Hayes Fracture Zone), MAR-ECO – HamPelFish, No. 34849353, 31.8829º W, 35.4000º N, 29 Apr. 1979; MAR-ECO – HamPelFish, No. 34849350, 35.4830º W, 34.4830º N, 28 Apr. 1979; MAR-ECO – HamPelFish, No. 34849351, 35.4000º W, 34.3330º N, 28 Apr. 1979; MAR-ECO – HamPelFish, No. 34849352, 35.3670º W, 34.3499º N, 28 Apr. 1979; MNHN, No. 1980-1346, 35.4000º W, 34.3330º N, Apr. 1979; MAR-ECO – HamPelFish, No. 34849349, 39.4830º W, 33.0670º N, 27 Apr. 1979.

Nannobrachium atrum (Tåning, 1928) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Nannobrachium cuprarium (Tåning, 1928) – No common name; ①②, Romeirinho③

Nannobrachium lineatum (Tåning, 1928) – No common name; ①②, Romeirinho③

Nannobrachium nigrum Günther, 1887 – No common name.

The species *N. nigrum* is regarded as being present off Mainland Portugal (occurrence reported at GBIF: ID 350188791). The specimen was caught at 37º32´31.20" N, 12º57´3.60" W and is deposited at Yale University Peabody Museum (catalogue number YPM ICH 004979). According to Zahuranec (2000), *N. nigrum* is found in the tropical Pacific, excluding the Eastern Tropical Pacific Region, throughout the East Indian archipelago as far west as the extreme eastern tropical Indian Ocean. For this reason, the occurrence of *N. nigrum* is very doubtful and the species was not accounted for in the total number of species in the current list.

Notolychnus valdiviae (Brauer, 1904) – No common name; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Notoscopelus bolini* Nafpaktitis, 1975 – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②

Notoscopelus caudispinosus (Johnson, 1863) – Lobisomem; Divertido, Escolarinho or Lobisomem②, Romeirinho③

□ *Notoscopelus elongatus* (Costa, 1844) – No common name; ①

The subspecies *Notoscopelus elongatus kroyeri* (Malm, 1861), reported from the Azores and Madeira, should probably be considered as *Notoscopelus kroyeri* (Malm, 1861). The specimen collected in 1969, at the south coast of Portugal, MNHN 1978-0444, -8.8500º W, 36.4329º N, was identified as *N. elongatus.*

Notoscopelus kroyeri (Malm, 1861) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②, ③

The subspecies *Notoscopelus elongatus kroyeri* (Malm, 1861) is synonymous with the species *N. kroyeri*, it is reported off Madeira, in the PECS area (Josephine Bank), MCZ, No. 104269, -13.3166º W, 36.666º N, 14 Jul. 1972.

□ *Notoscopelus resplendens* (Richardson, 1845) – Patchwork lampfish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Protomyctophum arcticum (Lütken, 1892) – Lanternfish; ①, Divertido, Escolarinho or Lobisomem②

Scopelopsis multipunctatus Brauer, 1906 – No common name; ③

Symbolophorus rufinus (Tåning, 1928) – No common name; ②

S. rufinus is reported from the Azores, in the PECS area (Plato Seamount, 38 NM SSW and 100 NM south of the Konstatinov Ridge), SOC, Discovery No. 1022209_86_FIS_785001, 30.0841º W, 33.1292º N, 1980.10.30; SOC, Discovery No. 1022217_85_FIS_785001, 30.0625º W, 33.0633º N, 31 Oct. 1980; SOC, Discovery No. 1022216_84_FIS_785001, 30.0358º W, 33.0900º N, 31 Oct. 1980; SOC, Discovery No. 1022824_84_FIS_785001, 31.5233º W, 32.9400º N, 3 Nov. 1980; SOC, Discovery No. 1022825_85_FIS_785001, 31.5567º W, 32.9758º N, 3 Nov. 1980; MCZ, No. 103498, 30.6833º W, 31.7333º N, 6 Sep. 1973; SOC, Discovery No. 1023306_86_FIS_785001, 31.5842º W, 31.8633º N, 14 Nov. 1980.

Symbolophorus veranyi (Moreau, 1888) – Large-scale lantern fish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③

Taaningichthys bathyphilus (Tåning, 1928) – No common name; ②, Romeirinho③
Taaningichthys minimus (Tåning, 1928) – No common name; Escolarinho②, Romeirinho③
□ *Taaningichthys paurolychnus* Davy, 1972 – No common name; ②, Romeirinho③

Order Lampriformes
Family Lampridae

*◇ *Lampris guttatus* (Brünnich, 1788) – Opah; Peixe-cravo①②③, Joaninha②

Family Stylephoridae

Stylephorus chordatus Shaw, 1791 – Tube-eye; ②

Family Lophotidae

* *Lophotus lacepede* Giorna, 1809 – Crested oarfish; ①③

Family Radiicephalidae

Radiicephalus elongatus Osório, 1917 – Tapertail; ②③

Family Trachipteridae

Trachipterus arcticus (Brünnich, 1788) – Dealfish; Rei-dos-arrenques①, ②③
* *Trachipterus trachypterus* (Gmelin, 1789) – Mediterranean dealfish; Peixe-tábua①, ②③
◇ *Zu cristatus* (Bonelli, 1819) – Scalloped ribbonfish; ②③

Family Regalecidae

* *Regalecus glesne* Ascanius, 1772 – King of herrings; Relangueiro①, Peixe-real, Regaleco or Rei-dos-arenques②, ③

Order Polymixiiformes
Family Polymixiidae

□ *Polymixia nobilis* Lowe, 1838 – Stout beardfish; Salmonete-do-alto②③

Order Gadiformes
Family Macrouridae

Asthenomacrurus victoris Sazonov & Shcherbachev, 1982 – No common name; ②
Bathygadus favosus Goode & Bean, 1886 – No common name; ①②, Lagartixa-do-mar③
This species is recorded off the Azores, in the PECS area (in the Mid-Atlantic Ridge: 170 NM west of the Sherkis Seamount), MAR-ECO 2004, No. 9832, 29.5359º W, 42.9329º N, 9 Jul. 2004.
Bathygadus melanobranchus Vaillant, 1888 – Vaillant's grenadier; ①, Peixe-rato or Rato②,③
This species is often confused with *B. favosus*. According to Iwamoto (2003), *B. melanobranchus* is most similar to *B. favosus* in its external features, but differs in counts of pyloric caeca (9-12 compared with 16-27 in *B. favosus*).
Cetonurus globiceps (Vaillant, 1884) – Globehead grenadier; ①, Peixe-rato or Rato②, Peixe-lagartixa③
*□ *Caelorinchus caelorincus* (Risso, 1810) – Hollowsnout grenadier; Lagartixa-do-mar①③; Rato-bicudo②, Lagartixa③

Caelorinchus labiatus (Köelher, 1896) – Spearsnouted grenadier; ①, Peixe-rato or Rato②
Caelorinchus occa (Goode & Bean, 1885) – Spear-snouted grenadier; ①, Peixe-rato or rato②
Coryphaenoides armatus (Hector, 1875) – Abyssal grenadier; ①, Peixe-rato or Rato②, Lagartixa-de-natura③
Coryphaenoides asper Günther, 1877 – No common name;
The species *C. asper* is regarded as being present off the Azores (GBIF occurrences). Two specimens are deposited in the fish collections of the Muséum National d'Histoire Naturelle, MNHN No. 2009-0420, 25.4680º W, 39.4180º N, 17 Oct. 1971; MNHN, No. 2009-0419, 25.4680º W, 39.4180º N, 17 Oct. 1971. In 2009 the specimens were re-evaluated and identified as *Coryphaenoides* sp. The occurrences from the Azores are therefore considered as doubtful and the presence of this species off the Azores should not be accepted. For this reason this species is not counted in the present list.
Coryphaenoides brevibarbis (Goode & Bean, 1896) – Shortbeard brenadier; ②
Coryphaenoides carapinus Goode & Bean, 1883 – Carapine grenadier; ①, Peixe-rato or Rato②, ③
Coryphaenoides guentheri (Vaillant, 1888) – Günther's grenadier; ①, Peixe-rato or Rato②
Coryphaenoides leptolepis Günther, 1877 – No common name; ①, Peixe-rato or Rato②
Coryphaenoides mediterraneus (Giglioli, 1893) – Mediterranean grenadier; ①, Peixe-rato or Rato②
Coryphaenoides profundicolus (Nybelin, 1957) – Deepwater grenadier; ①③
□ *Coryphaenoides rudis* Günther, 1878 – Madeira brenadier; ②③
Coryphaenoides rupestris Gunnerus, 1765 – Roundnose grenadier; Lagartixa-da-rocha, ②③
The occurrence of the species *C. rupestris* is reported off Madeira, in the PECS area (Josephine Bank), BMNH, No. 1995.7.25.17, 14.3002º W, 36.7336º N; 11 Apr. 1972; SOC, Discovery No. 785705_210_FIS_119003, 14.5199º W, 36.7824º N, 12 Apr. 1972.
□ *Coryphaenoides thelestomus* Maul, 1951 – Roughlip grenadier; ③
Coryphaenoides zaniophorus (Vaillant, 1888) – Thickbeard grenadier; ①, Peixe-lagartixa③
Echinomacrurus mollis Roule, 1916 – No common name; ③
Gadomus arcuatus (Goode & Bean, 1886) – Doublethread grenadier; ①②
* *Gadomus dispar* (Vaillant, 1888) – No common name; ①②
*□ *Gadomus longifilis* (Goode & Bean, 1885) – Treadfin grenadier; ①, Peixe-rato or Rato②, ③
□ *Hymenocephalus gracilis* Gilbert & Hubbs, 1920 – Graceful grenadier; ②
There are records of *H. gracilis* off the Azores, in the PECS area (Great Meteor Tablemount), SDSC, No. 22989, 28.6399º W, 30.0849º N, 26 Jul. 1967; SDSC, No. 16268, 28.6000º W, 30.0333º N, 1 Jul. 1982; SDSC, No. 9118, 28.6066º W, 29.9633º N, 26 Feb. 1970; SDSC, No. 21253, 28.3316º W, 29.9358º N, 10 Sep. 1998; SDSC, No. 9116, 28.3850º W, 29.9149º N, 8 Sep. 1998; SDSC, No. 22988, 28.3966º W, 29.8366º N, 22 Jul. 1967; SDSC, No. 9117, 28.3816º W, 29.7699º N, 8 Sep. 1998.
* *Hymenocephalus italicus* Giglioli, 1884 – Glasshead grenadier; Lagartixa-prateada①, Peixe-rato or Rato②, ③
*□ *Malacocephalus laevi*s (Lowe, 1843) – Softhead grenadier; Peixe-rato①②, Rato-redondo②, Lagartixa-do-mar③
□ *Nezumia aequalis* (Günther, 1878) – Common Atlantic grenadier; Lagartixa-do-mar①, Rato-redondo②, Lagartixa③
Nezumia bairdii (Goode & Bean, 1877) – Marlin-spike grenadier; ②③
Nezumia longebarbata (Roule & Angel, 1933) – Bluntnose grenadier; Lagartixa-do-mar③
Nezumia sclerorhynchus (Valenciennes, 1838) – Roughtip grenadier; Lagartixa-áspera①, Peixe-rato or Rato②, ③
Odontomacrurus murrayi Norman, 1939 – Roundhead grenadier; Peixe-rato or Rato②, Cobaia③
Paracetonurus flagellicauda (Koefoed, 1927) – No common name; ②
□ *Sphagemacrurus grenadae* (Parr, 1946) – Pugnose grenadier; ①②
The presence of *S. grenadae* is reported from the Azores, in the PECS area, Plateau Seamount (Shcherbachev *et al.* 1985) and Hyeres Seamount (Kukuev 2002), 29.0000º W, 31.0000º N.
Sphagemacrurus hirundo (Collett, 1896) – Swallow grenadier; Peixe-rato or Rato②, ③
Squalogadus modificatus Gilbert & Hubbs, 1916 – No common name; ②

Trachonurus sulcatus (Goode & Bean, 1885) – Bristly grenadier; ①, Lagartixa-negra②
Trachonurus villosus (Günther, 1877) – Bristly grenadier; ①, Peixe-rato or Rato②, ③
* *Trachyrincus scabrus* (Rafinesque, 1810) – Roughsnout grenadier; Peixe-lima①

Family Moridae

Antimora rostrata (Günther, 1878) – Blue antimora; Mora-azul①, ②
Eretmophorus kleinenbergi Giglioli, 1889 – No common name; ②
E. kleinenbergi is reported off the Azores, in the PECS area (Maxwell Fracture Zone), ISH, No. 583-1982, 27.1500º W, 47.8800º N.
*□ *Gadella maraldi* (Risso, 1810) – Gadella; Abrótea-de-natura①③, Gadela②
Guttigadus latifrons (Holt & Byrne, 1908) – No common name; ②
* *Halargyreus johnsonii* Günther, 1862 – Slender codling; ①②, Abrótea-de-natura③
Laemonema robustum Johnson, 1862 – Robust mora; Abrótea or Abrótea-de-natura③
□ *Laemonema yarrellii* (Lowe, 1838) – No common name; ②, Abrótea-de-natura③
The occurrence of *L. yarrellii* is reported from the Azores, in the PECS area (sixteen records in the Great Meteor Tablemount), USNM, No. 304412, 28.5000º W, 29.8330º N, 1970.02.26; SDSC, No. 22998, 28.4966º W, 29.8366º N, 18 Jul. 1967; SDSC, No. 22999, 28.6667º W, 30.0499º N, 25 Jul. 1967; SDSC, No. 16289, 28.2566º W, 29.9733º N, 26 Jun. 1982.
◇ *Lepidion eques* (Günther, 1887) – North Atlantic codling; ②
Bañón *et al.* (2012) discovered that the COI DNA sequencing along with morphological and meristic analyses strongly suggest that there are no specific differences between the Atlantic *Lepidion eques* and the Mediterranean species *L. lepidion* (Risso, 1810). Therefore, they proposed *L. eques* as a junior synonym of *L. lepidion*.
Lepidion guentheri (Giglioli, 1880) – Morid cod; ①, Juliana-pequena②, ③
Lepidion schmidti Svetovidov, 1936 – Schmidt's cod; ②
*□ *Mora moro* (Risso, 1810) – Common mora; Mora①, Escamuda-branca, Melg or Juliana ②, Abrótea-do-alto, Robaldo-branco or Buzia③
Physiculus dalwigki Kaup, 1858 – Black codling; Abrótea-de-natura①, ②③
Rhynchogadus hepaticus (Facciolà, 1884) – No common name; ②

Family Melanonidae

◇ *Melanonus zugmayeri* Norman, 1930 – Arrowtail; ①②③

Family Merlucciidae

□ *Lyconus brachycolus* Holt & Byrne, 1906 – No common name; ①②③
□ *Macruronus maderensis* Maul, 1951 – No common name; ③
*□ *Merluccius merluccius* (Linnaeus, 1758) – European hake; Pescada-branca①, ②③

Family Phycidae

* *Phycis blennoides* (Brünnich, 1768) – Greater forkbeard; Abrótea-do-alto①②③, Abrótea①, Juliana or Melga②
*□ *Phycis phycis* (Linnaeus, 1766) – Forkbeard; Abrótea-da-costa①, Abrótea②③

Family Gadidae

* *Ciliata mustela* (Linnaeus, 1758) – Fivebearded rockling; Laibeque-de-cinco-barbilhos①
*◇ *Gadiculus argenteus argenteus* Guichenot, 1850 – Silvery pout; Badejinho①, ②

* *Gaidropsarus biscayensis* (Collett, 1890) – Mediterranean bigeye rockling; Laibeque-olho-grande①, ③

Gaidropsarus granti (Regan, 1903) – Grant's rockling; Viúva-do-alto or Aranha-do-alto②, ③

□ *Gaidropsarus guttatus* (Collet, 1890) – No common name; Aranha-da-pedra or Viúva②, Abrótea-de-poça③

□ *Gaidropsarus macrophthalmus* (Günther, 1867) – Bigeye rockling; ①

* *Gaidropsarus mediterraneus* (Linnaeus, 1758) – Shore rockling; Laibeque①

* *Gaidropsarus vulgaris* (Cloquet, 1824) – Three-bearded rockling; Laibeque-de-três-barbilhos①, ③

* *Merlangius merlangus* (Linnaeus, 1758) – Whiting; Badejo①

*◇ *Micromesistius poutassou* (Risso, 1827) – Blue whiting; Verdinho①②, Pichelim②

Molva dypterygia (Pennant, 1784) – Blue ling; Donzela-azul①, ②

This species is regarded as being present north of the Azores (Hareide & Garnes 2001), in the PECS area (Mid-Atlantic Ridge, 43º-44ºN).

* *Molva macrophthalma* (Rafinesque, 1810) – Spanish ling; Donzela-do-Mediterrâneo①, Pescada-dos-Açores②

* *Molva molva* (Linnaeus, 1758) – Ling; Maruca①

* *Pollachius pollachius* (Linnaeus, 1758) – Pollack; Juliana①

* *Raniceps raninus* (Linnaeus, 1758) – Tadpole fish; Rainúnculo-negro①

* *Trisopterus luscus* (Linnaeus, 1758) – Bib; Faneca①

* *Trisopterus minutus* (Linnaeus, 1758) – Poor cod; Fanecão①

Order Ophidiiformes
Family Carapidae

*□ *Carapus acus* (Brünnich, 1768) – Pearl fish; ①, Peixe-cobrelo②③

□ *Echiodon dentatus* (Cuvier, 1829) – No common name; ②③

E. dentatus is reported off Madeira (Josephine Bank) and to the south of the Azores (Great Meteor Tablemount), but in all those records the specimens were captured outside their EEZ's, in the PECS area, SDSC, No. 23048, 14.2533º W, 36.7050º N, 2 Jul. 1967; SDSC, No. 23049, 28.4966º W, 29.8366º N, 18 Jul. 1967; SDSC, No. 23050, 28.3966° W, 29.8366° N; 22 Jul. 1967; SDSC, No. 23051, 28.5250º W, 30.0500º N, 25 Jul. 1967; SDSC, No. 9310, 28.3850º W, 29.9149º N, 8 Sep. 1998.

◇ *Echiodon drummondii* Thompson, 1837 – No common name; ②

Family Ophidiidae

Acanthonus armatus Günther, 1878 – No common name; ②

Barathrites iris Zugmayer, 1911 – No common name; ②

Bassozetus compressus (Günther, 1878) – No common name; ①③

Bassozetus levistomatus Machida, 1989 – No common name; ③

B. levistomatus is reported off Madeira, in the PECS area (233 NM WSW of Madeira in the Madeira Plain), BMNH, No. 1991.7.9.859, 21.3183° W, 31.0716° N, 18 Aug. 1990.

Bassozetus taenia (Günther, 1887) – No common name; ③

B. laticeps is reported off Madeira, in the PECS area (220 NM WSW of Madeira in the Madeira Plain), BMNH, No. 1991.7.9.860, 21.3183° W, 31.0716° N, 18 Aug. 1990.

Bathyonus laticeps (Günther, 1878) – No common name; ②③

B. laticeps is reported off the Azores, in the PECS area (85 NM northeast of the Marsala Seamount) (Koefoed 1932), 33.0166º W, 34.9833º N.

◇ *Benthocometes robustus* (Goode & Bean, 1886) – No common name; ①, Abadejo-cometa②

Brotulotaenia brevicauda Cohen, 1974 – No common name; ②

Brotulotaenia crassa Parr, 1934 – No common name; ①②③

Brotulotaenia nigra Parr, 1933 – No common name; ②③

This species is reported from the Azores, in the PECS area (94 NM southwest of the Konstantinov Ridge), SOC, Discovery No. 1023328_86_FIS_078001, 31.5900º W, 32.0316º N, 16 Nov. 1980.

Holcomycteronus squamosus (Roule, 1916) – No common name; ②③

Lamprogrammus niger Alcock, 1891 – No common name; ②

Monomitopus metriostoma (Vaillant, 1888) – No common name; ①②

*□ *Ophidion barbatum* Linnaeus, 1758 – Snake blenny; Peixe-cobrelo①, ③

◇□ *Parophidion vassali* (Risso, 1810) – No common name; ②③

Penopus microphthalmus (Vaillant, 1888) – No common name; ②

Porogadus miles Goode & Bean, 1885 – Slender cuskeel; ②

Spectrunculus crassus (Vaillant, 1888) – No common name; ②

Spectrunculus grandis (Günther, 1877) – Pudgy cuskeel; ①②③

Family Bythitidae

□ *Bellottia apoda* Giglioli, 1883 – No common name; ①②③

This species occurs off the Azores, in the PECS area (Great Meteor Tablemount), SDSC, No. 23047, 28.4966º W, 29.8366º N, 18 Jul. 1967.

Cataetyx alleni (Byrne, 1906) – No common name; ①

□ *Cataetyx laticeps* Koefoed, 1927 – No common name; ②

Grammonus ater (Risso, 1810) – No common name; ②

Family Aphyonidae

Aphyonus gelatinosus Günther, 1878 – No common name; ②

Barathronus multidens Nielsen, 1984 – No common name; ①

Barathronus parfaiti (Vaillant, 1888) – No common name; ②

Meteoria erythrops Nielsen, 1969 – No common name; ②

Nybelinella erikssoni (Nybelin, 1957) – No common name; ①

The species *N. erikssoni* is regarded as being present off the Portuguese mainland EEZ, based on its geographical distribution (Van der Land *et al.* 2001).

Sciadonus galatheae (Nielsen, 1969) – No common name; ②

The species *S. galatheae* is regarded as being present off the coast of Azores (Rannou *et al.* 1974; Nielsen & Møller 2008), MNHN, No. 1973-0033.

Sciadonus pedicellaris Garman, 1899 – No common name; ②

Family Parabrotulidae

Leucobrotula adipata Koefoed, 1952 – No common name; ①②

Parabrotula plagiophthalma Zugmayer, 1911 – No common name; ②③

Order Batrachoidiformes
Family Batrachoididae

* *Halobatrachus didactylus* (Bloch & Schneider, 1801) – Lusitanian toadfish; Charroco or Xarroco①, ③

Order Lophiiformes
Family Lophiidae

* *Lophius budegassa* Spinola, 1807 – Blackbellied angler; Tamboril-sovaco-preto①, ②

* *Lophius piscatorius* Linnaeus, 1758 – Angler; Tamboril①②, Peixe-diabo or Peixe-engana②

Family Antennariidae

Antennarius multiocellatus (Valenciennes, 1837) – Longlure frogfish; ②
□ *Antennarius nummifer* (Cuvier, 1817) – Spotfin frogfish; ②③
□ *Fowlerichthys radiosus* Garman, 1896 – Singlespot frogfish; ②③
◇ *Fowlerichthys senegalensis* Cadenat, 1959 – Senegalese frogfish; ②
Histrio histrio (Linnaeus, 1758) – Sargassumfish; ①②③

Family Chaunacidae

Chaunacops coloratus (Garman, 1899) – No common name; ②
This species occurs off the Azores, in the PECS area (68 NM west of the Oceanographer Fracture Zone), MNHN, No. 1996-0225, 36.3670º W, 34.8170º N, 2 Sep. 1995.
Chaunacops roseus (Barbour, 1941) – No common name; ②
*◇□ *Chaunax pictus* Lowe, 1846 – No common name; Sapo-mole①, ②③
Chaunax suttkusi Caruso, 1989 – No common name; ②

Family Caulophrynidae

Caulophryne jordani Goode & Bean, 1896 – No common name; ②
The species *C. jordani* is regarded as being present to the southwest of Madeira (Bertelsen, E. *in* Whitehead *et al.* 1986), but was caught outside the EEZ and outside the proposed extension of the Portuguese continental shelf.
Caulophryne polynema Regan, 1930 – No common name; ②③

Family Neoceratiidae

Neoceratias spinifer Pappenheim, 1914 – No common name; ②
There is a record of this species from off the Azores, in the PECS area (81 NM northeast of the Marsala Seamount), 33.0166º W, 34.9833º N (Koefoed 1932).

Family Melanocetidae

Melanocetus johnsonii Günther, 1864 – Humpback anglerfish; ①②③
Melanocetus murrayi Günther, 1887 – No common name; ②③

Family Himantolophidae

□ *Himantolophus albinares* Maul, 1961 – No common name; ②, Farol③
H. albinares occurs off the Azores, in the PECS area (45 NM southwest of the Oceanographer Fracture Zone), MAR-ECO – HamPelFish, No. 34850546, 35.4830º W, 34.3499º N, 28 Apr. 1979.
Himantolophus brevirostris (Regan, 1925) – No common name; ②
Himantolophus compressus (Osório, 1912) – No common name; ①③
*□ *Himantolophus groenlandicus* Reinhardt, 1837 – No common name; Peixe-de-farol①, ②③
□ *Himantolophus mauli* Bertelsen & Krefft, 1988 – No common name; ③

Family Diceratiidae

Bufoceratias wedli (Pietschmann, 1926) – No common name; ①③

Family Oneirodidae

Chaenophryne draco Beebe, 1932 – Smooth dreamer; ①②③

Chaenophryne longiceps Regan, 1925 – No common name; ②③
Chaenophryne ramifera Regan & Trewavas, 1932 – No common name; ②
Ctenochirichthys longimanus Regan & Trewavas, 1932 – No common name; ③
Dolopichthys allector Garman, 1899 – No common name; ②③
A single specimen was observed to the northeast of the Azores, in the PECS area (64 NM NNW of the Kings Trough), MAR-ECO – HamPelFish, No. 34848312, 22.2670º W, 44.9000º N, 3 May 1979.
Dolopichthys danae Regan, 1926 – No common name; ③
Dolopichthys jubatus Regan & Trewavas, 1932 – No common name; ②③
Dolopichthys karsteni Leipertz & Pietsch, 1987 – No common name; ①②③
This species occurs off the Azores, in the PECS area (156 NM southwest of the Altair Seamount), MCZ, No. 149624, 35.5950º W, 42.0950º N, 3 Jul. 1978.
Dolopichthys longicornis Parr, 1927 – No common name; ②
Dolopichthys pullatus Regan & Trewavas, 1932 – No common name; ②
D. pullatus is recorded off the Azores, in the PECS area (25 NM WNW of the Sherkis Seamount and 108 NM SSW of the Olympus Knoll), MAR-ECO – HamPelFish, No. 34848316, 26.2469º W, 43.2420º N, 9 Jun. 1982; MAR-ECO – HamPelFish, No. 34848317, 28.4419º W, 43.6969º N, 10 Jun. 1982.
Leptacanthichthys gracilispinis (Regan, 1925) – No common name; ②③
Lophodolos acanthognathus Regan, 1925 – No common name; ①②
Microlophichthys microlophus (Regan, 1925) – No common name; ②③
Oneirodes anisacanthus (Regan, 1925) – No common name; ③
Oneirodes clarkei Swinney & Pietsch, 1988 – No common name; ③
Oneirodes eschrichtii Lütken, 1871 – Bulbous dreamtail; ①②③
Oneirodes macronema (Regan & Trewavas, 1932) – No common name; ②
Oneirodes macrosteus Pietsch, 1974 – No common name; ②
Oneirodes myrionemus Pietsch, 1974 – No common name; ③
Oneirodes posti Bertelsen & Grobecker, 1980 – No common name; ②
This species occurs off the Azores, in the PECS area (114 NM south of the Lucky Strike Seamount), MAR-ECO – HamPelFish, No. 34843589, 32.0169º W, 35.4000º N, 29 Apr. 1979.
Pentherichthys venustus (Regan & Trewavas, 1932) – No common name; ③
Phyllorhinichthys micractis Pietsch, 1969 – No common name; ②
Puck pinnata Pietsch, 1978 – No common name; ②
This species occurs off the Azores, in the PECS area (107 NM northwest of the Atlantis Seamount), MAR-ECO – HamPelFish, No. 34849869, 32.0169º W, 35.4000º N, 29 Apr. 1979.
Spiniphryne gladisfenae (Beebe, 1932) – No common name; ②

Family Thaumatichthyidae

Lasiognathus amphirhamphus Piestsch, 2005 – No common name; ②
The species *L. amphirhamphus* (Holotype – BMNH 2003.11.16.12, 29.8450º W, 32.3700º N) is regarded as being present on the Madeira Abyssal Plain (Pietsch 2005) off the southwest coast of Madeira Island, but the geographic coordinates of the occurrence is off the Azores, in the PECS area (54 NM southwest of the Plato Seamount).
Lasiognathus beebei Regan & Trewavas, 1932 – No common name; ③
□ *Lasiognathus saccostoma* Regan, 1925 – No common name; ②③

Family Centrophrynidae

Centrophryne spinulosa Regan & Trewavas, 1932 – Horned lantern fish; ③

Family Ceratiidae

Ceratias holboelli Krøyer, 1845 – Kroyer's deep sea anglerfish; ②

Cryptopsaras couesii Gill, 1883 – Triplewart seadevil; ②③

Family Gigantactinidae

Gigantactis ios Bertelsen, Pietsch & Lavenberg, 1981 – No common name; ③
Gigantactis vanhoeffeni Brauer, 1902 – No common name; ②

Family Linophrynidae

Haplophryne mollis (Brauer, 1902) – No common name; ②③
Linophryne arcturi (Beebe, 1926) – No common name; ③
Linophryne brevibarbata Beebe, 1932 – No common name; ②③
Linophryne lucifer Collett, 1886 – No common name; ③
Linophryne macrodon Regan, 1925 – No common name; ②
□ *Linophryne maderensis* Maul, 1961 – No common name; ③
□ *Linophryne polypogon* Regan, 1925 – No common name; ③
Linophryne racemifera Regan & Trewavas, 1932 – No common name; ③
Linophryne sexfilis Bertelsen, 1973 – No common name; ③
Photocorynus spiniceps Regan, 1925 – No common name; ③

Order Mugiliformes
Family Mugilidae

□ *Chelon labrosus* (Risso, 1827) – Thicklip grey mullet; Tainha-liça①, Tainha①②③, Mugem②③, Muja②③, Muge③
*□ *Liza aurata* (Risso, 1810) – Golden grey mullet; Tainha-garrento①②③, Tainha or Tainha-amarela②③, Muge or Mugem③
* *Liza ramada* (Risso, 1827) – Thinlip grey mullet; Tainha-fataça①, Tainha②, Muge③
Wirtz *et al.* (2008) mention the need to find a specimen to confirm its presence at Madeira.
* *Liza saliens* (Risso, 1810) – Leaping mullet; Tainha-de-salto①
*□ *Mugil cephalus* Linnaeus, 1758 – Flathead grey mullet; Tainha-olhalvo①, Tainha③
Wirtz *et al.* (2008) consider this a very doubtful record for Madeira.
Oedalechilus labeo (Cuvier, 1829) – Boxlip mullet; Tainha-sabão, ③

Order Atheriniformes
Family Atherinidae

* *Atherina boyeri* Risso, 1810 – Big-scale sand smelt; Peixe-rei-do-Mediterrâneo①, Peixe-rei or Piarda①③
The presence of *A. boyeri* off Madeira seems very doubtful (Wirtz *et al*. 2008).
□ *Atherina hepsetus* Linnaeus, 1758 – Mediterranean sand smelt; Peixe-rei-do-alto①③, Guelro③
*□ *Atherina presbyter* Cuvier, 1829 – Sand smelt; Peixe-rei①, ②, Guelro③

Order Beloniformes
Family Exocoetidae

Cheilopogon cyanopterus (Valenciennes, 1847) – Margined flyingfish; ①
Cheilopogon exsiliens (Linnaeus, 1771) – Flying fish; ①, Peixe-voador②, ③
□ *Cheilopogon furcatus* (Mitchill, 1815) – Spotfin flyingfish; Peixe-voador or Voador②③
* *Cheilopogon heterurus* (Rafinesque, 1810) – Mediterranean flyingfish; Peixe-voador①, ③

*□ *Cheilopogon pinnatibarbatus pinnatibarbatus* (Bennett, 1831) – Bennett's flyingfish; Peixe-voador①②, ③
□ *Exocoetus obtusirostris* Günther, 1866 – Oceanic two-wing flyingfish; ①, Peixe-voador②, ③
□ *Exocoetus volitans* Linnaeus, 1758 – Tropical two-wing flyingfish; Peixe-voador, ②, Voador③
*□ *Hirundichthys rondeletii* (Valenciennes, 1847) – Black wing flyingfish; ①②③
Hirundichthys speculiger (Valenciennes, 1847) – Mirrorwing flyingfish; ③

Family Hemiramphidae

□ *Hemiramphus balao* Lesueur, 1821 – Balao halfbeak; ③

Family Belonidae

*□ *Belone belone* (Linnaeus, 1761) – Garfish; Agulha①③, Peixe-agulha①②, Agulha②
Belone svetovidovi Collette & Parin, 1970 – Short-beaked garfish; Agulha①
Platybelone argalus argalus (Lesueur, 1821) – Keeltail needlefish; Peixe-agulha②
Tylosurus acus acus (Lacepède, 1803) – Agujon needlefish; Peixe-agulha②, Agulha③
Strongylura acus is a synomym of *T. acus acus*. Albuquerque (1954–1956) considered the presence of *T. acus acus* off Madeira as very doubtful. Santos *et al*. (1997) wrote that the identity of the species and its synonyms for the Azores needed further confirmation.

Family Scomberesocidae

*□ *Scomberesox saurus saurus* (Walbaum, 1792) – Atlantic saury; Agulhão①②, Ratinho-do-alto②, Ratinho or Catutinho③
Scomberesox simulans (Hubbs & Wisner, 1980) – Dwarf saury; ①②③

Order Stephanoberyciformes
Family Melamphaidae

Melamphaes indicus Ebeling, 1962 – No common name; ③
Melamphaes falsidicus Kotlyar, 2011 – No common name; ②③
Kotlyar **(**2011) described the species *M. falsidicus* from the northern Atlantic Ocean, where it was sampled between 34º N and 58º N. According to Kotlyar (2011), this species was previously defined as *Melamphaes microps* (Günther, 1878), which is probably a variant of *M. falsidicus*. The records of the species *M. microps* off the Azores and in Madeira should probably be considered as *M. falsidicus*.
Melamphaes polylepis Ebeling, 1962 – No common name; ②
The species *M. polylepis* was recorded off the Azores, in the PECS area (10 NM north of the Maxwell Fracture Zone and 15 NM NNW of the Olympus Knoll), MAR-ECO – HamPelFish, No. 34850193, 27.8029º W, 45.6669º N, 11 Jun. 1982; MAR-ECO – HamPelFish, No. 34850194, 27.1369º W, 47.8720º N, 13 Jun. 1982. Kotlyar (2011) indicated that the Atlantic population of this species is isolated from the Indian-Pacific region, and the comparative analysis of specimens sampled in different geographical regions would be quite interesting, allowing a reliable species definition.
□ *Melamphaes longivelis* Parr, 1933 – Ridgehead; ②③
Melamphaes pumilus Ebeling, 1962 – No common name; ②
This species occurs off the Azores, in the PECS area (118 NM southeast of the Cruiser Tablemount), SOC, Discovery No. 1126123_85_FIS_516001, 25.3408º W, 31.4258º N, 29 Jun. 1985.
Melamphaes simus Ebeling, 1962 – Ridgehead; ①②③
□ *Melamphaes suborbitalis* (Gill, 1883) – Ridgehead; ①, Peixe-rã②③
Melamphaes typhlops (Lowe, 1843) – Ridgehead; Peixe-rã①②③
*□ *Poromitra capito* Goode & Bean, 1883 – Ridgehead; Peixe-rã①②③
Poromitra crassiceps (Günther, 1878) – Crested bigscale; ②③

Poromitra megalops (Lütken, 1878) – Ridgehead; ①②
This species occurs off the Portuguese mainland, in the PECS area (50 NM SSW of the Almeida Carvalho Seamount), SOC, Discovery No. 1103601_84_FIS_658002, 14.9616º W, 39.4000º N, 1 Apr. 1984.
Poromitra nigriceps (Zugmayer, 1911) – No common name; ①②
Scopeloberyx opisthopterus (Parr, 1933) – Ridgehead; ①②③
Scopeloberyx robustus (Günther, 1887) – Ridgehead; Peixe-rã①②, ③
Scopeloberyx rubriventer (Koefoed, 1953) – Ridgehead; ②
Scopelogadus beanii (Günther, 1887) – Ridgehead; ②③
Scopelogadus mizolepis mizolepis (Günther, 1878) – Bigscale; ②

Family Stephanoberycidae

Acanthochaenus luetkenii Gill, 1884 – Prickdefish; ②

Family Rondeletiidae

Rondeletia bicolor Goode & Bean, 1895 – No common name; ②
This species occurs off the Azores, in the PECS area (60 NM WNW of the Marsala Seamount), MCZ, No. 62168, 36.4483º W, 34.9350º N, 27 Aug. 1984.
Rondeletia loricata Abe & Hotta, 1963 – Redmouth whalefish; ②③

Family Cetomimidae

Cetichthys indagator (Rofen, 1959) – No common name; ③
Cetomimus gillii Goode & Bean, 1895 – No common name; ②
This species occurs off the Azores, in the PECS area (60 NM WNW of the Marsala Seamount), MAR-ECO – HamPelFish, No. 34847825, 35.4830º W, 34.3499º N, 28 Apr. 1979.
□ *Cetomimus hempeli* Maul, 1969 – Whalefish; ③
Cetostoma regani Zugmayer, 1914 – Pink flabby whalefish; ①②③
Ditropichthys storeri (Goode & Bean, 1895) – No common name; ②
The species *D. storeri* is reported to occur off the Azores, in the PECS area (107 NM southeast of the Cruiser Tablemount), SOC, Discovery No. 1126166_84_FIS_222001, 25.4324º W, 31.5229º N, 7 Jul. 1985.
Gyrinomimus myersi Parr, 1934 – No common name; ②
Procetichthys kreffti Paxton, 1989 – No common name; ②
The presence of the species *P. kreffti* is reported off the Azores, in the PECS area (95 NM northwest of the Maxwell Fracture Zone), MAR-ECO 2004, No. 7023, 29.5709º W, 48.0029º N, 25 Jun. 2004.

Family Mirapinnidae

Eutaeniophorus festivus (Bertelsen & Marshall, 1956) – Festive ribbonfish; ②③
This species is recorded off the Azores, in the PECS area (126 NM east of the Hyeres Seamount), SOC, Discovery No. 1126173_84_FIS_262001, 25.3366º W, 31.0083º N, 7 Jul. 1985.
Mirapinna esau Bertelsen & Marshall, 1956 – Hairyfish; ②
Parataeniophorus gulosus Bertelsen & Marshall, 1956 – No common name; ①②③

Family Megalomycteridae

Ataxolepis apus Myers & Freihofer, 1966 – No common name; ②

Order Beryciformes
Family Anoplogasteridae

□ *Anoplogaster cornuta* (Valenciennes, 1833) – Common fangtooth; ①②③

Family Diretmidae

Diretmichthys parini (Post & Quéro, 1981) – Parin's spinyfish; ②③
* *Diretmus argenteus* Johnson, 1864 – Silver spinyfin; ①②③

Family Trachichthyidae

Gephyroberyx darwinii (Johnson, 1866) – Darwin's slimehead; ②, Imperatriz or Peixe-vidro③
Hoplostethus atlanticus Collett, 1889 – Orange roughy; Olho-de-vidro-laranja①, Olho-de-vidro or Relógio②
Hoplostethus cadenati Quéro, 1974 – Black slimehead; Olho-de-vidro-preto①
*□ *Hoplostethus mediterraneus mediterraneus* Cuvier, 1829 – Mediterranean slimehead; Olho-de-vidro①②, Relógio②, Alfonsim-do-alto③

Family Berycidae

*□ *Beryx decadactylus* Cuvier, 1829 – Alfonsino; Imperador①②, Alfonsim②, Alfonsim-da-costa-larga③
*□ *Beryx splendens* Lowe, 1834 – Splendid alfonsino; Imperador-de-costa-estreita①, Alfonsim②, Alfonsim-da-costa-estreita③

Family Holocentridae

Sargocentron hastatum (Cuvier, 1829) – Red squirrelfish; Esquilo-real①

Order Zeiformes
Family Oreosomatidae

Allocyttus verrucosus (Gilchrist, 1906) – Warty dory; ②
The species *A. verrucosus* has been reported from the north of the Azores (Hareide & Garnes 2001), in the PECS area (Mid-Atlantic Ridge, 43º-44º N).
□ *Neocyttus helgae* (Holt & Byrne, 1908) – False boarfish, ②③
Neocyttus rhomboidalis Gilchrist, 1906 – Spiky oreo; ③
Albuquerque (1954–1956) mentioned the capture of a specimen to the north of Madeira (Maul 1948c, 1949), identified as *N. rhomboidalis*. Nevertheless, this specimen is distinct from the other specimens named by other authors. In the North Atlantic, *N. rhomboidalis* is replaced by *N. helgae*, ranging southward to Madeira. The possible occurrence of *N. rhomboidalis* in this area, as reported by Quéro (1982), seems doubtful.

Family Parazenidae

*□ *Cyttopsis rosea* (Lowe, 1843) – Rosy dory; Galo-de-natura①②, Peixe-galo②③, Peixe-galo-de-natura③

Family Zeniontidae (Zenionidae)

* *Zenion hololepis* (Goode & Bean, 1896) – No common name; Galito-rosado①

Family Grammicolepididae

* *Grammicolepis brachiusculus* Poey, 1873 – Thorny tinselfish; ①②

Family Zeidae

*◇□ *Zenopsis conchifer* (Lowe, 1852) – Silvery John dory; Galo-branco①②, Peixe-galo②, Peixe-galo-de-natura③

*□ *Zeus faber* Linnaeus, 1758 – John dory; Galo-negro①, Peixe-galo①②③

Order Gasterosteiformes
Family Gasterosteidae

* *Gasterosteus aculeatus aculeatus* Linnaeus, 1758 – Three-spined stickleback; Esgana-gata①

* *Spinachia spinachia* (Linnaeus, 1758) – Sea stickleback; Esgana-gata-marinha①

Family Syngnathidae

* *Entelurus aequoreus* (Linnaeus, 1758) – Snake pipefish; Cavalo-marinho①②

◇ *Hippocampus erectus* Perry, 1810 – Lined seahorse; Cavalo-marinho ②

* *Hippocampus guttulatus* Cuvier, 1829 – Long-snouted seahorse; ①, Cavalo-marinho②③, Cavalinho-do-mar③

*◇□ *Hippocampus hippocampus* (Linnaeus, 1758) – Short-snouted seahorse; Cavalo-marinho①②③

* *Nerophis lumbriciformis* (Jenyns, 1835) – Worm pipefish; Marinha①, ②
The species *N. lumbriciformis* is regarded as being present off the Azores (records in OBIS). The specimen was caught outside the EEZ (155 NM southwest of the Georgiy Zima Seamount) and is deposited in the Muséum National d'Histoire Naturelle at Paris, MNHN, No. 0000–6074, 20.0º W, 40.0º N. This appears to be a very doubtful record, which needs confirmation.
Nerophis maculatus Rafinesque, 1810 – No common name; Cavalo-marinho①, ②

*□ *Nerophis ophidion* (Linnaeus, 1758) – Straightnosed pipefish; Cavalo-marinho①, ③

* *Syngnathus abaster* Risso, 1827 – Black-striped pipefish; ①②
The species *S. abaster* is regarded as being present off the Azores (records in OBIS). The specimen was caught outside the EEZ (155 NM southwest of the Georgiy Zima Seamount) and is deposited in Muséum National d'Histoire Naturelle at Paris, MNHN, No. 1955–0044, 20.0º W, 40.0º N. This appears to be a very doubtful record, which needs confirmation.

*□ *Syngnathus acus* Linnaeus, 1758 – Great pipefish; Marinha-comum①②, Chicote②, Agulhinha③
Syngnathus pelagicus Linnaeus, 1758 – No common name; ②
This species was recorded from the Azores, in the PECS area (50 NM north and 87 NM west of the Atlantis Seamount, 45 NM to the northwest of the Konstantinov Ridge), ZMUC, No. 310, 30.0º W, 35.0º N; ZMUC, No. 312, 30.0º W, 35.0º N; ZMUC, No. 357, 34.4200º W, 32.2700º N; ZMUC, No. 381, 32.0º W, 34.0º N; ZMUC, No. 384, 32.0º W, 39.0º N.
Syngnathus phlegon Risso, 1827 – No common name; ①

* *Syngnathus rostellatus* Nilsson, 1855 – Nilsson's pipefish; Marinha-cabeça-chata①

* *Syngnathus typhl*e Linnaeus, 1758 – Deep-snouted pipefish; Marinha-focinho-grosso①

Family Aulostomidae

□ *Aulostomus strigosus* Wheeler, 1955 – Atlantic cornetfish; Trombeta③

Family Fistulariidae

*◇□ *Fistularia petimba* Lacepède, 1803 – Red cornetfish; Corneta-rosada①, ②
New record for the Portuguese mainland waters, the first specimen of *F. petimba* (Fig. 3) (1150 mm TL and 555 g) was caught by fishermen from Sesimbra, using trammel nets (100 mm mesh size, at lint), at a depth of 48 m, on the 22th of January 2008 (38º 27.096' N, 9º 14.284' W).
Fistularia tabacaria Linnaeus, 1758 – Cornetfish; Corneta-malhada, ②

Fig. 3. *Fistularia petimba* Lacepède, 1803.

Family Macroramphosidae

*□ *Macroramphosus gracilis* (Lowe, 1839) – Slender snipefish; Trombeteiro①②③
*□ *Macroramphosus scolopax* (Linnaeus, 1758) – Longspine snipefish; Trombeteiro①②③, Peixe-trombeteiro②
Robalo *et al.* (2009) suggested that the genus *Macroramphosus* is represented by a single species in the northeastern Atlantic, *M. scolopax,* with different morphotypes interbreeding off the central and southwestern Portuguese coast. Dyer & Westneat (2010) indicated the distribution of the species *M. gracilis* as being the western Central Atlantic and this species seems to be sympatric with *M. scolopax*, all around the world.

Order Scorpaeniformes
Family Dactylopteridae

* *Dactylopterus volitans* (Linnaeus, 1758) – Flying gurnard; Cabrinha-de-leque①, ②③
Wirtz *el al*. (2008) considered this as a doubtful record for Madeira.

Family Scorpaenidae

*□ *Helicolenus dactylopterus dactylopterus* (Delaroche, 1809) – Blackbelly rosefish; Cantarilho-legítimo①, Boca-negra②③
Phenacoscorpius nebris Eschmeyer, 1965 – No common name; ③
This species is recorded off Madeira, in the PECS area (Josephine Bank), SDSC, No. 16587, 14.2266º W, 36.7183º N.
*□ *Pontinus kuhlii* (Bowdich, 1825) – Offshore rockfish; Cantarilho-requeime①, Brage, Cantarilho or Cântaro②, Requeme or Vermelho③
Scorpaena azorica Eschmeyer, 1969 – No common name; ②
□ *Scorpaena canariensis* (Sauvage, 1878) – No common name; ②③
* *Scorpaena elongata* Cadenat, 1943 – Slender rockfish; Rascasso-rosado①
Scorpaena laevis Troschel, 1866 – Senegalese rockfish; ②③
□ *Scorpaena loppei* Cadenat, 1943 – Cadenat's rockfish; ①②③

S. loppei occurs off the Azores (Great Meteor Tablemount) and off Madeira (Josephine Bank), in the PECS area, SDSC, No. 23054, 28.4966º W, 29.8366º N; SDSC, No. 23056, 28.5250º W, 30.0500º N; SDSC, No. 23055, 28.4000º W, 30.0183º N; SDSC, No. 23052, 14.2533º W, 36.7050º N; SDSC, No. 23053, 14.2916º W, 36.6700º N.

□ *Scorpaena maderensis* Valenciennes, 1833 – Madeira rockfish; ①, Rascasso or Coça②, Rocaz③

*□ *Scorpaena notata* Rafinesque, 1810 – Small red scorpionfish; Rascasso-escorpião①, Rascasso or Coça②, ③

Scorpaena plumieri Bloch, 1789 – Pacific spotted scorpionfish; ②③

* *Scorpaena porcus* Linnaeus, 1758 – Black scorpionfish; Rascasso-de-pintas①, Rascasso or Coça②, ③

*□ *Scorpaena scrofa* Linnaeus, 1758 – Red scorpionfish; Rascasso-vermelho①, Rocaz②, Palhaço or Peixe-carneiro③

Scorpaena stephanica Cadenat, 1943 – Spotted-fin rockfish; ③

This species occurs off Madeira, in the PECS area (Josephine Bank), SOC, Discovery No. 785703_210_FIS_766003, 14.3033º W, 36.7391º N, 11 Apr. 1972.

◇ *Scorpaenodes arenai* Torchio, 1962 – No common name; ②

*□ *Setarches guentheri* Johnson, 1862 – Channeled rockfish; ①②, Requeme-de-natura③

Trachyscorpia cristulata cristulata (Goode & Bean, 1896) – Atlantic thornyhead; ①

◇□ *Trachyscorpia cristulata echinata* (Köhler, 1896) – Spiny scorpionfish, ①②③

Family Triglidae

*□ *Chelidonichthys cuculus* (Linnaeus, 1758) – Red gurnard; Cabra-vermelha①, Cabra②③, Cabrinha or Ruivo②

*□ *Chelidonichthys lucerna* (Linnaeus, 1758) – Tub gurnard; Cabra-cabaço①, ③

*□ *Chelidonichthys obscurus* (Walbaum, 1792) – Longfin gurnard; Cabra-de-bandeira①, ②③

*□ *Eutrigla gurnardus* (Linnaeus, 1758) – Grey gurnard; Cabra-morena①, ③

* *Lepidotrigla cavillone* (Lacepède, 1801) – Large-scaled gurnard; Ruivo①

* *Lepidotrigla dieuzeidei* Blanc & Hureau, 1973 – Spiny gurnard; Ruivo-espinhoso①

*□ *Trigla lyra* Linnaeus, 1758 – Piper gurnard; Cabra-lira①, Cabra③

Santos *et al.* (1997) indicated that the record of *T. lyra* from the Azores is based on a probable misidentification of *Chelidonichthys cuculus* (Linnaeus, 1758) by Sampaio (1904). The presence of this species off the Azores needs further documentation.

*□ *Trigloporus lastoviza* (Bonnaterre, 1788) – Straked gurnard; Cabra-riscada①, ②, Cabrinha or Cabra③

Family Peristediidae

* *Peristedion cataphractum* (Linnaeus, 1758) – African armoured searobin; Cabra-de-casca①, ②③

Family Cottidae

Myoxocephalus scorpius (Linnaeus, 1758) – Shorthorn sculpin; Escorpião①

Nobre (1935) and Albuquerque (1954–1956) indicated the presence of this species off the Portuguese mainland, considering it as rare.

* *Taurulus bubalis* (Euphrasen, 1786) – Longspined bullhead; Escorpião-roco①

Family Psychrolutidae

Cottunculus thomsonii (Günther, 1882) – Pallid sculpin; ①

Family Cyclopteridae

Cyclopterus lumpus Linnaeus, 1758 – Lumpfish; Peixe-lapa①
Eumicrotremus spinosus (Fabricius, 1776) – Atlantic spiny lumpsucker; ②

Family Liparidae

Paraliparis copei copei Goode & Bean, 1896 – No common name; ②
Paraliparis membranaceus Günther, 1887 – No common name
The holotype of *P. membranaceus* was caught on the 10th of January 1876, off Cabo San Vicente, Sarmiento Channel, Chile, BMNH 1887.12.7.20, "Challenger" Sta. 310, 74.0500º W, 51.4583º S. According to Stein (2005), information on the collection area was obscure but unequivocal (Murray 1895). Over time, erroneous reports of the occurrence of *P. membranaceus* accumulated in literature. In fact, Günther's (1887) description omitted mentioning that it was from Chile ("... off Cape St. Vincent, Station 310 ..."). Subsequent authors did not verify the actual collection data, and even the Natural History Museum online catalogue included incorrect collection data that have subsequently been corrected (Stein 2005). Burke (1930) also omitted the information that the specimen was from the fjord waters of southern Chile, and Nobre (1935) and Albuquerque (1954–1956) referred to Günther and Burke. Still later, Lindberg (1973) misinterpreted "Cape St. Vincent" as meaning "off Portugal", i.e. the Cape St. Vincent, which is the best known geographic feature of the south coast of Portugal. Stein & Able (1986) cited Lindberg. The species *P. membranaceus* was omitted from the reviews of Chilean liparids (Stein *et al.* 1991) and of Southern Ocean species (Andriashev 1998, 2003). The *P. membranaceus* record off mainland Portugal is erroneous. For this reason this species is not included in this list.
Paraliparis nigellus Chernova & Møller, 2008 – No common name; ②

Order Perciformes
Family Howellidae

Prokofiev (2006) suggested that *Howella*, *Pseudohowella* and *Bathysphyraenops* should be placed in the family Howellidae, which contains three genera from the Percichthyidae and the Acropomatidae. Prokofiev (2007a,b) discussed the systematic position of the genus *Howella* and revised the diagnosis of the family Howellidae. According to Eschmeyer (2013), the family contains nine valid species.

Bathysphyraenops simplex Parr, 1933 – No common name; ①
Howella atlantica Post & Quéro, 1991 - No common name; ①②③
Post & Quéro (1991) reviewed the species *Howella brodiei* Ogilby, 1899, and demonstrated the existence of two subspecies: *H. brodiei atlantica* (Post & Quéro, 1991) from the North and tropical Atlantic and *H. brodiei brodiei* Ogilby, 1899 from the Indian and Pacific Oceans. The authors also showed that the number of scales between the origin of the second dorsal fin and the lateral line separates the Atlantic populations of *Howella* into two different species: *Howella brodiei atlantica* and *Howella sherborni* (Norman, 1930). Eschmeyer (2013) raised the subspecies *Howella brodiei atlantica* (Post & Quéro, 1991) to species level: *Howella atlantica* (Post & Quéro, 1991). The records of *H. brodiei* in the northeast Atlantic should probably be considered as belonging to *H. atlantica*.
□ *Howella sherborni* (Norman, 1930) – No common name; ②③
This species occurs off the Azores, in the PECS area (72 NM southwest of the Albany Seamount).

Family Moronidae

* *Dicentrarchus labrax* (Linnaeus, 1758) – European seabass; Robalo-legítimo or Robalo①
* *Dicentrarchus punctatus* (Bloch, 1792) – Spotted seabass; Robalo-baila or Baila①

Family Polyprionidae

*□ *Polyprion americanus* (Bloch & Schneider, 1801) – Wreckfish; Cherne①②③

Family Serranidae

*□ *Anthias anthias* (Linnaeus, 1758) – Swallowtail seaperch; Canário-do-mar①②, Folião or Piriquito②, Castanheta-do-alto or Imperador③
Epinephelus aeneus (Geoffroy Saint-Hilaire, 1817) – White grouper; Garoupa-legítima①
Epinephelus caninus (Valenciennes, 1843) – Dogtooth grouper; Mero-gigante①
Epinephelus costae (Steindachner, 1878) – Goldblotch grouper; ①
*□ *Epinephelus marginatus* (Lowe, 1834) – Dusky grouper; Mero①②③
□ *Mycteroperca fusca* (Lowe, 1838) – Island grouper; Badejo②③
Mycteroperca phenax Jordan & Swain, 1884 – Scamp; ②
Mycteroperca rubra (Bloch, 1793) – Mottled grouper; Garoupa-chumbo①
*□ *Serranus atricauda* Günther, 1874 – Blacktail comber; Serrano-de-rolo①, Garoupa②③
*□ *Serranus cabrilla* (Linnaeus, 1758) – Comber; Serrano-alecrim①, Garoupa-do-alto②, Garoupa③
* *Serranus hepatus* (Linnaeus, 1758) – Brown comber; Serrano-ferreiro①
Serranus scriba (Linnaeus, 1758) – Painted comber; Serrano-riscado①, ②③

Family Callanthiidae

*◇□ *Callanthias ruber* (Rafinesque, 1810) – Parrot seaperch; Canarinho-do-mar①, Papagaio②, Castanheta-amarela-do-alto②③

Family Priacanthidae

◇ *Cookeolus japonicus* (Cuvier, 1829) – Longfinned bullseye; ②
□ *Heteropriacanthus cruentatus* (Lacepède, 1801) – Glasseye; Fura-vasos-da-rocha, Fura-vasos③
◇ *Priacanthus arenatus* Cuvier, 1829 –Atlantic bigeye; Fura-vasos-vulgar or Catalufa②, ③

Family Apogonidae

□ *Apogon imberbis* (Linnaeus, 1758) – Cardinal fish; Alcarraz①②, Folião or Cardeal②, Alfonsinho-da-Costa or Alcaraz③

Family Epigonidae

Epigonus constanciae (Giglioli, 1880) – No common name; ②③
Epigonus denticulatus Dieuzeide, 1950 – Pencil cardinal; ①②
The species *E. denticulatus* is regarded as being present to the north of the Azores (Hareide & Garnes 2001), in the PECS area (Mid-Atlantic Ridge, 43°- 44º N).
*□ *Epigonus telescopus* (Risso, 1810) – Black cardinal fish; Olhudo①, Escamuda, Escuro, Jordão or Preto ②, Robaldo, Robaldo-do-alto or Robalo-preto③
Microichthys coccoi Rüppell, 1852 – No common name; ②

Family Pomatomidae

*□ *Pomatomus saltatrix* (Linnaeus, 1766) – Bluefish; Anchova①②, Enchova②③

Family Coryphaenidae

□ *Coryphaena equiselis* Linnaeus, 1758 – Pompano dolphinfish; Doirado-pampo①, Dourado①②, Doirado or Doirado-amarelo②, Dourada or Delfim③

□ *Coryphaena hippurus* Linnaeus, 1758 – Common dolphinfish; Doirado①②, Dourado②③

Family Echeneidae

*◇□ *Echeneis naucrates* Linnaeus, 1758 – Live sharksucker; Rémora①②③, Agarrador or Pegador②

* *Phtheirichthys lineatus* (Menzies, 1791) – Slender suckerfish; ①, Agarrador, Pegador or Rémora②

□ *Remora albescens* (Temminck & Schlegel, 1850) – White suckerfish; ①, Agarrador, Rémora②, Pegador②③, Chupa-sangue③

*□ *Remora brachyptera* (Lowe, 1839) – Spearfish remora; Pegador①②③, Agarrador②, Chupa-sangue③

*◇□ *Remora osteochir* (Cuvier, 1829) – Marlinsucker; ①, Agarrador, Pegador or Rémora②, ③

*□ *Remora remora* (Linnaeus, 1758) – Sharksucker; Pegador①, Rémora①②③, Agarrador②, Pegador②③

Family Carangidae

The limits of carangid genera are in many cases poorly defined. This is in part a consequence of some fundamental problems in the delimitation of generic and sub-generic taxa within the family (Gunn 1990). A particular case in point is the separation of the large genus *Caranx* Lacepède into a series of smaller genera including *Carangoides* Bleeker, *Selar* Bleeker, *Alepes* Swainson, *Atule* Jordan & Jordan, *Decapterus* Sleeker, *Pseudocaranx* Bleeker, *Ulua* Jordan & Snyder, *Uraspis* Bleeker and *Caranx* (*sensu stricto*) (Gunn 1990).

Alectis alexandrinus (Geoffroy Saint-Hilaire, 1817) – Alexandria pompano; Xareu-enxada①

Campogramma glaycos (Lacepède, 1801) – Vadigo; Xareu-palheta①, ③

□ *Caranx crysos* (Mitchill, 1815) – Blue runner; Xareu-azul①②, Írio-de-serra or Xareu-gacesse②, ③

□ *Caranx hippos* (Linnaeus, 1766) – Crevalle jack; Xareu-macoa①, ②, Charéu or Encharéu-de-natura③

□ *Caranx latus* Agassiz, 1831 – Horse-eye jack; ③

□ *Caranx lugubris* Poey, 1860 – Black jack; ②, Encharéu or Charéu③

Caranx rhonchus Geoffroy Saint-Hilaire, 1817 – False scad; Charro-amarelo①, ③

This record of this species from off Madeira needs verification (Wirtz *et al*. 2008).

Caranx ruber (Bloch, 1793) – Bar jack; Xareu-carvoeiro, ②

Carangoides ruber (Bloch, 1793) is synonym of *Caranx ruber*, which some sources (ITIS) still cite as valid.

□ *Caranx sexfasciatus* Quoy & Gaimard, 1825 – Bigeye trevally; Charéu-de-natura or Encharéu③

The species *C. sexfasciatus* is referred to as being present off Madeira by Maul (1948a), with the indication of very rare occurrence. There are an additional twelve records of the species in the Atlantic Ocean. According to Nichols (1938), *C. sexfasciatus* is a circumtropical species. Hureau & Tortonese (1979) reported that Maul's identification might be questionable.

◇□ *Decapterus macarellus* (Cuvier, 1833) – Mackerel scad; Cavala-preta②, ③

□ *Decapterus punctatus* (Cuvier, 1829) – Round scad; Charro-moiro, ②③

This species is recorded off the Azores, in the PECS area (87 NM west of the Great Meteor Tablemount), ROM, No. 23918, 30.2500º W, 30.2916º N, 29 Jan. 1966.

◇ *Elagatis bipinnulata* (Quoy & Gaimard, 1825) – Rainbow runner; Fogueteiro-arco-iris①②, Salemão②

Lichia amia (Linnaeus, 1758) – Leerfish; Palombeta or Doirada①, ②③

*□ *Naucrates ductor* (Linnaeus, 1758) – Pilotfish; Peixe-piloto①②, Romeiro①②③

□ *Pseudocaranx dentex* (Bloch & Schneider, 1801) – White trevally; Xareu-bicudo or Xaréu②, Encharéu②③, Charéu③

Selene dorsalis (Gill, 1863) – African moonfish; Corcovado-africano①, ③

□ *Seriola dumerili* (Risso, 1810) – Greater amberjack; Charuteiro-catarino①, Írio or Lírio②, Charuteiro③

□ *Seriola fasciata* (Bloch, 1793) – Lesser amberjack; ②, Charuteiro③

□ *Seriola lalandi* Valenciennes, 1833 – Yellowtail amberjack; Enchova①, Charuteiro③

□ *Seriola rivoliana* Valenciennes, 1833 – Longfin yellowtail; ①, Írio or Lírio②, Charuteiro③

* *Trachinotus carolinus* (Linnaeus, 1766) – Florida pompano; Sereia-da-Florida, ②

*□ *Trachinotus ovatus* (Linnaeus, 1758) – Pompano; Sereia-camochilo①, Cabra, Plombeta or Prombeta②, Trombeta, Facaio or Ranhosa③

Trachurus lathami Nichols, 1920 – Rough scad; Carapau-rugoso, ②

Very rare off the Azores, with only one record, MCZ, No. 166359, 23.9166º W, 36.6000º N, 26 Jun. 1969.

* *Trachurus mediterraneus* (Steindachner, 1868) – Mediterranean horse mackerel; Carapau-do-Mediterrâneo①

*□ *Trachurus picturatus* (Bowdich, 1825) – Blue jack mackerel; Carapau-negrão①, Chicharro-do-alto②, Chicharro②③

*□ *Trachurus trachurus* (Linnaeus, 1758) – Atlantic horse mackerel; Carapau①, ②, Chicharro-charéu③

Family Bramidae

*□ *Brama brama* (Bonnaterre, 1788) – Atlantic pomfret; Xaputa①, Chaputa②, Freira①②③

Pteraclis carolinus Valenciennes, 1833 – Fanfish; ②, Freira or Xaputa③

There are records of the species *P. carolinus* off the Azores, in the PECS area (90 NM northwest of the Hyeres Seamount and 44 NM west of the Oceanographer Fracture Zone), MCZ, No. 76279, 30.6166º W, 31.8333º N, 5 Sep. 1973; MCZ, No. 76284, 35.9016º W, 35.0283º N, 25 Aug. 1984.

◇ *Pterycombus brama* Fries, 1837 – Atlantic fanfish; ①②③

□ *Taractes asper* Lowe, 1843 – Rough pomfret; ①②③

Taractes rubescens (Jordan & Evermann, 1887) – Dark pomfret; ②③

◇□ *Taractichthys longipinnis* (Lowe, 1843) – Big-scale pomfret; Xaputa-galhuda①②, Xaputa②, Freira-de-natura③

Family Caristiidae

Caristius macropus (Bellotti, 1903) – Manefish; ②

This species is recorded off the Azores, in the PECS area (112 NM south of the Lucky Strike Seamount, 11 NM and 54 NM north of the Maxwell Fracture Zone), MAR-ECO – HamPelFish, No. 34843840, 32.0169º W, 35.4000º N, 29 Apr. 1979; MAR-ECO – HamPelFish, No. 34843841, 27.1369º W, 47.8720º N, 13 Jun. 1982; MAR-ECO – HamPelFish, No. 34843842, 27.5330º W, 48.5880º N.

□ *Paracaristius maderensis* (Maul, 1949) – No common name; ②③

Platyberyx mauli Kukuev, Parin & Trunov, 2012 – No common name; ③

According to Kukuev *et al.* (2012), the specimen described by Maul in 1949 as *Platyberyx opalescens* Zugmayer, 1911 concerns *P. mauli*. The latter differs from *P. opalescens* in the structure of a branchial apparatus (morphology and number of gill rakers and more numerous teeth on the vomer) and body proportions (body depth, eye diameter, head length and position of the pelvic fins).

□ *Platyberyx opalescens* Zugmayer, 1911 – No common name; Aia①, ②③

According to Kukuev *et al.* (2012), reliable catches of *P. opalescens* are known from Portugal to northern Mauritania and suggest that the range of the species includes the near-bottom waters of the continental slope (bathial-pelagic ichthyocene) of the East Atlantic. According to Santos *et al.* (1997), the presence of this species off the Azores is based on the identification of a 63 mm specimen caught by the R/V "Michael Sars" at

29.7833º W, 36.8833º N (St. 56). According to Eschmeyer (2013) the range of the species is wider (Greenland and eastern Atlantic).

Family Lutjanidae

Etelis carbunculus Cuvier, 1828 – Deep-water red snapper; Vermelho-salmão③
The species *E. carbunculus* is referenced for Madeira by Maul (1948a). No other records have been reported from the Atlantic Ocean.
Etelis oculatus (Valenciennes, 1828) – Queen snapper; ③
This species is reported from Madeira, based on a single record kept at the Natural History Museum (BMNH 1857.6.13.112, identified as *Serranus oculatus* Valenciennes, 1828). *S. oculatus* is a synonym *E. oculatus*.
Lutjanus goreensis (Valenciennes, 1830) – Gorean snapper; Luciano-da-Goreia, ③
Rhomboplites aurorubens (Cuvier, 1829) – Vermilion snapper; ②
R. aurorubens is recorded off the Azores, in the PECS area (82 NM west of the Great Meteor Tablemount), ROM, No. 23910, 30.2500º W, 30.2916º N, 29 Jan. 1966.

Family Lobotidae

◇□ *Lobotes surinamensis* (Bloch, 1790) – Tripletail; Furriel①②, Lobotes or Peixe-folha②, ③

Family Haemulidae

* *Parapristipoma humile* (Bowdich, 1825) – Guinean grunt; Roncador-canela①, ③
□ *Parapristipoma octolineatum* (Valenciennes, 1833) – African striped grunt; Riscado①, ③
Plectorhinchus mediterraneus (Guichenot, 1850) – Rubberlip grunt; Pombo①
*◇□ *Pomadasys incisus* (Bowdich, 1825) – Bastard grunt; Roncador-bravura①, Roncador①③, Ronqueirão②, Músico③,

Family Sparidae

*□ *Boops boops* (Linnaeus, 1758) – Bogue; Boga-do-mar①, Boga②③
Dentex canariensis Steindachner, 1881 – Canary dentex; Dentão-das-Canárias①
* *Dentex dentex* (Linnaeus, 1758) – Common dentex; Capatão-legítimo①, ②③
□ *Dentex gibbosus* (Rafinesque, 1810) – Pink dentex; Capatão-de-bandeira①, ③
* *Dentex macrophthalmus* (Bloch, 1791) – Large-eye dentex; Cachucho①
Dentex maroccanus Valenciennes, 1830 – Morocco dentex; Cachucho-dentão or Dentão-de-Marrocos①
* *Diplodus annularis* (Linnaeus, 1758) – Annular seabream; Sargo-alcorraz①, ③
* *Diplodus bellottii* (Steindachner, 1882) – Senegal seabream; Sargo-do-Senegal or Mucharra①
□ *Diplodus cervinus cervinus* (Lowe, 1838) – Zebra seabream; Sargo-veado①③
Diplodus puntazzo (Walbaum, 1792) – Sharpsnout seabream; Sargo-bicudo①
Diplodus sargus cadenati de la Paz, Bauchot & Daget, 1974 – Moroccan white seabream; Sargo-legítimo①, Sargo②, ③
□ *Diplodus sargus sargus* (Linnaeus, 1758) – White seabream; Sargo-legítimo-do-Mediterrâneo①, ②, Sargo or Sargo-branco③
*◇□ *Diplodus vulgaris* (Geoffroy Saint-Hilaire, 1817) – Common two-banded seabream; Sargo-safia①, ②, Seifia③
*□ *Lithognathus mormyrus* (Linnaeus, 1758) – Sand steenbras; Ferreira①③, Riscado③
*□ *Oblada melanura* (Linnaeus, 1758) – Saddled seabream; Dobradiça①, Dobrada③
*□ *Pagellus acarne* (Risso, 1827) – Axillary seabream; Besugo①②③
Pagellus bellottii Steindachner, 1882 – Red pandora; Bica-buço①

*□ *Pagellus bogaraveo* (Brünnich, 1768) – Blackspot seabream; Goraz①②③, Carapau or Peixão②
*□ *Pagellus erythrinus* (Linnaeus, 1758) – Common Pandora; Bica①③, ②
* *Pagrus auriga* Valenciennes, 1843 – Redbanded seabream; Pargo-sêmola①, ③
Pagrus caeruleostictus (Valenciennes, 1830) – Bluespotted seabream; Pargo-ruço①
*□ *Pagrus pagrus* (Linnaeus, 1758) – Red porgy; Pargo-legítimo①, Pargo①②③
*□ *Sarpa salpa* (Linnaeus, 1758) – Salema; Salema①②③
* *Sparus aurata* Linnaeus, 1758 – Gilthead seabream; Dourada①, ②③
*□ *Spondyliosoma cantharus* (Linnaeus, 1758) – Black seabream; Choupa①③, ②

Family Centracanthidae

*◇□ *Centracanthus cirrus* Rafinesque, 1810 – Curled picarel; Boqueirão①②③
* *Spicara maena* (Linnaeus, 1758) – Blotched picarel; Trombeiro-choupa①
Spicara melanurus (Valencienneas, 1830) – Blackspot picarel; Trombeiro-malha-redonda, ③
Spicara smaris (Linnaeus, 1758) – Picarel; Trombeiro-boga①

Family Sciaenidae

* *Argyrosomus regius* (Asso, 1801) – Meagre; Corvina-legítima①, ②
Sciaena umbra Linnaeus, 1758 – Brown meagre; Roncadeira-preta①, ③
Umbrina canariensis Valenciennes, 1843 – Canary drum; Calafate-das-Canárias①, ③
Umbrina cirrosa (Linnaeus, 1758) – Shi drum; Calafate-de-riscas①
Umbrina ronchus Valenciennes, 1843 – Fusca drum; ①③

Family Mullidae

* *Mullus barbatus barbatus* Linnaeus, 1758 – Red mullet; Salmonete-da-vasa①, Salmonete②③
*□ *Mullus surmuletus* Linnaeus, 1758 – Surmullet; Salmonete-legítimo①, Salmonete②, Salmonete-vermelho②③, Salmonete-do-rolo③

Family Kyphosidae

Kyphosus incisor (Cuvier, 1831) – Yellow sea chub; Patruça, Preguiçosa or Salema-do-Brasil②, ③
□ *Kyphosus sectatrix* (Linnaeus, 1758) – Bermuda sea chub; Preguiçosa-branca①, Patruça or Salema-do-Brasil②, Preguiçosa②③

Family Chaetodontidae

Chaetodon ocellatus Bloch, 1787 – No common name; ②
This species is recorded off the Azores, in the PECS area (88 NM WNW of the Great Meteor Tablemount), ROM, No. 23917, 30.2500º W, 30.2916º N, 29 Jan. 1966.
Chaetodon sedentarius Poey, 1860 – Reef butterflyfish; Peixe-borboleta②

Family Cepolidae

* *Cepola macrophthalma* (Linnaeus, 1758) – Red bandfish; Suspensório①

Family Pomacentridae

□ *Abudefduf luridus* (Cuvier, 1830) – Canary damsel; ①, Castanheta-preta②③, Castanheta-ferreira③
□ *Abudefduf saxatilis* (Linnaeus, 1758) – Sergeant-major; ③
*□ *Chromis chromis* (Linnaeus, 1758) – Damselfish; Castanheta①③

□ *Chromis limbata* (Valenciennes, 1833) – Azores chromis; Castanheta-amarela②, Castanheta-báia or Castanheta-branca③

Family Labridae

*□ *Acantholabrus palloni* (Risso, 1810) – Scale-rayed wrasse; Bodião-do-alto①②, Truta-do-alto③
□ *Bodianus scrofa* (Valenciennes, 1839) – Barred hogfish; Bodião-dente-de-cão, Peixe-cão②③, Gaio or Viola②
Bodianus speciosus (Bowdich, 1825) – Blackbar hogfish; Peixe-cão or Coa③
Centrolabrus caeruleus Azevedo, 1999 – Emerald wrasse; ②
* *Centrolabrus exoletus* (Linnaeus, 1758) – Rock cook; Bodião①
□ *Centrolabrus trutta* (Lowe, 1834) – Emerald wrasse; Bodião-verde or Maracoto②, Truta-verde or Truta-da-costa③
*□ *Coris julis* (Linnaeus, 1758) – Mediterranean rainbow wrasse; Judia①, Lambaz②, Peixe-rei②③
Ctenolabrus rupestris (Linnaeus, 1758) – Goldsinny-wrasse; Bodião-rupestre①
*□ *Labrus bergylta* Ascanius, 1767 – Ballan wrasse; Bodião-reticulado①, Bodião-vermelho②, Truta-da-costa or Truta-vermelha③
Labrus merula Linnaeus, 1758 – Brown wrasse; Bodião-fusco①, ②
*□ *Labrus mixtus* Linnaeus, 1758 – Cuckoo wrasse; Bodião-canário①, Peixe-rei-do-alto②, Truta-do-alto③
Labrus viridis Linnaeus, 1758 – Green wrasse; Bodião-torto①
□ *Lappanella fasciata* (Cocco, 1833) – Pointed spotty; ②, Bodiano, Verdelhão or Verdelho③
* *Symphodus bailloni* (Valenciennes, 1839) – Baillon's wrasse; Bodião①
Symphodus cinereus (Bonnaterre, 1788) – Grey wrasse; Bodião-cinzento①
□ *Symphodus mediterraneus* (Linnaeus, 1758) – Axillary wrasse; Bodião-do-Mediterrâneo①, Abadejo or Costureira②, Trombetão③
* *Symphodus melops* (Linnaeus, 1758) – Corkwing; Bodião-vulgar①, ②
Symphodus ocellatus (Forsskål, 1775) – No common name; Bodião-de-pinta①
Symphodus roissali (Risso, 1810) – Five-spotted wrasse; Bodião-manchado①
Symphodus rostratus (Bloch, 1791) – No common name; Bodião-das-ervas①
Symphodus tinca (Linnaeus, 1758) – East Atlantic peacock wrasse; Bodião-pavão①
□ *Thalassoma pavo* (Linnaeus, 1758) – Ornate wrasse; Bodião-verde①, Bodião, Bodeão, Rainha, Torcida or Verdugo②, Cagão, Peixe-de-rolo or Peixe-verde③
□ *Xyrichtys novacula* (Linnaeus, 1758) – Pearly razorfish; Mordedor①; Bodião-da-areia or Peixe-padre②, Papagaio③

Family Scaridae

□ *Sparisoma cretense* (Linnaeus, 1758) – Parrotfish; Papagaio-velho①, Veja or Véja②, Bodião③

Family Zoarcidae

Lycenchelys alba (Vaillant, 1888) – No common name; ②
L. alba is reported off the Azores, in the PECS area (56 NM southeast of the Antialtair Seamount). Holotype collected in 1883 as *Lycodes albus* Vaillant, 1888, MNHN, No. 1886-0590, 21.2830º W, 42.2500º N. *L. albus* is a synonym of *Lycenchelys alba.*
Melanostigma atlanticum Koefoed, 1952 – Atlantic soft pout; ①
The species *M. atlanticum* is regarded as being present in the Portuguese mainland EEZ based on its geographical distribution (Van der Land *et al.* 2001).
Pachycara thermophilum Geistdoerfer, 1994 – No common name; ②
Pachycara saldanhai Biscoito & Almeida, 2004 – No common name; ②

This species occurs off the Azores, in the PECS area (Rainbow Hydrothermal Vent Field), USNM, No. 371905, 33.9019º W, 36.2294º N, 25 Jun. 2001; MNHN, No. 2003-0096, 33.9050º W, 36.2190º N,1 Jul. 2001.

Family Chiasmodontidae

*□ *Chiasmodon niger* Johnson, 1864 – Black swallower; ①②, Pancinha or Sapinho-de-fundura③
Dysalotus alcocki MacGilchrist, 1905 – No common name; ②
Dysalotus oligoscolus Johnson & Cohen, 1974 – No common name; ②
There are records of this species off the Azores, in the PECS area (13 NM NNW of the Olympus Knoll and 68 NM southwest of the Hayes Fracture Zone), MAR-ECO – HamPelFish, No. 34848750, 27.8029º W, 45.6669º N, 11 Jun. 1982; MAR-ECO – HamPelFish, No. 34848746, 39.6829º W, 32.9830º N, 27 Apr. 1979.
Kali indica Lloyd, 1909 – No common name; ②
This species is recorded off the Azores, in the PECS area (96 NM northwest of the Maxwell Fracture Zone), MAR-ECO 2004, No. 6971, 29.5709º W, 48.0029º N, 25 Apr. 2004.
Kali kerberti (Weber, 1913) – No common name; ②
K. kerberti is reported off the Azores, in the PECS area (13 NM northwest of the Olympus Knoll), MAR-ECO – HamPelFish, No. 34844461, 27.8029º W, 45.6669° N, 11 Jun. 1982: identified as *Kali normani* (Parr, 1931). Melo (2008) re-evaluated *K. kerberti* as valid and identifies it as senior synonym of *K. normani*.
Kali macrodon (Norman, 1929) – No common name; ②③
Kali macrura (Parr, 1933) – No common name; ②③
Kali parri Johnson & Cohen, 1974 – No common name; ②
The species *K. parri* is reported to occur off the Azores, in the PECS area (65 NM southwest of the Hayes Fracture Zone), MAR-ECO – HamPelFish, No. 34844921, 39.6829º W, 32.9830º N, 27 Apr. 1979.
□ *Pseudoscopelus altipinnis* Parr, 1933 – No common name; ①②③
Pseudoscopelus obtusifrons (Fowler, 1934) – No common name; ②
Pseudoscopelus scutatus Krefft, 1971 – No common name; ②

Family Ammodytidae

* *Ammodytes tobianus* Linnaeus, 1758 – Sandeel; Galeota-menor①
*◇ *Gymnammodytes cicerelus* (Rafinesque, 1810) – Mediterranean sand eel; Galeota-da-areia①, ②
□ *Gymnammodytes semisquamatus* (Jourdain, 1879) – Smooth sand eel; Frachão or Galeota①
* *Hyperoplus lanceolatus* (Le Sauvage, 1824) – Great sand eel; Galeota-maior①

Family Trachinidae

*□ *Echiichthys vipera* (Cuvier, 1829) – Lesser weever fish; Peixe-aranha-menor①, Peixe-aranha②, Aranha③
* *Trachinus araneus* Cuvier, 1829 – Spotted weever; Peixe-aranha-pontuado①
*□ *Trachinus draco* Linnaeus, 1758 – Greater weever fish; Peixe-aranha-maior①, Aranha③
Trachinus radiatus Cuvier, 1829 – Starry weever; Peixe-aranha-raiado①

Family Uranoscopidae

*□ *Uranoscopus scaber* Linnaeus, 1758 – Stargazer; Cabeçudo①, Papa-tabaco③

Family Tripterygiidae

□ *Tripterygion delaisi* Cadenat & Blache, 1970 – Black-faced blenny; Cabrito①, Caboz-de-três-dorsais②, Caboz③
Tripterygion tripteronotum (Risso, 1810) – No common name; Cabrito③

Family Blenniidae

* *Blennius ocellaris* Linnaeus, 1758 – Butterfly blenny; Marachomba-borboleta①; Caboz-ocelado②

*□ *Coryphoblennius galerita* (Linnaeus, 1758) – Montagu's blenny; Marachomba①, Caboz-de-crista②, Caboz③

Hypleurochilus bananensis (Poll, 1959) – No common name; ①

Hypleurochilus fissicornis (Quoy & Gaimard, 1824) – No common name; ②

Lipophrys canevae (Vinciguerra, 1880) – No common name; ①

*□ *Lipophrys pholis* (Linnaeus, 1758) – Shanny; Marachomba-frade①; Caboz-gigante②, Caboz③

□ *Lipophrys trigloides* (Valenciennes, 1836) – No common name; ①, Caboz②③

Microlipophrys dalmatinus (Steindachner & Kolombatovic, 1883) – No common name; ①

□ *Ophioblennius atlanticus* (Valenciennes, 1836) – Redlip blenny; Rói-anzóis②, Caboz or Velha③

*□ *Parablennius gattorugine* (Brünnich, 1768) – Tompot blenny; Marachomba-babosa①, ②, Caboz③

□ *Parablennius incognitus* (Bath, 1968) – No common name; ①, Caboz-das-cracas②, ③

□ *Parablennius parvicornis* (Valenciennes, 1836) – Rock-pool blenny; Caboz-das-poças②, ③

Parablennius pilicornis (Cuvier, 1829) – Ringneck blenny; ①

Parablennius rouxi (Cocco, 1833) – No common name; ①

□ *Parablennius ruber* (Valenciennes, 1836) – Portuguese blenny; Caboz-português①②, Caboz-lusitano②, ③Caboz

□ *Parablennius sanguinolentus* (Pallas, 1814) – Rusty blenny; ①, Caboz-das-poças②, Caboz③

Parablennius tentacularis (Brünnich, 1768) – Tentacled blenny; ①

This species is regarded as being present off mainland Portugal, based on its geographical distribution (Eschmeyer 2013) and because the presence of *P. tentacularis* has been reported off the Portuguese coast (Gordo & Cabral 2001).

* *Salaria pavo* (Risso, 1810) – Peacock blenny; Marachomba-pavão①, ③

Family Clinidae

* *Clinitrachus argentatus* (Risso, 1810) – Cline; Peixe-macaco①

Family Labrisomidae

□ *Labrisomus nuchipinnis* (Quoy & Gaimard, 1824) – Hairy blenny; ③

Family Gobiesocidae

Apletodon dentatus (Facciolà, 1887) – Small-headed clingfish; Pegador①

Apletodon incognitus Hofrichter & Patzner, 1997 – No common name; ①, Peixe-ventosa-dos-ouriços②, ③

◇ *Apletodon pellegrini* (Chabanaud, 1925) – Chubby clingfish; Peixe-ventosa②, Sugador③

□ *Diplecogaster bimaculata* (Bonnaterre, 1788) – Two-spotted clingfish; Pegador①, ③

Diplecogaster bimaculata pectoralis Briggs, 1955 – No common name; Peixe-ventosa②

* *Lepadogaster candolii* Risso, 1810 – Connemarra clingfish; ①③

Almada *et al.* (2008) indicated the need to remove the species *L. candollei* from the genus *Lepadogaster.* Canestrini (1864) had previously suggested placing *L. candollei* in a different genus (*Mirbelia*), distinct from *Lepadogaster*. In turn Briggs (1955), in his detailed revision, although placing *L. candollei* in *Lepadogaster* noted that: ''*L. candollei* is well separated from the other three forms [of *Lepadogaster*] which are very closely related to each other".

*□ *Lepadogaster lepadogaster* (Bonnaterre, 1788) – Shore clingfish; Sugador①③, Chupa-sangue③

The species *Lepadogaster zebrina* Lowe, 1839 is a synonym of *L. lepadogaster*, according to Almada *et al.* (2008). All records of *L. zebrine* should be considered as *L. lepadogaster*.

□ *Lepadogaster purpurea* (Bonnaterre, 1788) – Cornish sucker; Sugador①, ②③
This species is recorded off the Azores, in the PECS area (157 NM southwest of the Georgiy Zima Seamount), VLIZ, Tisbe No. 318571, 20.0º W, 40.0º N.
Opeatogenys gracilis (Canestrini, 1864) – No common name; ①

Family Callionymidae

* *Callionymus lyra* Linnaeus, 1758 – Common dragonet; Peixe-pau-lira①, ②
*□ *Callionymus maculatus* Rafinesque-Schmaltz, 1810 – Spotted dragonet; Peixe-pau-malhado①
Callionymus pusillus Delaroche, 1809 – No common name; Peixe-pau-rabudo①
Callionymus reticulatus Valenciennes, 1837 – Reticulate dragonet; Peixe-pau-listado①, ②
* *Callionymus risso* Lesueur, 1814 – No common name; Peixe-pau-pintado①
□ *Protogrammus sousai* (Maul, 1972) – No common name; ②
This species is reported off the Azores, in the PECS area (Great Meteor Tablemount), SDSC, No. 23042, 28.4833º W, 29.8258º N; SDSC, No. 23041, 28.4966º W, 29.8366º N; SDSC, No. 23043, 28.4000º W, 30.0183º N.
*□ *Synchiropus phaeton* (Günther, 1861) – No common name; Peixe-pau-rosa①②, ②③

Family Draconettidae

□ *Centrodraco acanthopoma* (Regan, 1904) – No common name; ①②③
There are records of *C. acanthopoma* off the Azores, in the PECS area (Great Meteor Tablemount), SDSC, No. 23046, 28.5249º W, 30.0499º N, 25 Jul. 1967; SDSC, No. 9286, 28.6667º W, 30.0499º N, 25 Jul. 1967; SDSC, No. 23045, 28.6667º W, 30.0499º N, 25 Jul. 1967.

Family Gobiidae

* *Aphia minuta* (Risso, 1810) – Transparent goby; Caboz-transparente①
Buenia jeffreysii (Günther, 1867) – Jeffrey's goby; ①
□ *Chromogobius britoi* Van Tassell, 2001 – Brito's goby; ①③
□ *Crystallogobius linearis* (Düben, 1845) – Crystal goby; ①③
□ *Deltentosteus collonianus* (Risso, 1820) – No common name; ①
*□ *Deltentosteus quadrimaculatus* (Valenciennes, 1837) – Four-spotted goby; Caboz-de-quatro-manchas①
□ *Gnatholepis thompsoni* Jordan, 1904 – No common name; ①③
Gobius ater Bellotti, 1888 – Bellotti's goby; ①
*□ *Gobius auratus* Risso, 1810 – Golden goby; Caboz-dourado or Caboz-das-pedras①, ③
Gobius bucchichi Steindachner, 1870 – Bucchich's goby; ①
* *Gobius cobitis* Pallas, 1814 – Giant goby; Caboz-cabeçudo①
Gobius cruentatus Gmelin, 1789 – Red-mouthed goby; Caboz-boca-vermelha①
□ *Gobius gasteveni* Miller, 1974 – Steven's goby; ①, Caboz-de-escama③
* *Gobius niger* Linnaeus, 1758 – Black goby; Caboz-negro①
*□ *Gobius paganellus* Linnaeus, 1758 – Rock Goby; Caboz-da-rocha①; Bochecha or Joana②, Caboz②③, Velha③
□ *Gobius roulei* de Buen, 1928 – Roule's goby; ①③
Gobius xanthocephalus Heymer & Zander, 1992 – No common name; ①
* *Gobiusculus flavenscens* (Fabricius, 1779) – Two-spotted goby; Caboz or Alcaboz①
Lebetus guilleti (Le Danois, 1913) – Guillet's goby; ①③
Lebetus scorpioides (Collet, 1874) – Diminutive goby; ①
* *Lesueurigobius friesii* (Malm, 1874) – Fries's goby; Caboz-de-escama-grande①
□ *Lesueurigobius heterofasciatus* Maul, 1971 – Striped goby; ③

Lesueurigobius sanzi (de Buen, 1918) – Sanzo's goby; Caboz-de-bandeira①
Lesueurigobius suerii (Risso, 1810) – Lesueur's goby; ①②③
□ *Mauligobius maderensis* (Valenciennes, 1837) – No common name; ②, Caboz-de-escama③
Pomatoschistus knerii (Steindachner, 1861) – Kner's goby; ①
Pomatoschistus lozanoi (de Buen, 1923) – Lozano's goby; ①
Pomatoschistus marmoratus (Risso, 1810) – Marbled goby; ①
Pomatoschistus microps (Kroyer, 1838) – Common goby; Caboz①
* *Pomatoschistus minutus* (Pallas, 1770) – Sand goby; Caboz-da-areia①
□ *Pomatoschistus pictus* (Malm, 1865) – Painted goby; ①, Góbio-da-areia②, ③
□ *Thorogobius ephippiatus* (Lowe, 1839) – Leopard-spotted goby; ①, Bochecha-pintada②, Caboz or Caboz-de-escama③
□ *Vanneaugobius canariensis* Van Tassel, Miller & Brito, 1988 – No common name; ③

Family Luvaridae

Luvarus imperialis Rafinesque, 1810 – Luvar; ①, Boquinho or Peixe-sol②, Boquinho③

Family Acanthuridae

Acanthurus monroviae Steindachner, 1876 – Monrovia doctorfish; Unha①

Family Scombrolabracidae

*◇□ *Scombrolabrax heterolepis* Roule, 1921 – Longfin escolar; ①②③
New record for Portuguese mainland waters; the first specimen of *S. heterolepis* (Fig. 4) was caught on the 15th of November 2008 (300 mm TL and 375.63 g), using a bottom trawl (39º59.257'N, 10º3.025'W) and other specimens were collected in commercial fisheries in 2008 and 2009. Bold Systems Sample ID – MLFPI62, available on the Barcode of Life Data Systems (BOLD; www.barcodinglife.org, under the project titled "Fish of Portugal and Italy [MLFPI]").

Fig. 4. *Scombrolabrax heterolepis* Roule, 1921.

Family Sphyraenidae

Sphyraena barracuda (Edwards, 1771) – Great barracuda; Bicuda-gigante③

* *Sphyraena sphyraena* (Linnaeus, 1758) – European barracuda; Bicuda①, ②

□ *Sphyraena viridensis* Cuvier, 1829 – Yellowmouth barracuda; ①, Bicuda②③

According to Wirtz (1998), the records of *S. sphyraena*, reported from Madeira, are likely to be confused with the common S. *viridensis*.

Family Gempylidae

□ *Diplospinus multistriatus* Maul, 1948 – Striped escolar; ②③

□ *Gempylus serpens* Cuvier, 1829 – Snake mackerel; Escolar②, Coelho-de-natura③

*◇□ *Lepidocybium flavobrunneum* (Smith, 1843) – Escolar; Escolar-preto①, Escolar②, Escolar-de-natura③

□ *Nealotus tripes* Johnson, 1865 – Black snake mackerel; ②, Peixe-coelho-de-natura③

*□ *Nesiarchus nasutus* Johnson, 1862 – Black gemfish; Geribé①, Escolar②, Coelho-de-natura①③

□ *Promethichthys prometheus* (Cuvier, 1832) – Roudi escolar; Escolar-branco①, Coelho-do-alto②, Peixe-coelho②③

Ruvettus pretiosus Cocco, 1833 – Oilfish; Escolar①②③

Family Trichiuridae

*□ *Aphanopus carbo* Lowe, 1839 – Black scabbardfish; Peixe-espada-preto①②, Espada or Espada-preto③

Aphanopus intermedius Parin, 1983 – Intermediate scabbardfish; ②③

Benthodesmus elongatus (Clarke, 1879) – Elongate frostfish; Espada-de-má-água①, Espada-branca-de-natura③

*□ *Benthodesmus simonyi* (Steindachner, 1891) – Simony's frostfish; ①; Peixe-espada②, ③

*□ *Lepidopus caudatus* (Euphrasen, 1788) – Silver scabbard fish; Peixe-espada-branco①②, Talabarte②, Espada-branca③

* *Trichiurus lepturus* Linnaeus, 1758 – Largehead hairtail; Lírio①

Family Scombridae

◇ *Acanthocybium solandri* (Cuvier, 1832) – Wahoo; Cavala-da-Índia①②③

*□ *Auxis rochei rochei* (Risso, 1810) – Bullet tuna; Judeu①②③

*□ *Auxis thazard thazard* (Lacepède, 1800) – Frigate tuna; Judeu-liso①, Chapouto③

Euthynnus alletteratus (Rafinesque, 1810) – Little tunny; Merma①

□ *Katsuwonus pelamis* (Linnaeus, 1758) – Skipjack tuna; Gaiado①②③, Bonito①②

*□ *Sarda sarda* (Bloch, 1793) – Atlantic bonito; Sarrajão①③, Serra①②, Cerda or Serralhão③

*□ *Scomber colias* Gmelin, 1789 – Atlantic chub mackerel; Cavala①②③

*□ *Scomber scombrus* Linnaeus, 1758 – Atlantic mackerel; Sarda①, Cavala②③

□ *Thunnus alalunga* (Bonnaterre, 1788) – Albacore; Atum-voador①②③, Voador①②③, Avoador③

□ *Thunnus albacares* (Bonnaterre, 1788) – Yellowfin tuna; Atum-albacora①③, Albacora①②, Alvacor or Galha-à-ré②

Thunnus atlanticus (Lesson, 1831) – Blackfin tuna; Albacorinha, ②

The species *T. atlanticus* occurs off the Azores, in the PECS area (41 NM west of the Ocenographer Fracture Zone), MCZ, No. 75623, 35.8133º W, 35.0750º N, 26 Aug. 1984.

□ *Thunnus obesus* (Lowe, 1839) – Bigeye tuna; Atum-patudo①③, Patudo①②③, Albacora, Alvacor or Alvacora②

*□ *Thunnus thynnus* (Linnaeus, 1758) – Atlantic bluefin tuna; Atum-rabilho①, Albacora, Alvacor, Rabão or Rabilo②, Atum-rabil or Rabilho③

Family Xiphiidae

*□ *Xiphias gladius* Linnaeus, 1758 – Swordfish; Espadarte①②, Peixe-agulha①③, Agulhão②

Family Istiophoridae

Istiophorus platypterus (Shaw & Nodder, 1792) – Sailfish; Veleiro-do-Atlântico①, ②③
Istiophorus albicans (Latreille, 1804) is a synonym of *I. platypterus* according to Collette *et al.* (2006).
Kajikia albida (Poey, 1860) – Atlantic white marlin; Espadim-branco-do-Atlântico①, Espadim-branco or Marlin-branco②, Peto③
Makaira nigricans Lacepède, 1802 – Blue marlin; Espadim-azul-do-Atlântico①, Espadim-azul①②, ③
Tetrapturus belone Rafinesque, 1810 – Mediterranean spearfish; Espadim-do-Mediterrâneo, Peto③
Tetrapturus georgii Lowe, 1841 – Roundscale spearfish; Espadim-peto①, ②, Peito③
◇ *Tetrapturus pfluegeri* Robins & de Sylva, 1963 – Longbill spearfish; Espadim-bicudo①, ②

Familly Centrolophidae

*□ *Centrolophus niger* (Gmelin, 1789) – Rudderfish; Liro-preto①, ②, Liro③
Hyperoglyphe perciformis (Mitchill, 1818) – Barrelfish; Liro①②
□ *Schedophilus maculatus* Günther, 1860 – Pelagic butterfish; ②③
□ *Schedophilus medusophagus* (Cocco, 1839) – Cornish blackfish; Liro-mole①, ②③
*□ *Schedophilus ovalis* (Cuvier, 1833) – Imperial blackfish; Liro-imperial①, Choupa②, Lírio or Liro③

Family Nomeidae

*□ *Cubiceps gracilis* (Lowe, 1843) – Driftfish; Tirone①, ②③
Nomeus gronovii (Gmelin, 1789) – Man-of-war fish; Pequeno-argonauta②
Psenes cyanophrys Valenciennes, 1833 – Freckled driftfish; ③
Psenes maculatus Lütken, 1880 – Silver driftfish; ②

Family Tetragonuridae

Tetragonurus atlanticus Lowe, 1839 – Bigeye squaretail; ①②, Escolar-de-natura③
□ *Tetragonurus cuvieri* Risso, 1810 – Smalleye squaretail, ①②, Escolar-de-natura③

Family Stromateidae

* *Stromateus fiatola* Linnaeus, 1758 – Blue butterfish; Pampo-godinho①, ②③

Family Caproidae

*□ *Antigonia capros* Lowe, 1843 – Deepbody boarfish, Periquito①, ②③
*□ *Capros aper* (Linnaeus, 1758) – Boarfish; Pimpim①②, Peixe-pau②, Tem-te-em-pé③

Order Pleuronectiformes
Family Citharidae

* *Citharus linguatula* (Linnaeus, 1758) – Atlantic spotted flounder; Carta-de-bico①, ③

Family Scophthalmidae

*□ *Lepidorhombus boscii* (Risso, 1810) – Fourspotted megrim; Areeiro-de-quatro-manchas①, ②③
The species *L. boscii* is recorded off Madeira (Josephine Bank) and to the northeast of the Azores (157 NM southwest of the Georgiy Zima Seamount), both outside their respective EEZ's. MNHN, No. 1956-0007, 20.0º W, 40.0º N; MNHN, No. 1956-0008, 20.0º W, 40.0º N, both specimens captured in June 1955; FISH 1556599 (Shcherbachev *et al.* 1985).
* *Lepidorhombus whiffiagonis* (Walbaum, 1792) – Megrim; Areeiro①②, Solha-da-fundura②
* *Scophthalmus maximus* (Linnaeus, 1758) – Turbot; Pregado①, ③
* *Scophthalmus rhombus* (Linnaeus, 1758) – Brill; Rodovalho①
* *Zeugopterus punctatus* (Bloch, 1787) – Topknot; Rodovalho-bruxa①
* *Zeugopterus regius* (Bonnaterre, 1788) – Eckström's topknot; Bruxa①

Family Paralichthyidae

Syacium papillosum (Linnaeus, 1758) – Dusky flounder; ②
This species is recorded off the Azores, in the PECS area (82 NM west of the Great Meteor Tablemount), ROM, No. 23911, 30.2500º W, 30.2916º N, 29 Jan. 1966.

Family Pleuronectidae

Microstomus kitt (Walbaum, 1792) – Lemon sole; Solha-limão①
* *Platichthys flesus* (Linnaeus, 1758) – European flounder; Solha-das-pedras or Patruça①
* *Pleuronectes platessa* Linnaeus, 1758 – European plaice; Solha①, ②

Family Bothidae

*□ *Arnoglossus imperialis* (Rafinesque, 1810) – Imperial scaldfish; Carta-imperial①, ②③
* *Arnoglossus laterna* (Walbaum, 1792) – Scald fish; Carta-do-Mediterrâneo①
*□ *Arnoglossus rueppelii* (Cocco, 1844) – Ruppell's scaldback; Carta-estreita①, ②③
* *Arnoglossus thori* Kyle, 1913 – Thor's scaldfish; Carta-pontuada①, ③
*□ *Bothus podas* (Delaroche, 1809) – Wide-eyed flounder; Carta-de-olhos-grandes①②, Solha②③
Chascanopsetta lugubris Alcock, 1894 – Pelican flounder; Carta-pelicano①
Monolene microstoma Cadenat, 1937 – Smallmouth moonflounder; Carta-de-boca-pequena, ③
This species is reported from Madeira, in the PECS area (Josephine Bank), based on a single observation, SOC, Discovery No. 785703_210_FIS_503001, 14.3033º W, 36.7391º N, 11 Apr. 1972.

Family Soleidae

* *Bathysolea profundicola* (Vaillant, 1888) – Deepwater sole; Linguado-da-fundura①
Buglossidium luteum (Risso, 1810) – Solenette; Língua-de-gato①, ②
The species *B. luteum* has been recorded from the northeast of the Azores, in the PECS area (157 NM southwest of the Georgiy Zima Seamount), MNHN, No. 1959-0604, 20.0º W, 40.0º N.
* *Dicologlossa cuneata* (Moreau, 1881) – Wedge sole; Língua①, ③
* *Dicologlossa hexophthalma* (Bennett, 1831) – Ocellated wedge sole; Linguado-de-olhos①, ③
* *Microchirus azevia* (de Brito Capello, 1867) – Bastard sole; Azevia①
* *Microchirus boscanion* (Chabanaud, 1926) – Lusitanian sole; Azevia-marginada①, ③
*□ *Microchirus ocellatus* (Linnaeus, 1758) – Foureyed sole; Azevia-de-malhas①, Solha-linguado③
* *Microchirus variegatus* (Donovan, 1808) – Thickback sole; Azevia-raiada or Raposo①, ③
Microchirus wittei Chabanaud, 1950 – Banded sole; Azevia-raiada-africana③
* *Monochirus hispidus* Rafinesque, 1814 – Whiskered sole; Cascarra①
* *Pegusa impar* (Bennett, 1831) – Adriatic sole; ①

* *Pegusa lascaris* (Risso, 1810) – Sand sole; Linguado-da-areia①, ②③
* *Solea senegalensis* Kaup, 1858 – Senegalese sole; Linguado-branco①, ③
* *Solea solea* (Linnaeus, 1758) – Common sole; Linguado-legítimo①, ③
* *Synaptura lusitanica lusitanica* de Brito Capello, 1868 – Portuguese sole; Língua-de-vaca or Linguado-português①
Synapturichthys kleinii (Risso, 1827) – Klein's sole; ①

Family Cynoglossidae

□ *Symphurus insularis* Munroe, Brito & Hernández, 2000 – No common name; ②③
*□ *Symphurus nigrescens* Rafinesque, 1810 – Tonguesole; Língua-avessa①, Língua②
Symphurus reticulatus Munroe, 1990 – No common name; ③

Order Tetraodontiformes
Family Balistidae

*□ *Balistes capriscus* Gmelin, 1789 – Grey triggerfish; Cangulo-cinzento①, Peixe-porco②③, Peixe-burro③
Balistes punctatus Gmelin, 1789 – Bluespotted triggerfish; Cangulo-pintado, ③
This seems a doubtful record for Madeira, which needs confirmation (Wirtz *et al*. 2008).
Balistes vetula Linnaeus, 1758 – Queen triggerfish; Peixe-porco②
◇ *Canthidermis maculata* (Bloch, 1786) – Ocean triggerfish; Peixe-porco②
□ *Canthidermis sufflamen* (Mitchill, 1815) – No common name; ②③
The species *C. sufflamen* occurs off the Azores, in the PECS area (82 NM west of the Great Meteor Tablemount), ROM, No. 23921, 30.2500º W, 30.2916º N, 29 Jan. 1966.

Family Monacanthidae

◇□ *Aluterus monoceros* (Linnaeus, 1758) – Unicorn leatherjacket filefish; Peixe-porco②, ③
◇□ *Aluterus scriptus* (Osbeck, 1765) – Scribbled leatherjacket filefish; ②③
◇□ *Stephanolepis hispidus* (Linnaeus, 1766) – Planehead filefish; Peixe-porco②, Peixe-porco-galhudo③
Stephanolepis setifer (Bennett, 1831) – Pygmy filefish; ③

Family Ostraciidae

Acanthostracion notacanthus (Bleeker, 1863) – Island boxfish; ②
Acanthostracion quadricornis (Linnaeus, 1758) – Scrawled cowfish; ②
This species is recorded off the Azores, in the PECS area (82 NM west of the Great Meteor Tablemount), ROM, No. 23915, 30.2500º W, 30.2916º N, 29 Jan. 1966.

Family Tetraodontidae

□ *Canthigaster capistrata* (Lowe, 1839) – Sharpnose puffer; ②, Porquinho or Sapo③
◇ *Canthigaster rostrata* (Bloch, 1786) – Sharpnose puffer; Peixe-balão or Porquinho①②, Sapinho②
All *Canthigaster* specimens reported so far from Madeira belong to *Canthigaster capistrata* (Moura & Castro 2002). There is a doubtful record from off the Portuguese mainland that requires confirmation.
Ephippion guttifer (Bennett, 1831) – Prickly puffer; ①③
□ *Lagocephalus laevigatus* (Linnaeus, 1758) – Smooth puffer; Baiacu-verde①, ③
*□ *Lagocephalus lagocephalus lagocephalus* (Linnaeus, 1758) – Oceanic puffer; ①, Peixe-balão②, Sapo③

□ *Sphoeroides marmoratus* (Lowe, 1838) – Guinean puffer; ①, Peixe-balão, Sopapo or Sapo②, Sapinho③
The records for *Sphoeroides spengleri* (Bloch, 1785) should be replaced by *S. marmoratus* in the eastern Atlantic (P. Wirtz, pers. comm. Oct. 2004, in FishBase, Froese & Pauly 2012).

* *Sphoeroides pachygaster* (Müller & Troschel, 1848) – Blunthead puffer; Peixe-bola①, Peixe-balão or Sapo-do-alto②, ③

Family Diodontidae

◇□ *Chilomycterus atringa* (Linnaeus, 1758) – Porcupine fish; Peixe-porco①, ②, Sapo③

◇□ *Chilomycterus reticulatus* (Linnaeus, 1758) – Spotfin burrfish; Peixe-porco ①, ②, Sapo③

Chilomycterus schoepfii (Walbaum, 1792) – No common name; ②
This species is recorded off the Azores, in the PECS area (82 NM west of the Great Meteor Tablemount), ROM, No. 23914, 30.2500º W, 30.2916º N, 29 Jan. 1966.

* *Chilomycterus spinosus spinosus* (Linnaeus, 1758) – No common name; ①

Diodon eydouxii Brisout de Barneville, 1846 – Pelagic porcupinefish; Peixe-ouriço②

◇ *Diodon holocanthus* Linnaeus, 1758 – Longspined porcupinefish; Peixe-ouriço-de-crista, ②

*◇□ *Diodon hystrix* Linnaeus, 1758 – Spot-fin porcupinefish; Peixe-ouriço①②, Sapo-grande①③, Peixe-balão-espinhoso②, Sapo or Sapo-de-espinhos③

Family Molidae

□ *Masturus lanceolatus* (Liénard, 1840) – Sharptail mola; Peixe-lua-rabudo①②, Peixe-lua②③, Peixe-porco③

*□ *Mola mola* (Linnaeus, 1758) – Ocean sunfish; Peixe-lua①②③

*◇□ *Ranzania laevis* (Pennant, 1776) – Slender sunfish; Peixe-lua-comprido①②, Peixe-lua②, ③

Discussion

The present checklist compiles for the first time an annotated list of fish species occurring both in the Portuguese EEZ and territorial waters, and in the area corresponding to the proposed extension of the Portuguese continental shelf (PECS). Based solely on updated information on species occurrences, this new checklist results in an addition of over 200 species to the Portuguese marine ichthyofauna, which corresponds to a relevant increase of about 28% compared to earlier and current compilations (Froese & Pauly 2012; Magalhães & Rogado 1993). To this primary list we add 130 new species records from the area corresponding to the PECS. Therefore, the grand total of 1191 marine fishes included here represent approximately 88% of the 1349 species listed for Europe in the European Register of Marine Species (Costello *et al.* 2006), although the surveyed areas do not match completely.

The great increase in species numbers in the current checklist can be justified in a number of ways. Part of this increase is a consequence of new records for deep-sea fishes obtained from recent deep-sea surveys. We also recovered a number of old records and found new relatively recent records in the literature that had not yet been included in databases or that had not been considered in previous checklists (e.g., Vieira *et al.* 2012; Menezes *et al.* 2012).

There is growing scientific evidence that, as a result of global warming, the traditional pattern of species distribution seems to have altered in the last decades (since about the mid-1980s). In general, a warmer oceanic temperature would result in poleward advances of species with an affinity to warm water (Lusitanian) and the retreat of species with an affinity to cooler water (Boreal) (Brander *et al*. 2003; Southward *et al*. 2005; Stefansdottir *et al*. 2010).

From our data we could not infer any global trend of this kind, since most of the records in the checklist lack historical occurrence data. However, it is possible to identify some poleward expansions towards the Iberian coast and the Azores among tropical Atlantic fishes, such as occurred, for example, with *Fistularia petimba* (Azevedo *et al.* 2004; Bañon & Sande 2008), *Zenion hololepis* (Martins *et al*. 2012) and *Acanthurus monroviae* (Horta e Costa & Gonçalves 2013). Conversely, there is evidence of the contraction of southern range limits of boreal species towards higher latitudes, and the decrease of their records, as for example observed for *Salmo salar* and *Cyclopterus lumpus*.

Quéro *et al.* (1998) investigated the alteration of the northward range extension of fish species associated with the warming of European Atlantic waters since 1963. The upper slope species have made regular northward range extensions off southern Portugal to northwestern Ireland, more and less rapidly, taking about thirty years for *Cyttopsis roseus* and *Zenopsis conchifer* and only six years for *Sphoeroides pachygaster*. Another example of these alterations is the substantial increase in the abundance of a sub-tropical species, the boarfish *Capros aper*, that correlates with the temperature increase on the northeast Atlantic continental shelf (Blanchard *et al*. 2005; Coad *et al*. 2012).

Owing to the fact that marine ecosystems are influenced by many factors, the interpretation of alterations in species ranges may not be simple. Some of these factors are strongly correlated, as for biogeochemical cycles (CO_2) and the eduction of the pH of surface seawater (acidification); primary production, nutrient availability and foodwebs; overfishing, recruitment and phenological relationships. The establishment of invasive species may also have a far-reaching effect. Those factors may provide a growing contribution to the threatened biodiversity at a global scale because of the cumulative impact of different variables. The NRIC (National and Regional Implementation Committees / Census of Marine Life) reported overfishing, habitat loss, and pollution (contamination by xenobiotics and eutrophication), to be the greatest threats to marine biodiversity, followed by alien species and the impacts of warming due to climate change (Costello *et al.* 2010).

In the present work we chose to apply a large spatial scale to our biogeographical analysis. Globally, the biogeographical composition analysis revealed that the Atlantic group is the largest, with almost the 46.01% of the total species represented. The Lusitanian (21.49%) and the African (5.96%) groups are also important. Six other groups are minor, including the Boreal group, the Mediterranean group, the Macaronesian group, the Atlantic/African group, the Mediterranean/African group and the Arctic group.

By providing a biogeographic classification of the species in the current checklist, we aim at contributing to the understanding of the distribution of species and habitats for the purposes of scientific research, conservation and management, and ultimately for policy definition. This is particularly relevant given that the effective application of the proposed extension of the EEZ may result in one of the largest EEZ of the world, covering a major section of the northeast Atlantic. Scientifically, this biogeographic classification can provide a basis for hypotheses and further scientific studies on the origin and evolution of deep-sea fauna assemblages and the linkage between species communities and open-ocean and deep-sea environments. From a policy perspective, such a classification is a necessary component, when considering area-based management options, such as marine protected areas, particularly when assessing representativity of a potential network (Vierros *et al*. 2009).

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References

Albuquerque R.M. 1954–1956. *Peixes de Portugal e Ilhas Adjacentes* (*Chaves para a sua determinação*). Portugaliae Acta Biológica, Lisboa.

Almaça C. 1998. On the sturgeon, *Acipenser sturio*, in the Portuguese rivers and seas. *Folia Zoologica* 37: 183-191.

Almada F., Henriques M., Levy A., Pereira A., Robalo J. & Almada V.C. 2008. Reclassification of *Lepadogaster candollei* based on molecular and meristic evidence with a redefinition of the genus *Lepadogaster*. *Molecular Phylogenetics and Evolution* 46: 1151-1156. http://dx.doi.org/10.1016/j.ympev.2007.05.021

Andriashev A.P. 1998. A review of recent studies of Southern Ocean Liparidae (Teleostei: Scorpaeniformes). *Cybium*, 22 (3): 255-266.

Andriashev A.P. 2003. Liparid fishes (Liparidae, Scorpaeniformes) of the Southern Ocean and adjacent waters. Results of Russian Antarctic Expeditions 9. *Explorations of the Fauna of the Seas*, 53 (61): 1-477.

Arruda L.M. 1997. Checklist of the marine fishes of the Azores. *Arquivos do Museu Bocage, Nova Série* 3 (2): 3-164.

Aschliman N.C., Nishida M., Miya M., Inoue J.G., Rosana K.M. & Naylor G.J.P. 2012. Body plan convergence in the evolution of skates and rays (Chondrichthyes: Batoidea). *Molecular Phylogenetics and Evolution* 63 (1): 28-42. http://dx.doi.org/10.1016/j.ympev.2011.12.012

Azevedo J.M.N., Raposeiro P.M. & Rodrigues L. 2004. First records of *Fistularia petimba* and *Diodon eydouxii* for the Azores, with notes on the occurrence of three additional species. *Journal of Fish Biology* 65 (4): 1180-1184. http://dx.doi.org/10.1111/j.0022-1112.2004.00523.x

Bañón R. & Sande C. 2008. First record of the red cornetfish *Fistularia petimba* (Syngnathiformes: Fistularidae) in Galician waters: a northernmost occurrence in the eastern Atlantic. *Journal of Applied Ichthyology* 24 (1): 106-107. http://dx.doi.org/10.1111/j.1439-0426.2007.00918.x

Bañón R., Arronte J.C., Vázquez-Dorado S., Del Río J.L. & Carlos A. 2012. DNA barcoding of the genus *Lepidion* (Gadiformes: Moridae) with recognition of *Lepidion eques* as a junior synonym of *Lepidion lepidion*. *Molecular Ecology Resources* 13: 189-199. http://dx.doi.org/10.1111/1755-0998.12045

Bauchot M.-L. & Saldanha L. 1986. Congridae (including Heterocongridae). *In*: Whitehead P.J.P., Bauchot M.-L., Hureau J.-C., Nielsen J. & Tortonese E. (eds) *Fishes of the North-Eastern Atlantic and the Mediterranean* 2: 567-574. UNESCO, Paris.

Blanchard F. & Vandermeirsch F. 2005. Warming and exponential abundance increase of the subtropical fish *Capros aper* in the Bay of Biscay (1973-2002). *Comptes Rendus Biologies* 328: 505-509. http://dx.doi.org/10.1016/j.crvi.2004.12.006

Bonnet C. 1850. *Mémoire sur le Royaume de l´Algarve*. Academia Real das Sciencias, 2ª Série, 2, Lisboa.

Brander K., Blom G., Borges M.F., Erzini K., Henderson G., MacKenzie B.R., Mendes H., Ribeiro J., Santos A.M.P. & Toresen R. 2003. Changes in fish distribution in the eastern North Atlantic: Are we

seeing a coherent response to changing temperature? *International Council for the Exploration of the Sea* - Marine Science Symposium 219: 261-270.

Brauer A. 1906. *Wissenschaftliche Ergebnisse der Deutschen Tiefsee-Expedition auf dem Dampfer „Valdivia" 1898-1899*. Jena, Naumburg.

Briggs J.C. 1955. A Monograph of the Clingfish (Order Xenopterygii). *Stanford Ichthyological Bulletin* 6: 33-39.

Canestrini G. 1864. Studi sui *Lepadogaster* del Mediterraneo. *Archivio per la Zoologia, L'Anatomia e la Fisiologia* 3: 177-196.

Capello F.B. 1867a. Catálogo dos peixes de Portugal que existem no Museu de Lisboa. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 1 (3): 233-264.

Capello F.B. 1867b. Catálogo dos peixes de Portugal que existem no Museu de Lisboa. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 1 (4): 307-313.

Capello F. B. 1868. Catálogo dos peixes de Portugal que existem no Museu de Lisboa. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 2 (5): 51-63.

Capello F. B. 1869a. Catálogo dos peixes de Portugal que existem no Museu de Lisboa. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 2 (6): 131-153.

Capello F. B. 1869b. Appendice ao Catálogo dos peixes de Portugal que existem no Museu de Lisboa. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 2 (7): 223-228.

Capello F.B. 1873. Segundo apêndice ao catálogo dos peixes de Portugal. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 4 (16): 307-311.

Capello F.B. 1876. Terceiro apêndice ao catálogo dos peixes de Portugal. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 5 (19): 165-167.

Capello F.B. 1880. Catálogo dos peixes de Portugal. *Memórias da Academia de Sciencias de Lisboa* 6: 1-73.

Castro J.M.O. 1967. *Nomenclatura Portuguesa do Pescado*. Gabinete de Estudos das Pescas, Lisboa.

Coad J.O. & Hüssy K. 2012. Boom in boarfish abundance: Insight from otolith analysis. *In:* ICES CM 2012/J:10: 1-24. International Council for the Exploration of the Sea (ICES).

Collette B.B., McDowell J.R. & Graves J.E. 2006. Phylogeny of Recent Billfishes (Xiphioidei). *Bulletin of Marine Science* 79 (3): 455-468.

Compagno L.J.V. 1984a. FAO Species Catalogue. Sharks of the world. An annotated and illustrated catalogue of shark species known to date. Part 1- Hexanchiformes to Lamniformes. *FAO Fisheries Synopsis* 125: 1-249, Rome.

Compagno L.J.V. 1984b. FAO Species Catalogue. Sharks of the world. An annotated and illustrated catalogue of shark species known to date. Part 2- Carcharhiniformes. *FAO Fisheries Synopsis* 125: 251-655, Rome.

Compagno L.J.V. 1999. Checklist of living elasmobranchs. *In*: Hamlett, W.C. (ed.) *Sharks, Skates, and Rays: The Biology of Elasmobranch Fishes*: 471-498. John Hopkins University Press, Maryland.

Compagno L.J.V. 2003. Sharks. *In*: Carpenter K.E. (ed.) *The living marine resources of the Western Central Atlantic. Volume 1. Introduction, molluscs, crustaceans, hagfishes, sharks, batoid fishes, and chimaeras. FAO species identification guide for fishery purposes and American Society of Ichthyologist and Herpetologists Special Publication No.5*: 357-505. Food and Agriculture Organization, Rome.

Costa M.E. 2007. Chondrichthyes. *In*: Borges,T.C. (ed.) *Biodiversidade nas Pescas do Algarve* (*Sul de Portugal*). Impriluz, Lisboa.

Costa F.O., Landi M., Martins R., Costa M.H., Costa M.E., Carneiro M., Alves M.J., Steinke D. & Carvalho G.R. 2012. A ranking system for reference libraries of DNA Barcodes: Application to marine fish species from Portugal. *PLoS ONE* 7 (4): 1-9. http://dx.doi.org/10.1371/journal.pone.0035858

Costello M.J., Bouchet P., Emblow C.S. & Legakis, A. 2006. European marine biodiversity inventory and taxonomic resources: state of the art and gaps in knowledge. *Marine Ecology Progress Series* 316: 257-268. http://dx.doi.org/10.3354/meps316257

Costello M.J., Coll M., Danovaro R., Halpin P., Ojaveer H. & Miloslavich P. 2010. A census of marine biodiversity knowledge, resources, and future challenges. *PLoS ONE* 5 (8): 1-15. http://dx.doi.org/10.1371/journal.pone.0012110

Declaração de Rectificação n.º 52/2006, de 18 de Agosto. *Diário da República* 159 I Série-A: 5849-5863.

Dyer B.S. & Westneat M.W. 2010. Taxonomy and biogeography of the coastal fishes of Juan Fernández Archipelago and Desventuradas Islands, Chile. *Revista de Biología Marina y Oceanografía*, 45 (S1): 589-617. http://dx.doi.org/10.4067/S0718-19572010000400007

Ebert D.A. & Stehmann M.F.W. 2013. *Sharks, batoids, and chimaeras of the North Atlantic*. FAO Species Catalogue for Fishery Purposes no. 7, Food and Agriculture Organization, Rome.

Ellis J.R., Engelhard G.H. & Pinnegar J.K. 2008. Ecotypology of fishes in the eastern North Atlantic. RECLAIM, 26. Available from: http://www.climateandfish.eu

Eschmeyer W.N. (ed.) 2013. The Catalog of Fishes. California Academy of Sciences, San Francisco, California, U.S.A. Available from: http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp and http://collections.calacademy.org/ich/

Fowler H.W. 1936. *The Marine Fishes of West Africa*. Vol. LXX, Part I and Part II. The American Museum of Natural History, New York.

Froese R. & Pauly D. 2012. *Global Information System on Fishes* - FISHBASE (version Dec. 2012). Available from: http://www.fishbase.org

Gomes J.M. & Olim S. 2007. Actinopterygii. *In*: Borges, T.C. (ed.) *Biodiversidade nas Pescas do Algarve* (*Sul de Portugal*). Impriluz, Lisboa.

Gonçalves B.C. 1941. Colecção Oceanográfica de D. Carlos I - Peixes. *Travaux da la Station de Biologie Maritime de Lisbonne* 46: 1-108.

Gordo L.S. & Cabral H.N. 2001. The fish assemblage structure of a hydrologically altered coastal lagoon: The Óbidos lagoon (Portugal). *Hydrobiologia* 459: 125-133.

Gunn J.S. 1990. A revision of selected genera of the Family Carangidae (Pisces) from Australian Waters. *Records of the Australian Museum* Suppl. 12: 1-77. http://dx.doi.org/10.3853/j.0812-7387.12.1990.92.

Hareide N.-R. & Garnes G. 2001. The distribution and catches rates of deep water fish along the Mid-Atlantic Ridge from 43 to 61ºN. *Fisheries Research* 51: 297-310.

Hernandez F. (ed.) 2013. EMODnet - European Marine Observation and Data Network. Vlaams Instituut Voor de Zee. Available from: http://bio.emodnet.eu/portal/index.php [accessed since 14 Feb. 2013].

Horta e Costa B. & Gonçalves E.J. 2013. First occurrence of the Monrovia doctorfish *Acanthurus monroviae* (Perciformes: Acanthuridae) in European Atlantic waters. *Marine Biodiversity Records* 6 (20): 1-4. http://dx.doi.org/10.1017/S1755267213000055

Hureau J.C. & Monod Th. 1979a. *Check-list of the Fishes of the North-Eastern Atlantic and the Mediterranean* (*CLOFNAM I*).United Nations Educational, Scientific and Cultural Organization, Paris.

Hureau J.C. & Monod Th. 1979b *Check-list of the Fishes of the North-Eastern Atlantic and the Mediterranean* (*CLOFNAM II*).United Nations Educational, Scientific and Cultural Organization, Paris.

Hureau J.C. & Tortonese E. 1979. Carangidae. *In*: Hureau J.C. & Monod Th. (1979a) *Check-list of the Fishes of the North-Eastern Atlantic and the Mediterranean* (*CLOFNAM I*): 373-384. United Nations Educational, Scientific and Cultural Organization, Paris.

Iglésias S.P., Toulhoat L. & Sellos D.Y. 2010. Taxonomic confusion and market mislabelling of threatened skates: important consequences for their conservation status. *Aquatic Conservation: Marine and Freshwater Ecosystems* 20: 319-333. http://dx.doi.org/10.1002/aqc.1083

Iwamoto T. 2003. Family nº 93 - Macrouridae. *In*: Smith J.L.B, Smith M.M. & Heemstra P.C. (eds) *Smith's Sea Fishes*: 330-350. Struik, Cape Town.

Jonsson B. 2011. NOBANIS - Invasive Alien Species Fact Sheet - *Oncorhynchus mykiss*. Available from: http://www.nobanis.org/ Online Database of the European Network on Invasive Alien Species - NOBANIS [accessed 10 Mar. 2013].

Koefoed E. 1932. *Fishes from the sea-botton from the "Michael Sars" North Atlantic Deep-sea Expedition 1910*. John Grieg (ed.), Bergen.

Kotlyar A.N. 2011. Revision of Genus *Melamphaes* (Melamphaidae). II. Multi-Raker Species: *M. polylepis*, *M. falsidicus* sp. nova, *M. pachystomus* sp. nova, *M. macrocephalus*, *M. leprus*. *Journal of Ichthyology* 51 (8): 569-580. http://dx.doi.org/10.1134/S0032945211050080

Kukuev E.I. 2002. Ichthyofauna research on underwater mountains within the North Atlantic Ridge and adjacent areas. 2002 Annual Science Conference, International Council for the Exploration of the Sea, Copenhagen, Denmark. *International Council for the Exploration of the Sea - Committee Document* CM2002/M: 05: 1-19.

Kukuev E.I., Parin N.V. & Trunov I.A. 2012. Materials for the revision of the Family Caristiidae (Perciformes). 2. Manefishes from the East Atlantic (Redescription of *Platyberyx opalescens* Zugmayer and description of two new species *Platyberyx mauli* sp. n. and *Caristius andriashevi* sp. n.). *Journal of Ichthyology* 52 (3): 185-199. http://dx.doi.org/10.1134/S0032945212010080

Magalhães F. & Rogado L. (eds) 1993. *Livro Vermelho dos Vertebrados de Portugal*, *Vol.III - Peixes Marinhos e Estuarinos*. Instituto da Conservação da Natureza, Lisboa.

Martins R., Costa F.O., Murta A.C., Carneiro M. & Landi M. 2012. First record of *Zenion hololepis* (Zenionidae) in Portuguese continental waters: the northernmost occurrence in the eastern Atlantic. *Marine Biodiversity Records* 5: 1-3. http://dx.doi.org/10.1017/S1755267211000522

Maul G.E. 1948a. Lista sistemática dos peixes assinalados nos mares da Madeira. *In*: Noronha A.C. & Sarmento A.A. (ed.) *Vertebrados da Madeira*: 135-159. Junta Geral do Distrito Autónomo do Funchal, Funchal.

Maul G.E. 1948b. Monografia dos Peixes do Museu Municipal do Funchal. Ordem Isospondyli. *Boletim do Museu Municipal do Funchal* 3 (5): 5-41.

Maul G.E. 1948c. Quatro peixes novos dos mares da Madeira. *Boletim do Museu Municipal do Funchal* 3 (6): 41-55.

Maul G.E. 1949. Monografia dos Peixes do Museu Municipal do Funchal. Ordem Isospondyli, Conclusão. *Boletim do Museu Municipal do Funchal* 4 (9): 1-20.

Maul G.E. 1951a. Monografia dos Peixes do Museu Municipal do Funchal. Família Macrouridae e Merlucciidae. *Boletim do Museu Municipal do Funchal* 5 (12): 5-55.

Maul G.E. 1951b. Nota sobra as duas espécies de género *Neoscopelus*. *Boletim do Museu Municipal do Funchal* 5 (13): 56-63.

Maul G.E. 1952a. Monografia dos Peixes do Museu Municipal do Funchal: Famílias Gadidae e Bregmacerotidae. *Boletim do Museu Municipal do Funchal* 6 (15): 5-51.

Maul G.E. 1952b. Monografia dos Peixes do Museu Municipal do Funchal. Additions to previously revised families. *Boletim do Museu Municipal do Funchal* 6 (16): 51-62.

Maul G.E. 1954a. Monografia dos Peixes do Museu Municipal do Funchal. Ordem Berycomorphi. *Boletim do Museu Municipal do Funchal* 7 (17): 1-41.

Maul G.E. 1954b. Monografia dos Peixes do Museu Municipal do Funchal. Additions to previously revised families. *Boletim do Museu Municipal do Funchal* 7 (18): 41-63.

Maul G.E. 1955. Monografia dos Peixes do Museu Municipal do Funchal. Ordem Heteromi. *Boletim do Museu Municipal do Funchal* 8 (20): 5-19.

Maul G.E. 1956a. Monografia dos Peixes do Museu Municipal do Funchal. Ordem Discocephali. *Boletim do Museu Municipal do Funchal* 9 (23): 5-75.

Maul G.E. 1956b. Monografia dos Peixes do Museu Municipal do Funchal. Additions to previously revised Orders or Families of Fishes of the Museu Municipal do Funchal (Stomiatidae, Astronesthidae, Paralepididae). *Boletim do Museu Municipal do Funchal* 9 (24): 75-96.

Maul G.E. 1957. Further addition to the previously revised family Searsidae. *Boletim do Museu Municipal do Funchal* 10 (25): 1-21.

Maul G.E. 1959. On a specimen of *Bathylaco nigricans* Good and Bean taken from the stomach of *Aphanopus carbo*. *Museu Municipal do Funchal*, *Bocagiana* 12 (4): 1-8.

Maul G.E. 1961. The ceratioid fishes in the collection of the Museu Municipal do Funchal (Melanocetidae, Himantolophidae, Oneirodidae, Linophrynidae). *Boletim do Museu Municipal do Funchal* 14 (50): 87-159.

Maul G.E. 1962a. On a small collection of ceratioid fishes from off Dakar and two recently acquired specimens from a stomachs of *Aphanopus carbo* taken in Madeira (Melanocetidae, Himantolophidae, Diceratiidae, Oneirodidae, Ceratiidae). *Boletim do Museu Municipal do Funchal* 16 (54): 5-27.

Maul G.E. 1962b. Report on the fishes taken in Madeira and Canarian waters during the summer-autumn cruises of the "Discovery II" 1959 and 1961. I Ceratioid fishes (Melanocetidae, Himantolophidae, Oneirodidae, Gigantactinidae, Linophrynidae). *Boletim do Museu Municipal do Funchal* 16 (56): 33-46.

Maul G.E. 1965. On a new genus and species of Paralepidid from Madeira. *Boletim do Museu Municipal do Funchal* 19 (81): 55-61.

Maul G.E. 1971a. Report on the fishes taken in Madeira and Canarian waters during the summer-autumn cruises of the "Discovery II" 1959 and 1961. III Order Iniomi I on a toothless, sexually mature *Anotopterus*. *Museu Municipal do Funchal*, *Bocagiana* 28: 1-15.

Maul G.E. 1971b. On a new Goby of the Genus *Lesueurigobius* from off the Atlantic coast of Marocco and Madeira (Percomorphi, Gobioidae, Gobiidae). *Museu Municipal do Funchal*, *Bocagiana* 29: 1-7.

Maul G.E. 1972. On a new species of eel of the genus *Gnathophis* (Apodes, Congridae) from the Meteor Seamount. *Museu Municipal do Funchal, Bocagiana* 31: 1-7.

Melo M.R.S. 2008. The genus *Kali* Lloyd (Chiasmodontidae: Teleostei) with description of new two species, and the revalidation of *K. kerberti* Weber. *Zootaxa* 1747: 1-33.

Menezes G.M., Rosa A., Melo O. & Porteiro F.M. 2012. Annotated list of demersal fishes occurring at Sedlo seamount, Azores North-east Atlantic Central Ocean. *Journal of Fish Biology* 81: 1003-1018. http://dx.doi.org/10.1111/j.1095-8649.2012.03355.x

Moser H.G. & Charter S.R. 1996. Notacanthidae: spinyeels. *In*: Moser H.G. (ed.) *The early stages of fishes in the California Current Region*: 82-85. California Cooperative Oceanic Fisheries Investigations (CalCOFI) Atlas 33, La Jolla (California, USA).

Moura R.L. & Castro R.M.C. 2002. Revision of Atlantic sharpnose pufferfishes (Tetraodontiformes: Tetraodontidae: *Canthigaster*), with description of three new species. *Proceedings of the Biological Society of Washington* 115: 32-50.

Muñoz-Chapuli R. & Ramo F. 1989. Review of the *Centrophorus* sharks (Elasmobranchii, Squalidae) of the Eastern-Atlantic. *Cybium* 13 (1): 65-81.

Murray J. 1895. *Report on the Scientific Results of the Voyage of HMS "Challenger". A Summary of the Scientific Results*, Part. 2. Her Majesty's Stationery Office, London, 797-1608.

Murray J. & Hjort J. 1912. *Depths of the Ocean*. Macmillan and Co., London. http://dx.doi.org/10.5962/bhl.title.6874

Naylor G.J.P., Caira J.N., Jensen K., Rosana K.A.M., Straube N. & Lakner C. 2012. Elasmobranch phylogeny: A mitochondrial estimate based on 595 species. *In:* Carrier J.C., Musick J.A. & Heithaus M.R. (eds) *The Biology of Sharks and Their Relatives*: 31-56. Chemical Rubber Company Press, New York.

Nelson J.S., 2006. *Fishes of the World* (Fourth Edition). John Wiley & Sons, Inc., New Jersey.

Nichols, J.T. 1938. Notes on Carangin Fishes (III – On *Caranx sexfasciatus* Quoy & Gaimard). *American Museum Novitates* 998: 1-6.

Nielsen J.G. & Møller P.R. 2008. New and rare deep-sea ophidiiform fishes from the Solomon Sea caught by the Danish Galathea 3 Expedition. *Steenstrupia* 30 (1): 21-46.

Nobre A. 1935. *Fauna Marinha de Portugal. I. Vertebrados* (*Mamíferos, Répteis e Peixes*). Companhia Editora do Minho, Barcelos.

Nolf D. 2013. *The Diversity of Fish Otoliths, Past and Present*. Royal Belgian Institute of Natural Sciences, Brussels.

Osório B. 1888. Aditamento ao catálogo dos peixes de Portugal. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* - 1ª Série, 12: 1-19.

Osório B. 1895. Segundo apêndice ao "Catálogo dos Peixes de Portugal" de Felix Capello. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 3: 254-269.

Osório B. 1896. Peixes de Matozinhos. Terceiro apêndice ao catálogo dos peixes de Portugal de F. Capello. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 4: 131-159.

Osório B. 1905. Notícia de uma espécie a juntar ao catálogo dos peixes de Portugal de F. Capello. *Jornal de Sciencias Mathematicas, Physicas e Naturaes* 7: 151-152.

Osório B. 1909. Contribuição para o conhecimento da fauna bathypelagica visinhas das costas de Portugal, Lisboa.

Parin N.V. & Borodulina O.D. 1990. Survey of the genus *Polymetme* (Photichthyidae) with a description of two new species. *Journal of Ichthyology* 30 (6): 108-121.

Parin N.V. & Borodulina O.D. 2000. Redescriptions and new data on the distribution of six rare and poorly known species of the mesopelagic fish genus *Astronesthes* (Astronesthidae). *Journal of Ichthyology* 40, Suppl. 1: 15-30.

Patterson D.J., Cooper J., Kirk P.M., Pyle R.L. & Remsen D.P. (eds) 2010. *Global Names Index*. Available from: http://gni.globalnames.org/name_strings

Pietsch T.W. 2005. New species of the ceratoniod anglerfish genus *Lasiognathus* Regan (Lophiiformes: Thaumatichthyidae) from the Eastern North Atlantic off Madeira. *Copeia* 2005 (1): 77-81.

Portaria n.º 587/2006, de 22 de Junho – List of Authorized Commercial Names for Fishery and Aquaculture Products – Annex I. *Diário da República* 119 I, Série-B 4: 4421-4444.

Porteiro F.M. 2005 *Biogeography and biodiversity of Stomiid fish in the North Atlantic*. Ph.D. thesis, *University of Liverpool*, *UK*.

Porteiro F.M. 2009. A importância das campanhas oceanográficas do Príncipe Albert I do Mónaco para o conhecimento do Mar dos Açores. Boletim do Núcleo Cultural da Horta 18: 189-219.

Porteiro F.M., Menezes G.M., Afonso P., Monteiro J.G. & Santos R.S. 2010. Marine fish (Chondrichthyes, Actinopterygii). In: Borges P.A.V., Costa A., Cunha R., Gabriel R., Gonçalves V., Martins A.F., Melo I., Parente M., Raposeiro P., Rodrigues P., Santos R.S., Silva L., Vieira P., & Vieira V. A list of the terrestrial and marine biota from the Azores: 325-345. Principia, Cascais.

Post A. 1987. Pelagic transects of FRVs "Walther Herwig" and "Anton Dohrn" in the Atlantic Ocean 1966 to 1986. *Mitteilungen aus dem Institut für Seefischerei durch BfaFi der Bundesforschungsanstalt für Fischerei* 42: 1-68.

Post A. & Quéro J.-C. 1991. Distribution et taxonomie des *Howella* (Perciformes, Percichthyidae) de l'Atlantique. *Cybium 15* (*2*)*: 111-128.*

Prokofiev A.M. 2006. Morphology of *Howella sherborni* (Perciformes, Percoidei) with comparative data on the families Acropomatidae, Epigonidae and Apogonidae. Kompanija Sputnik, Moscow.

Prokofiev A.M. 2007a. Osteology and some other morphological characters of *Howella sherborni*, with a discussion of the systematic position of the genus (Perciformes, Percoidei). *Journal of Ichthyology* 27 (6): 413-426. http://dx.doi.org/10.1134/S003294520706001X

Prokofiev A.M. 2007b. The osteology of *Bathysphyraenops simplex* and the diagnosis of the Howellidae (Perciformes: Percoidei) family. *Journal of Ichthyology* 47 (8): 556-578. http://dx.doi.org/10.1134/S0032945207080036

Quéro J.-C. 1982. Zeiformes. *In*: Maurin C. & Quéro J.-C. (eds) Poisson des côtes nord-ouest africaines (Campagnes de la 'Thalassa' 1962, 1968, 1971 et 1073). *Revue des Travaux de l'Institut des Pêches Maritimes* 45: 5-71. Paris.

Quéro J.-C., Du Buit M.-H. & Vayne J.-J. 1998. Les observations de poissons tropicaux et le réchauffement des eaux dans l'Atlantique européen. *Oceanologica Acta* 21 (2): 345-351. http://dx.doi.org/10.1016/S0399-1784(98)80021-2

Quéro J.-C., Porché P. & Vayne J.-J. 2003. *Guide des Poissons de l'Atlantique Européen*. Delachaux et Niestlé, Paris.

Rannou M., Nielsen J.G. & Hureau J-C. 1974. Note sur quelques Aphyonidae de l'Atlantique Nord (Téléostéens, Ophidioidei). *Bulletin du Muséum National d'Histoire Naturelle* 171 (247): 1249-1257.

Ratnasingham S. & Hebert P.D.N. 2007. BOLD: The Barcode of Life Data System (http://www.barcodinglife.org). *Molecular Ecology Notes* 7: 355-364. http://dx.doi.org/10.1111/j.1471-8286.2007.01678.x

Robalo J.I., Santos C.S., Cabral H., Castilho R. & Almada V.C. 2009. Genetic evidence fails to discriminate between *Macroramphosus gracilis* Lowe 1839 and *Macroramphosus scolopax* Linnaeus 1758 in Portuguese waters. *Marine Biology* 156: 1733-1737. http://dx.doi.org/10.1007/s00227-009-1197-y

Rogado L., Alexandrino P., Almeida P.R., Alves J., Bochechas J., Cortes R., Domingos I., Filipe F., Madeira J. & Magalhães F. 2005. Peixes. *In*: Cabral M.J., Almeida J., Almeida P.R., Dellingar T., Ferrand de Almeida N., Oliveira M.E., Palmeirim J.M., Queiroz A., Rogado L. & Santos-Reis M. (eds) *Livro Vermelho dos Vertebrados de Portugal*: 40-43. Instituto da Conservação da Natureza, Lisboa.

Sampaio A. S. 1904. *Memoria sobre a Ilha Terceira*. Imprensa Municipal, Angra do Heroísmo.

Sanches J.G. 1986. *Nomenclatura e Diagnose dos Principais Peixes Marinhos de Portugal* (*Ciclóstomos, Seláceos e Holocéfalos*). Publicações Avulsas do Instituto Nacional de Investigação das Pescas 9, INIP, Lisboa.

Sanches J.G. 1989. *Nomenclatura Portuguesa de Organismos Aquáticos* (*Proposta para Normalização Estatística*). Publicações Avulsas do Instituto Nacional de Investigação das Pescas 14, INIP, Lisboa.

Santos R.S., Porteiro F.M. & Barreiros J.P. 1997. Marine fishes of the Azores: annotated checklist and bibliography. *Arquipélago – Life and Marine Sciences*. Suppl. 1: 1-244.

Seabra A.F. 1911. Catalogue systématique des Vertébrés du Portugal. V. Poissons. *Bulletin de la Société Portugaise des Sciences Naturelles* 53: 129-224.

Shcherbachev Y.N., Kukuev E.I. & Shlibanov V.I. 1985. Composition of the benthic and demersal ichthyocenoses of the submarine mountains in the southern part of the North Atlantic Range. *Jounal of Ichthyology* 25: 110-125.

Smith D.G. 1989. Various eel families. *In*: Böhlke E.B. (ed.) *Orders Anguilliformes and Saccopharyngiformes*. Memoirs of the Sears Foundation of Marine Research 1(9), Yale Peabody Museum of Natural History, Connecticut.

Smith D.G. 2012. A checklist of the moray eels of the world (Teleostei: Anguilliformes: Muraenidae). *Zootaxa* 3474: 1-64.

Southward A.J., Langmead O., Hardman-Mountford N.J., Aiken J., Boalch G.T., Dando P.R., Genner M.J., Joint I., Kendall M., Halliday N.C., Harris R.P., Leaper R., Mieszkowska N., Pingree R.D., Richardson A.J., Sims D.W., Smith T., Walne A.W. & Hawkins S.J. 2005. Long-term oceanographic and ecological research in the western English Channel. *Advances in Marine Biology* 47: 1-105. http://dx.doi.org/10.1016/S0065-2881(04)47001-1

Stefansdottir L., Solmundsson J., Marteinsdottir G., Kristinsson K.N. & Jonasson J.P. 2010. Groundfish species diversity and assemblage structure in Icelandic waters during recent years of warming. *Fisheries Oceanography* 19: 42-62. http://dx.doi.org/10.1111/j.1365-2419.2009.00527.x

Stein D.L. 2005. Descriptions of four new species, redescription of *Paraliparis membranaceus*, and additional data on species of the fish family Liparidae (Pisces, Scorpaeniformes) from the west coast of South America and the Indian Ocean. *Zootaxa* 1019: 1-25.

Stein D.L. & Able K.J. 1986. Liparididae. *In*: Whitehead P.J.P., Bauchot M.-L., Hureau J.-C., Nielsen J. & Tortonese E. (eds) *Fishes of the North-eastern Atlantic and Mediterranean* (*FNAM III*). UNESCO, Paris, 1275-1283.

Stein D.L., Melendez C.R. & Kong U.I. 1991. A review of Chilean snailfishes (Liparididae, Scorpaeniformes) with descriptions of a new genus and three new species. *Copeia* 1991 (2): 358-373.

Swinney G.N. 1994. Comments on the Atlantic species of the genus *Evermannella* (Scopelomorpha, Aulopiformes, Evermannellidae) with a re-evaluation of the status of *Evermanella melanoderma*. *Journal of Fish Biology* 44: 809-819. http://dx.doi.org/10.1111/j.1095-8649.1994.tb01257.x

Vaillant L.L. & Milne-Edwards A. 1888. Expeditions scientifiques du Travailleur et du Talisman pendant les années 1880, 1881, 1882, 1883: Poissons. G. Masson, Paris.

Vandelli D. 1771. *Hortus Olisiponensis Exhibens Plantas Exoticas Horti Regii Specimenque Historiae Naturalis Lusitaniae Cum novis generibus et Specibus*. Manuscript. Available from: http://purl.pt/15104/1/P7.html

Vandelli D. 1797. Flora et fauna Lusitanicae specimen. *Memórias da Academia de Sciencias de Lisboa* 1.

Vanden Berghe E., Van Guelpen L. & Pohle G. 2005. NARMS – North Atlantic Register for Marine Species. Available from: http://www.vliz.be/vmdcdata/narms/

Van der Land J., Costello M.J., Zavodnik D., Santos R.S., Porteiro F.M., Bailly N., Eschmeyer W.N. & Froese R. 2001. Pisces, *In*: Costello M.J., Emblow C.S. & White R.J. (eds) *European Register of Marine Species: A Checklist of the Marine Species in Europe and A Bibliography of Guides to Their Identification* 357-374. *Collection Patrimoines Naturels* 50, Paris.

Vieira R.P., Christiansen B., Christiansen S. & Gonçalves J.M.S. 2012. First record of the deep-water whalefish *Cetichthys indagator* (Actinopterygii: Cetomimidae) in the North Atlantic Ocean. *Journal of Fish Biology* 81: 1133-1137. http://dx.doi.org/10.1111/j.1095-8649.2012.03378.x

Vierros M., Cresswell I., Briones E.E., Rice J. & Ardron J. 2009. *Global Open Oceans and Deep Seabed* (*GOODS*) – *Biogeographic Classification*. United Nations Educational, Scientific and Cultural Organization – Intergovernmental Oceanographic Commission, IOC Technical Series 84, Paris.

Wirtz P. 1998. Twelve invertebrate and eight fish species new to the marine fauna of Madeira, and a discussion of the zoogeography of the area. *Helgoländer wissenschaftliche Meeresuntersuchungen* 52: 197-207.

Wirtz P., Fricke R. & Biscoito M.J. 2008. The coastal fishes of Madeira Island – new records and an annotated check-list. *Zootaxa* 1715: 1-26.

WoRMS Editorial Board 2013. World Register of Marine Species. Available from http://www.marinespecies.org/ at VLIZ.

Zahuranec B.J. 2000. *Zoogeography and Systematics of the Lanternfishes of the Genus* Nannobrachium (*Myctophidae: Lampanyctini*). Smithsonian Contributions to Zoology 607. Smithsonian Institution Press, Washington D.C.

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