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.


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 km² divided between mainland Portugal (327.667 km²), the Archipelago of the Azores (953.633 km²) and the Archipelago of Madeira (446.108 km²). 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 km² may potentially be added to the EEZ, therefore amounting to a total Portuguese area of 4.227.408 km².

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 ichthyofauna 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 acquired 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.

<table>
<thead>
<tr>
<th>Date</th>
<th>N. species</th>
<th>Comment</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1771</td>
<td>60</td>
<td>Domenico Vandelli, naturalist and chemist, published an elementary fish list.</td>
<td>Vandelli (1771)</td>
</tr>
<tr>
<td>1797</td>
<td>83</td>
<td>Domenico Vandelli published an updated list of fish species.</td>
<td>Vandelli (1797)</td>
</tr>
<tr>
<td>1850</td>
<td>79</td>
<td>Charles Bonnet, a mining engineer, published a book which included a list of fish species.</td>
<td>Bonnet (1850)</td>
</tr>
<tr>
<td>1867</td>
<td>84</td>
<td>The naturalist Felix de Brito Capello published his first fish list.</td>
<td>Capello (1867a) (1867b)</td>
</tr>
<tr>
<td>1868-1876</td>
<td>254</td>
<td>During these years Cappello added several appendices to the list.</td>
<td>Capello (1868) (1869a) (1869b) (1873) (1876)</td>
</tr>
<tr>
<td>1880</td>
<td>267</td>
<td>The naturalist J.V. Barbosa du Bocage concluded and published, posthumously, the work of his colleague and friend F. B. Capello.</td>
<td>Capello (1880)</td>
</tr>
<tr>
<td>1888</td>
<td>316</td>
<td>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.</td>
<td>Vaillant &amp; Milne-Edwards (1880)</td>
</tr>
<tr>
<td>1885–1915</td>
<td>197</td>
<td>During 29 oceanographic campaigns directed by Prince Albert I of Monaco, mostly in the northeastern Atlantic (Azores), 197 fish species were annotated.</td>
<td>Porteiro (2009)</td>
</tr>
<tr>
<td>1896–1906</td>
<td>306</td>
<td>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”.</td>
<td>Gonçalves (1941)</td>
</tr>
<tr>
<td>1935</td>
<td>324</td>
<td>The naturalist A. Nobre published “Fauna Marinha de Portugal”.</td>
<td>Nobre (1935)</td>
</tr>
<tr>
<td>Year</td>
<td>Page</td>
<td>Description</td>
<td>Author(s)</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>2008</td>
<td>226</td>
<td>List of marine fishes from the coastal waters (Madeira).</td>
<td>Wirtz et al. (2008)</td>
</tr>
<tr>
<td>2012</td>
<td>77</td>
<td>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.</td>
<td>Menezes et al. (2012)</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Name</th>
<th>Author and/or access link</th>
<th>Accessed since</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOLDSYSTEMS</td>
<td>BOLD: The Barcode of Life Data System</td>
<td><a href="http://www.barcodinglife.org">http://www.barcodinglife.org</a></td>
<td>5 February 2012</td>
</tr>
<tr>
<td>CLOFETA</td>
<td>Checklist of the Fishes of the Eastern Tropical Atlantic</td>
<td>Quero et al. (1990)</td>
<td>20 February 2012</td>
</tr>
<tr>
<td>CLOFNAM</td>
<td>Check-list of the fish of the northeastern Atlantic and of the Mediterranean</td>
<td>Hureau &amp; Monod (1979)</td>
<td></td>
</tr>
<tr>
<td>EMODnet</td>
<td>European Marine Observation and Data Network. Vlaams Instituut voor de Zee</td>
<td><a href="http://bio.emodnet.eu">http://bio.emodnet.eu</a></td>
<td>14 February 2013</td>
</tr>
<tr>
<td>FNAM</td>
<td>Fishes of the northeastern Atlantic and Mediterranean</td>
<td>Whitehead et al. (1984, 1986)</td>
<td></td>
</tr>
<tr>
<td>GBIF</td>
<td>Global Biodiversity Information Facility</td>
<td><a href="http://data.gbif.org">http://data.gbif.org</a></td>
<td>2 March 2011</td>
</tr>
<tr>
<td>GNI</td>
<td>Global Names Index</td>
<td>Patterson et al. (2010), <a href="http://gni.globalnames.org">http://gni.globalnames.org</a></td>
<td>13 February 2013</td>
</tr>
<tr>
<td>MCZ</td>
<td>Museum of Comparative Zoology, Harvard University, Ichthyology Department, Cambridge, Massachusetts, U.S.A.</td>
<td><a href="http://www.mcz.harvard.edu">http://www.mcz.harvard.edu</a></td>
<td>2 March 2011</td>
</tr>
<tr>
<td>MHNF</td>
<td>Museu de História Natural do Funchal, Câmara Municipal do Funchal, Funchal, Madeira, Portugal</td>
<td><a href="http://www1.cm-funchal.pt">http://www1.cm-funchal.pt</a></td>
<td>2 March 2011</td>
</tr>
<tr>
<td>MOM</td>
<td>Musée Oceanoigraphique du Mónaco, Mónaco</td>
<td><a href="http://www.oceano.mc">http://www.oceano.mc</a></td>
<td>2 March 2011</td>
</tr>
<tr>
<td>NARMS</td>
<td>North Atlantic Register for Marine Species</td>
<td>Vanden Berghe et al. (2005), <a href="http://www.vliz.be">http://www.vliz.be</a></td>
<td>8 January 2012</td>
</tr>
<tr>
<td>NMNH</td>
<td>National Museum of Natural History, Division of Fishes Collections, Washington D.C.</td>
<td><a href="http://collections.mnh.si.edu">http://collections.mnh.si.edu</a></td>
<td>2 March 2011</td>
</tr>
<tr>
<td>OBIS</td>
<td>Ocean Biogeographic Information System</td>
<td><a href="http://iobis.org">http://iobis.org</a></td>
<td>2 March 2011</td>
</tr>
<tr>
<td>ROM</td>
<td>Royal Ontario Museum, Department of Natural History, Toronto, Ontario, Canada</td>
<td><a href="http://www.rom.on.ca">http://www.rom.on.ca</a></td>
<td>2 March 2011</td>
</tr>
<tr>
<td>WoRMS</td>
<td>World Register of Marine Species</td>
<td>WoRMS Editorial Board (2013), <a href="http://www.marinespecies.org">http://www.marinespecies.org</a></td>
<td>2 March 2011</td>
</tr>
</tbody>
</table>
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 occurrences in the proposed area for the extension are indicated as “in the PECS area”.

We followed Nelson’s (2006) classification system for taxonomic categories, Froese & Pauly (2012) for the scientific nomenclature, 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 ( ), the Archipelago of the Azores ( ), and the Madeira Archipelago ( ). The use of one or more of these symbols, , , , 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 species present in the collection of the Museu de História Natural – Museu Bocage, 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.

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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.
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).

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

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

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).

<table>
<thead>
<tr>
<th></th>
<th>Oceanic</th>
<th>Shelf</th>
<th>Slope</th>
<th>Inner shelf</th>
<th>Coastal</th>
<th>Outer shelf</th>
<th>Oceanic / shelf</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (n = 1191)</td>
<td>37.45</td>
<td>16.71</td>
<td>13.77</td>
<td>7.47</td>
<td>5.88</td>
<td>2.43</td>
<td>0.59</td>
<td>15.70</td>
</tr>
<tr>
<td>EEZ (n =1058)</td>
<td>32.91</td>
<td>16.12</td>
<td>12.26</td>
<td>7.30</td>
<td>5.88</td>
<td>2.35</td>
<td>0.42</td>
<td>11.68</td>
</tr>
<tr>
<td>PECS (n =133)</td>
<td>4.53</td>
<td>0.59</td>
<td>1.51</td>
<td>0.17</td>
<td>0.08</td>
<td>0.17</td>
<td>4.03</td>
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Annotated Checklist

Superclass Myxinomorpha  
  Class Myxini  
  Order Myxiniformes  
  Family Myxinidae  

*□ Myxine glutinosa Linnaeus, 1758 – Hagfish; Enguia-de-casulo③

Superclass Petromyzontomorpha  
  Class Petromyzontida  
  Order Petromyzontiformes  
  Family Petromyzontidae  

Lampetra fluviatilis (Linnaeus, 1758) – River lamprey; Lampreia-do-rio③  
* Petromyzon marinus Linnaeus, 1758 – Sea lamprey; Lampreia-do-mar③③
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-anequim®, Rinquim®, Marracho®️, Anequim®️

**Isurus paucus** Guitart, 1966 – Longfin mako; Tubarão-anequim-de-gadanha®, Marrajo-negro®️

**Lamna nasus** (Bonnaterre, 1788) – Porbeagle; Tubarão-sardo®, Marracho®

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;®️

**Apristurus manis** (Springer, 1979) – Ghost catshark; Tubarão-gato-fantasma®️

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

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

**Galeus melastomus** Rafinesque, 1810 – Blackmouth catshark; Leitão®,®️

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;®️

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-roxa®,®️

**Scyliorhinus stellaris** (Linnaeus, 1758) – Nursehound; Pata-roxa-gata®,®️

Family Pseudotriakidae

**Pseudotriakis microdon** de Brito Capello, 1868 – False catshark; Tubarão-mona®, Mamôna®,®️

Family Triakidae

**Galeorhinus galeus** (Linnaeus, 1758) – Tope shark; Caçao®,®, Perna-de-moça®️

**Mustelus asterias** Cloquet, 1821 – Starry smooth-hound; Caçao-pintado®,®️

**Mustelus mustelus** (Linnaeus, 1758) – Smooth-hound; Caçao-liso®,®, Caneja®️

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;®️

Family Carcharhinidae

**Carcharhinus brachyurus** (Müller & Henle, 1839) – Copper shark; Tubarão-cobre®️

**Carcharhinus brevipinna** (Müller & Henle, 1839) – Spinner shark; Tubarão-tecelão®,®️

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-luzidio®,®️

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-Galápos®,®️

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, Marracho③

*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-tigre①, 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**

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

*Sphyra 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).

*Sphyra 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, ② ③
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) – Leavescale 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-fundura, Quelmazinha, Lixinha

Family Somniosidae

* **Centroscymnus coeleoplis** Barbosa du Bocage & de Brito Capello, 1864 – Portuguese dogfish; Carocho, Tubarão-português, Xara-preta

* **Centroscymnus owstonii** Garman, 1906 – Roughskin dogfish; Xara-preta-de-natura

The species *Centroscymnus cryptacanthus* Regan, 1906 is a synonym of *C. owstonii* (Compagno 2003).

* **Centroscymnus crepidater** (Bocage & Capello, 1864) – Longnose velvet dogfish; Sapata-preta, Sapata-de-natura

* **Scymnodalatias garricki** Kukuev & Konovalenko, 1988 – Azores dogfish; Scymnodon ringens Barbossa du Bocage & de Brito Capello, 1864 – Knifetooth dogfish; Arreganhada, Boca

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

* **Somniosus rostratus** (Risso, 1827) – Little sleeper shark; Pailona

* **Zameus squamulosus** (Günther, 1877) – Velvet dogfish; Arreganhada-de-focinho-comprido, Arreganhada

The species *Scymnodon obscurus* (Vaillant, 1888) is a synonym of *Z. squamulosus* (Compagno 2003).

Family Oxynotidae

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

* **Oxynotus paradoxus** Frade, 1929 – Sailfin roughshark; Peixe-porco-de-vela

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; Gata, Gata-lixia or Gato, Trabolha

* **Isistius plutodus** Garrick & Springer, 1964 – Largetooth cookiecutter shark

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-anão

Order Squatiniformes

Family Squatinidae

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

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

Order Torpediniformes

Family Torpedinidae

* **Torpedo (Torpedo) marmorata** Risso, 1810 – Spotted torpedo; Tremelga-marmoreada, Tormentim or Tremedeira

* **Torpedo (Tetronarce) nobiliana** Bonaparte, 1835 – Electric ray; Tremelga-negra, Arraia or Tremelga, Tormentim, Dormideira or Tremedeira

* **Torpedo (Torpedo) torpedo** (Linnaeus, 1758) – Common torpedo; Tremelga-de-olhos, Tormentim, Dormideira or Tremedeira
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-repregada②

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, 38.2333° W, 37.7333° 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, Iglesias 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, Raia③

* _Leucoraja circularis_ (Couch, 1838) – Sandy ray; Raia-de-São-Pedro①

_Leucoraja fulonica_ (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, Raia③

* _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_ Lacépède, 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_ (Lacépède, 1803) – Bottlenosed skate; Raia-tairoga①, ③
Order Myliobatiformes
Family Dasyatidae

- Dasyatis centroura (Mitchell, 1815) – Roughtail stingray; Uge-de-cards, Ratão, Uge
- Dasyatis pastinaca (Linnaeus, 1758) – Common stingray; Uge, Rato-do-mar, Ratão
- Pteroplathyrynchus violacea (Bonaparte, 1832) – Pelagic stingray; Uge-violeta, Ratão or Raia-pelágica
- Taeniura grabata (Geoffroy Saint-Hilaire, 1817) – Roundstingray; Ratão

Family Gymnuridae

- Gymnura altavela (Linnaeus, 1758) – Spiny butterly ray; Uge-manta, Raia or Andorinha-do-mar
- Gymnura hirundo (Lowe, 1843) – Madeira butterfly ray; Raia-borboleta

Compagno (1999) considered the validity of this species as doubtful.

Family Myliobatidae

- Manta birostris (Walbaum, 1792) – Giant manta; Manta, Urjamanta or Marona, Urjamanta
- Mobula mobular (Bonnaterre, 1788) – Devil fish; Jamanta, Jimanta, Uge or Uja, Urjamanta
- Mobula tarapacana (Philippi, 1892) – Chilean devil ray; Manta-cornuda
- Myliobatis aquila (Linnaeus, 1758) – Common eagle ray; Ratão-água, Arreião or Ratão, Raia
- Pteromyraeus bovinus (Geoffroy Saint-Hilaire, 1817) – Bull ray; Ratão-bispo, Raia
- Rhinoptera marginata (Geoffroy Saint-Hilaire, 1817) – Lusitanian cownose ray; Gavião-do-mar

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, Soilha or Sóilha-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-Atlântico, Trapão, Peixe-prata

Order Albuliformes
Family Halosauridae

- Aldrovandia affinis (Günther, 1877) – No common name
- Aldrovandia gracilis Goode & Bean, 1896 – No common name

*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, 29.9800° W, 34.4500° 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, 28.2833° W, 36.8500° N; FISH 1556510, 28.2800° W, 29.8500° N (Shcherbachev et al. 1985).

*Halosauropsis macrochir* (Günther, 1878) – Abyssal halosaur; ②

*Halosaurus jonhsonianus* Vaillant, 1888 – Halosaur; ②

*Halosaurus ovenii* Johnson, 1864 – Halosaur; ②③

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, 17.0° W, 32.0° N, and off mainland Portugal EEZ (16 NM NE of the Carlos Ribeiro Gap), BMNH. 1994.11.1.3931, 10.0° W, 32.0° 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, 29.5359° W, 42.9329° N, 2004.07.09; MAR-ECO, No. 6241, 28.5520° W, 43.0340° N, 2004.

* Notacanthus chemitzii* 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-europeia, Eiró, Iró
* Anguilla rostrata* (Lesueur, 1817) – American eel; Enguia-americana

Family Chlopsidae

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

Family Muraenidae

□ *Anarchias euryurus* (Lea, 1913) – No common name; Peixe-lobo, ③
* Anarchias longicauda* (Peter, 1877) – Bluenose moray; ③

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-lobo, ③
* Anarchias longicauda* (Peter, 1877) – Bluenose moray; ③
Anarchias similis (Lea, 1913) – Pygmy moray; ②

Enchelycore anatina (Lowe, 1838) – Fangtooth moray; Moreia-víbora or Vibora②, 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) – Sharktooth 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, ② ③

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; Fluta②, ③④

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, 33.0166° W, 34.9833° 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

Apherichthys 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, 20.3016° W, 39.8900° 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-centopeia③

*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, 32.0169° W, 35.4000° N, 24 Apr. 1979; BMNH, No. 1994.11.1.1493, 31.5000° W, 32.5450° N; MAR-ECO HamPelFish, No. 34844931, 35.4830° W, 34.3499° N, 28 Apr. 1979.

*Nemichthys curvirostris* (Strömman, 1896) – Boxer snipe eel; ③

* Nemichthys scolopaceus* Richardson, 1848 – Slender snipe eel; Cobra-de-bico③, ②

Family Congridae

* Ariosoma balearicum* (Delaroche, 1809) – Bandtooth conger; Congro-das-Baleares③, ②

* Bathyuroconger vicimus* (Vaillant, 1888) – Large-toothed conger; ①

* Conger conger* (Linnaeus, 1758) – European conger; Congro③, ②

* Conger triporiceps* Kanazawa, 1958 – Manytooth conger; ③

* Gnathophis codoniphorus* Maul, 1972 – No common name; ②


* Gnathophis mystax* (Delaroche, 1809) – Thinlip conger; Coreano③, ②

* 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-pato②, ③

* Nettastoma melanurum* Rafinesque, 1810 – Blackfin sorcerer; Cobra-bico-de-pato②, ③

* Venefica proboscidea* (Vaillant, 1888) – Whipsnout sorcerer; ①

Family Serrivomeridae

* Serrivomer beani*i Gill & Ryder, 1883 – Bean’s sawtoothed eel; Cobra-couraça③, ②

* 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-leme③, ②

Family Saccopharyngidae

* Saccopharynx ampullaceus* (Harwood, 1827) – Gluper eel; Enguia-pelicano②, ③

* 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, 33.0166° W, 34.9833° N, 9 Jun. 1910.  

*Saccopharynx paucivertebratis* 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, 26.7166° W, 30.3066° 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, 33.2433° W, 32.9666° N.  

Family Eurypharyngidae  

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

Family Monognathidae  

The species *Monognathus jespersenii* 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 (17.0016° W, 41.8630° N, Discovery Stn. 9801 # 82(9)). For these reasons, *M. jespersenii* 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, 32.9333° W, 34.9666° 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, ③  

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-dourada

Family Opisthoptroctidae

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, 22.2670° W, 44.9000° N, 5 Mar. 1979.

Bathylychnops exilis Cohen, 1958 – Javelin spookfish; ②
Dolichopteryx longipes (Vaillant, 1888) – Brown-snout spookfish; ② ③
Opisthoproctus grimaldii Zugmayer, 1911 – Mirrorbelly; ①, Peixe-sola ②, ③
Opisthoproctus soleatus Vaillant, 1888 – Barrel-eye; ①, Peixe-sola ②

Family Microstomatidae

Bathylagichthys greyae (Cohen, 1958) – Grey’s deepsea smelt; ① ② ③
Bathylagus euryops Goode & Bean, 1896 – Goiter blacksmelt; ① ② ③
Dolicholagus longirostris (Maul, 1948) – Longsnout blacksmelt; ① ② ③
Melanolagus bericoides (Borodin, 1929) – No common name; ① ② ③
Microstoma microstoma (Risso, 1810) – Slender argentine; ② ③
Nansenia atlantica Blache & Rossignol, 1962 – No common name; ②
Nansenia groenlandica (Reinhardt, 1840) – Greenland argentine; ① ②
Nansenia iberica Matallanas, 1985 – No common name; ②
Nansenia tenera Kawaguchi & Butler, 1984 – No common name; ③

Family Platytroctidae

Barbantus curvifrons (Roule & Angel, 1931) – Palebelly searsid; ① ② ③

Holtbyrnia anomala Krefft, 1980 – Bighead searsid; ②
Holtbyrnia macrops Maul, 1957 – Bigeye searsid; ② ③
Maulisia argipalla Matsui & Rosenblatt, 1979 – Palegold searsid; ② ③
Maulisia maui Parr, 1960 – Maui’s searsid; ② ③
Maulisia microlepis Sazonov & Golovan, 1976 – Smallscale searsid; ②
Mentodus facilis (Parr, 1951) – No common name; ③
Mentodus mesalirus (Matsu & 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
Searsi 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 bairdi 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 (39°30’3.23”N, 9°30’32.37”W). Bold Systems Sample ID–MLFP111, 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
Bathyctoutes macrolepis Günther, 1887 – Koefoed’s smooth-head; ②
Bathyctoutes michaelsarsi Koefoed, 1927 – Michael Sars’ smooth-head; ①②
Bathyctoutes microlepis Günther, 1878 – Smallscale smooth-head; ①②③
Conocara fiolenti Sazonov & Ivanov, 1979 – Fiolenti’s smooth-head; ②
Conocara macropterus (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

**Rinocetes 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-íris ① ② ③

*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 Salmão ①

* **Salmo trutta** Linnaeus, 1758 – Sea trout; Truta-marisca ①

**Order Stomiiformes**

**Family Diplophidae**

* **Diplophos taenia** Günther, 1873 – No common name; ①②③


**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 offersii (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
*□ 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, 28.6667° W, 30.0499° 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

*Aristostomias* *titmanni* Welsh, 1923 – Loosejaw; ② ③

*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, 20.0000° W, 40.0000° N.

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

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

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; ① ② ③

*Astronesthes* *similus* Parr, 1927 – No common name; ②


*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, 31.4750° W, 32.5180° N, 14 Nov. 1980; SOC, Discovery No. 1023217_86_FIS_013006, 31.4608° W, 32.7425° N, 13 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; ② ③

*Bathophilus* *longipinnis* (Pappenheim, 1912) – No common name; ② ③

*Bathophilus* *nigerrimus* Giglioli, 1882 – Scaleless dragonfish; ② ③

*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, 30.0220° W, 33.0780°N, 30 Oct. 1980; SOC, Discovery No. 1023216_84_FIS_067004, 31.4880° W, 32.5510° 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, 31.8025° W, 33.1858°N, 18 Nov. 1980.

*Bathophilus* *vaillanti* (Zugmayer, 1911) – Scaleless dragonfish; ① ② ③

*Borostomias* *antarcticus* (Lönnberg, 1905) – Snaggletooth; ① ②

*Borostomias* *eluens* (Brauer, 1906) – No common name; ② ③

*B. eluens* is recorded off the Azores, in the PECS area (Plato Seamount), SOC, Discovery No. 1022203_86_FIS_067008, 31.8025° W, 33.1858°N, 18 Nov. 1980.

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

*Chauliodus* *danae* Regan & Trewavas, 1929 – Dana viperfish; ① ② ③

*Chauliodus* *sloani* Bloch & Schneider, 1801 – Sloane’s viperfish; Demónio or Peixe-demónio ① ② ③
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, 35.3670° W, 34.3499° N; USNM, No. 322759, 35.4830° W, 34.3500° N, 28 Apr. 1979; ZMH, Paratype No. 137942, 39.5666° W, 35.0333° N; ZMH, Paratype No. 138424, 39.4833° W, 33.0666° 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, 31.5155° W, 33.0941° 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, 35.4830° W, 34.3500° N, 28 Apr. 1979; USNM, No. 372074, 35.3670° W, 34.3500° N, 28 Apr. 1979.
Eustomias filifer (Gilchrist, 1906) – No common name; ②③
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. 348447902, 35.4830° W, 34.3499° 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, 39.5000° W, 33.0999° 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, 35.4830° W, 34.3499° 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, 39.5670° W, 33.0170° 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; ③
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, 34.3716° W, 32.0575° 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, 35.4830° W, 34.3499° N, 28 Apr. 1979.
Eustomias schmidtii Regan & Trewavas, 1930 – No common name; ②③

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

Eustomias tetranema Zugmayer, 1913 – No common name;
Flagellostomias boureei (Zugmayer, 1913) – Scaleless dragonfish;
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, 35.4830° W, 34.3499° N, 28 Apr. 1979.
Grammatostomias flagellibarba Holt & Byrne, 1910 – No common name; ③
Idiacanthus fasciola Peters, 1877 – Sawtailfish;
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, 31.8266° W, 33.1958° N, 19 Nov. 1980; SOC, Discovery No. 1024405_84_FIS_518003, 31.2608° W, 32.8441° N, 21 Nov. 1980.
Melanostomias macrophotus Regan & Trewavas, 1930 – No common name; ②③
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, 29.6000° W, 33.0999° N, 27 Apr. 1979; USNM, No. 358821, 39.5670° W, 33.0170° 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 Sherman Seamount, 48 NM southwest of the Oceanographer Fracture Zone and 63 NM WSW of the Hayes Fracture Zone), MAR-ECO – HamPelFish, No. 34849776, 26.2469° W, 43.2420° N, 9 Jun. 1982; USNM, No. 358831.5268546, 35.4000° W, 34.2608° W, 32.8441° N, 21 Nov. 1980.
Melanostomias valdiviae Brauer, 1902 – Valdivia black dragon fish;
Neonesthes capensis (Gilchrist & von Bonde, 1924) – Cape snaggletooth; ①②③
Pachystomias microdon (Günther, 1878) – Smalltooth dragonfish; ①②
Photonectes braueri (Zugmayer, 1913) – Scaleless dragonfish; ③
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, 35.4000° W, 34.3330° 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; ☀
*Photostomias goodyeari* Kenaley & Hartel, 2005 – No common name; ☀ ☀
*Photostomias guernei* Collett, 1889 – Loosejaw; ☀ ☀ ☀
*Rhadinesthes decimus* (Zugmayer, 1911) – Slender snaggletooth; ☀ ☀ ☀
*Stomias boa boa* (Risso, 1810) – Boa dragonfish; ☀ ☀
*Stomias boa ferox* Reinhardt, 1842 – Scaly dragonfish; ☀ ☀ ☀
*Stomias brevibarbatus* Ege, 1918 – No common name; ☀ ☀ ☀
*Stomias longibarbatus* (Brauer, 1902) – No common name; ☀ ☀ ☀
*Trigonolampa miriceps* Regan & Trewavas, 1930 – Threelight dragonfish; ☀

Order *Ateleopodiformes*
Family *Ateleopodidae*

*Guentherus altivela* Osório, 1917 – Jellynose; ☀

*Order Aulopiformes*
Family *Aulopodidae*

*[*Aulopus* filamentosus*] (Bloch, 1792) – Royal flagfin; Lagarto-do-mar ☀ ☀ ☀, Lagarto-do-alto or Peixe-lagarto ☀, Lagarto ☀

Family *Synodontidae*

*Synodus foetens* (Linnaeus, 1766) – Inshore lizardfish; ☀
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, ☀
*[*Synodus saurus*] (Linnaeus, 1758) – Atlantic lizardfish; Lagarto-da-costa ☀ ☀ ☀, Peixe-lagarto ☀
*[*Synodus synodus*] (Linnaeus, 1758) – Diamond lizardfish; Lagarto-de-rolo ☀

Family *Chlorophthalmidae*

*[*Chlorophthalmus agassizi*] Bonaparte, 1840 – Shortnose greeneye; Olho-verde ☀ ☀, Olho-vivo ☀ ☀

Family *Notosudidae*

*[*Ahliesaurus berryi*] Bertelsen, Krefft & Marshall, 1976 – No common name; ☀ ☀ ☀
*Scopelosaurus argenteus* (Maul, 1954) – Waryfish; ☀ ☀ ☀
*Scopelosaurus lepidus* (Krefft & Maul, 1955) – Waryfish; ☀ ☀ ☀
*Scopelosaurus smithii* Bean, 1925 – No common name; ☀ ☀

Family *Ipnopidae*

*[*Bathymicrops multispinis*] Nielsen & Merrett, 1992 – No common name; ☀
*Bathymicrops regis* Hjort & Koefoed, 1912 – No common name; ☀ ☀
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-tripé
**Bathypterois grallator** (Goode & Bean, 1886) – Tripodfish; ①, Peixe-tripé
**Bathypterois longipes** Günther, 1878 – Abyssal spiderfish; ①, Peixe-tripé-abissal

**Bathypterois phenax** Parr, 1928 – Blackfin spiderfish; Peixe-tripé-de-barbatana-negra

**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


**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, 30.6166° W, 31.8333° 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, 30.7150° W, 32.4366° 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. melanoderma*. In our opinion the common name should be modified.

**Family Alepisauridae**

**Alepisaurus brevirostris** Gibbs, 1960 – Short snouted lancetfish; Peixe-cavalo

*□* **Alepisaurus ferox** Lowe, 1833 – Long snouted lancetfish; Lirio-ferro ①, ②, Peixe-cavalo or Peixe-água

**Omosudis lowii** Günther, 1887 – Omosudid; ①②③

**Family Paralepididae**

**Anotopterus pharaon** Zugmayer, 1911 – Dagghter tooth; 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, 27.8020° W, 48.1500° N, 14 Jun. 1982; MAR-ECO – HamPelFish, No. 348447970, 27.3320° W, 47.0449° N, 12 Jun. 1982; MAR-ECO – HamPelFish, No. 348447971, 27.2380° W, 46.4900° N, 12 Jun. 1982; MAR-ECO – HamPelFish, No. 34847969, 27.6870° W, 45.3969° N, 11 Jun. 1982;
Lestidiops sphyrenoides (Risso, 1820) – Barracudina

Macroparalepis affinis Ege, 1933 – Barracudina; Barracudina

Macroparalepis brevis Ege, 1933 – No common name; Barracudina

Macroparalepis nigra (Maul, 1965) – No common name; Barracudina

Magnisudis atlantica (Krøyer, 1868) – Duckbill barracudine; Barracudina

Paralepis brevirostris (Parr, 1928) – No common name; Barracudina

Paralepis coregonoides Risso, 1820 – Lancet fish; Barracudina

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

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. 102306_86_FIS_647004, 31.5842° W, 31.8633° N, 14 Nov. 1980.

Paralepis speciosa Bellotti, 1878 – No common name; Barracudina

Sudis atrox Rofen, 1963 – Fierce pike smelt; Barracudina


Sudis hyalina Rafinesque, 1810 – Barracudina; Barracudina

Uncisudis longirostra Maul, 1956 – No common name; Barracudina

Uncisudis quadriramaculata (Post, 1969) – Barracudina

Family Bathysauridae

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

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

Order Myctophiformes

Family Neoscopelidae

Neoscopelus macrolepidotus Johnson, 1863 – Large-scaled lantern fish; Lanterna-vermelha

Neoscopelus microchir Matsubara, 1943 – No common name; Barracudina

Scopelegys tristis Alcock, 1890 – Pacific blackchin; Barracudina

Family Myctophidae

Benthosema glaciale (Reinhardt, 1837) – Glacier lantern fish; Romeirinho, Divertido, Escolarinho or Lobisomem

Benthosema suborbitale (Gilbert, 1913) – Smallfin lanternfish; Romeirinho, Divertido, Escolarinho or Lobisomem

Bolinichthys indicus (Nafpaktitis & Nafpaktitis, 1969) – Lanternfish; Divertido, Escolarinho or Lobisomem

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

Brauer (1906) described a new species as Myctophum (Lampanyctus) longipes, caught at 75 NM southeast of Madeira (Valdivia, Stat. 26 – 31° 59.050’ N, 15° 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; Barracudina

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

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

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Bolinichthys supralateralis (Parr, 1928) – No common name; Romeininho
Centrobranchus nigroocellatus (Günther, 1873) – No common name; Romeininho
Ceratoscopelus maderensis (Lowe, 1839) – Madeira lantern fish; Peixinho-preto, Divertido, Escolarinho or Lobisomem, Romeininho

Ceratoscopelus warmigii (Lütken, 1892) – Lanternfish; Romeininho, Divertido, Escolarinho or Lobisomem, Romeininho

Diaphus adenosus Gilbert, 1905 – No common name; Romeininho

Diaphus bertelseni Nafpaktitis, 1966 – No common name; Romeininho

Diaphus brachycephalus Tåning, 1928 – Short-headed lantern fish; Romeininho, Divertido, Escolarinho or Lobisomem, Romeininho

Diaphus dumerili (Bleeker, 1856) – Lantern fish; Ferreiro, Divertido, Escolarinho or Lobisomem, Romeininho

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

Diaphus holti Tåning, 1918 – Small lantern fish; Romeininho, Divertido, Escolarinho or Lobisomem, Romeininho

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


Diaphus luetskeni (Brauer, 1904) – No common name; Romeininho


Diaphus metopoclampus (Cocco, 1829) – Spothead lantern fish; Romeininho, Divertido, Escolarinho or Lobisomem, Romeininho

Diaphus mollis Tåning, 1928 – Lantern fish; Romeininho, Divertido, Escolarinho or Lobisomem, Romeininho

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

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. 1022826_86_FIS_214015, 31.0141º W, 33.0141º N, 3 Nov. 1980; SOC, Discovery No. 82487868, 39.4830º W, 33.067º N, 27 Apr. 1979; MAR-ECO – HamPelFish, No. 34846173, 39.4830º W, 33.067º N, 27 Apr. 1979.

* Diaphus rafinesquii (Cocco, 1838) – White-spotted lantern fish; Ferreiro, Divertido, Escolarinho or Lobisomem, Romeininho

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

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, 39.567º W, 33.0169º N, 27 Apr. 1979.

Diaphus subtilis Nafpaktitis, 1968 – No common name; Romeininho


Diaphus termophilus Tåning, 1928 – Taaning’s lantern fish; Romeininho
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 coco (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; ③

Lampanyctus alatus Goode & Bean, 1896 – No common name; ①②, 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 dolfini (Zugmayer, 1911) – Dolefini’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, 33.0166° W, 34.9833° N (Murray & Hjort 1912).

Myctophum nitidulum Garman, 1899 – Spotted lanternfish; 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


Nannobrachium atrum (Tåning, 1928) – Lantern

Nannobrachium cuprarium (Tåning, 1928) – No common name; ②, Romeirinho③

Nannobrachium lineatum (Tåning, 1928) – No common name; ②, 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 37°32′31.20″ N, 12°57′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 validiae (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, -8.8500° W, 36.4329° N, was identified as N. elongatus.

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

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, -13.3166° W, 36.666° N, 14 Jul. 1972.

Notoscopelus resin plein (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


Symbolophorus veranyi (Moreau, 1888) – Large-scale lantern fish; ①, Divertido, Escolarinho or Lobisomem②, Romeirinho③
Taaningichthys bathyphilus (Tåning, 1928) – No common name; Romeirinho
Taaningichthys minimus (Tåning, 1928) – No common name; Escolarinho, Romeirinho
Taaningichthys paurolychnus Davy, 1972 – No common name; Romeirinho

Order Lampriformes
Family Lampridae

Lampris guttatus (Brünnich, 1788) – Opah; Peixe-cravo, Joaninha

Family Stylephoridae

Stylephorus chordatus Shaw, 1791 – Tube-eye

Family Lophotidae

Lophotus lacepede Giorna, 1809 – Crested oarfish

Family Radiicephalidae

Radiicephalus elongatus Osório, 1917 – Tapertail

Family Trachipteridae

Trachipterus arcticus (Brünnich, 1788) – Dealfish; Rei-dos-arenques
Trachipterus trachypterus (Gmelin, 1789) – Mediterranean dealfish; Peixe-tábuá
Zu cristatus (Bonelli, 1819) – Scalloped ribbonfish

Family Regalecidae

Regalecus glesne Ascanius, 1772 – King of herrings; Relangueiro, Peixe-real, Regaleco or Rei-dos-arenques

Family Polymixiidae

Polymixia nobilis Lowe, 1838 – Stout beardfish; Salmonete-do-alto

Order Gadiformes
Family Macrouridae

Asthenomacrurus victoris Sazonov & Shcherbachev, 1982 – No common name
Bathygadus favosus Goode & Bean, 1886 – No common name; Lagartixa-do-mar
This species is recorded off the Azores, in the PECS area (in the Mid-Atlantic Ridge: 170 NM west of the Sherkis Seamount), MAR-E CO 2004, No. 9832, 29.5359º W, 42.9329º N, 9 Jul. 2004.
Bathygadus melanobranchus Vaillant, 1888 – Vaillant’s grenadier; Peixe-rato or Rato
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; Lagartixa-do-mar, Peixe-lagartixa

Family Macrouridae

Caelorinchus caelorincus (Risso, 1810) – Hollowsnout grenadier; Lagartixa-do-mar, Raticudo, Lagartixa
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, 25.4680° W, 39.4180° N, 17 Oct. 1971; MNHN, No. 2009-0419, 25.4680° W, 39.4180° 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
Coryphaenoides guentheri (Vaillant, 1888) – Günther’s grenadier; ①, Peixe-lagartixa③
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, ①③
Coryphaenoides thelestomus Maul, 1951 – Roughlip grenadier; ③
Coryphaenoides zaniophorus (Vaillant, 1888) – Thickbeard grenadier; ①, Peixe-lagartixa③
Echinomacrurus mollis Roule, 1916 – No common name; ①
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; ①
* Hymenocephalus italicus Giglioli, 1884 – Glasshead grenadier; Lagartixa-prateada①, Peixe-rato or Rato②, ③
* Malacocephalus laevis (Lowe, 1843) – Sothead 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
Odontomacrus 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), 29.0000° W, 31.0000° N.
Sphagemacrurus hirundo (Collett, 1896) – Swallow grenadier; Peixe-rato or Rato②, ③
Squalogadus modicatus 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, 27.1500° W, 47.8800° N.

*① Gadella maraldi (Risso, 1810) – Gadella; Abrótea-de-natura①③, Gadela②
Guttigadus latifrons (Holt & Byrne, 1908) – No common name; ②
*① Halsargyreus johnsonii Günther, 1862 – Slender codling; ①②, Abrótea-de-natura③
Laemonema robustum Johnson, 1862 – Robust mora; Abrótea or Abrótea-de-natura③

*① Laemonema yarrellii (Lowe, 1838) – No common name; ②, Abrótea-de-natura③

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 schmidtii Svetovidov, 1936 – Schmidt’s cod; ②

*① 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 (Facciолà, 1884) – No common name; ②

Family Melanidae

Melanonus zugmayeri Norman, 1930 – Arrowtail; ①②③

Family Merluccidae

Lyconus brachycolus Holt & Byrne, 1906 – No common name; ①②③
Macruronus maderensis Maul, 1951 – No common name; ③
*① Merluccius merluccius (Linnaeus, 1758) – European hake; Pescada-branca①, ②③

Family Phycidae

* Phycis blennoides (Brünnich, 1768) – Greater forkbeard; Abrótea-do-alto①②③, Abrótea①, Juliana or Melga②
*① Phycis phycis (Linnaeus, 1766) – Forkbeard; Abrótea-da-costa①, Abrótea②③

Family Gadidae

* Ciliata mustela (Linnaeus, 1758) – Fivebearded rockling; Laibeque-de-cinco-barbilhos①
*① Gadicus argenteus argenteus Guichenot, 1850 – Silvery pout; Badejinho①, ②
* Gaidropsarus biscayensis (Collett, 1890) – Mediterranean bigeye rockling; Laibeque-olho-grande

* Gaidropsarus granti (Regan, 1903) – Grant’s rockling; Viúva-do-alto or Aranha-do-alto

* Gaidropsarus guttatus (Collet, 1890) – No common name; Aranha-da-pedra or Viúva

* Gaidropsarus macrophthalmus (Günther, 1867) – Bigeye rockling

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

* Micromesistius poutassou (Risso, 1827) – Blue whiting; Verdinho, Pichelim

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

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

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

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

Order Ophidiiformes
Family Carapidae

* Carapus acus (Brünnich, 1768) – Pearl fish; Peixe-cobrelo

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


* Echiodon drummondii Thompson, 1837 – No common name

Family Ophidiidae

* Acanthonus armatus Günther, 1878 – No common name

* Barathrites iris Zugmayer, 1911 – No common name

* Bassozeus compressus (Günther, 1878) – No common name

* Bassozeus levisotimus Machida, 1989 – No common name


* Bassozeus taenia (Günther, 1887) – No common name


* Bathyonus laticeps (Günther, 1878) – No common name

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

* Benthocometes robustus (Goode & Bean, 1886) – No common name, Abadejo-cometa

* Brotulotaenia brevicauda Cohen, 1974 – No common name

* Brotulotaenia crassa Parr, 1934 – No common name

* Brotulotaenia nigra Parr, 1933 – No common name
This species is reported from the Azores, in the PECS area (94 NM southwest of the Konstantinov Ridge), SOC, Discovery No. 102328_86_FIS_078001, 31.5900º W, 32.0316º N, 16 Nov. 1980.

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

*Lamprogrammus niger* Alcock, 1891 – No common name; ♂

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

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

*Cataetyx laticeps* Koefoed, 1927 – No common name; ♂

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

**Family Bythitidae**

*Bellottia apoda* Giglioli, 1883 – No common name; ♂ ♂ ♂

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; ♂

**Family Aphyonidae**

*Aphyonus gelatinosus* Günther, 1878 – No common name; ♂

*Barathronus multidens* Nielsen, 1984 – No common name; ♂

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

*Metoeira erythrops* Nielsen, 1969 – No common name; ♂

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

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 galathea* (Nielsen, 1969) – No common name; ♂

The species *S. galathea* 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; ♂

**Family Parabrotulidae**

*Leucobrotula adipata* Koefoed, 1952 – No common name; ♂ ♂

*Parabrotula plagiophthalma* Zugmayer, 1911 – No common name; ♂ ♂

**Order Batrachoidiformes**

**Family Batrachoididae**

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

**Order Lophiiformes**

**Family Lophiidae**

*Lophius budegassa* Spinola, 1807 – Blackbellied angler; Tamboril-sovaco-preto; ♂ ♂

*Lophius piscatorius* Linnaeus, 1758 – Angler; Tamboril; ♂ ♂, Peixe-diabo or Peixe-engana; ♂
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 – HamPeeFish, 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; ②
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, 22.2670° W, 44.9000° 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, 35.5950° W, 42.0950° 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 Sherksis Seamount and 108 NM SSW of the Olympus Knoll), MAR-ECO – HamPelFish, No. 34848316, 26.2469° W, 43.2420° N, 9 Jun. 1982; MAR-ECO – HamPelFish, No. 34848317, 28.4419° W, 43.6969° 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 clarkee 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, 32.0169° W, 35.4000° N, 29 Apr. 1979.
Phyllorhinichthys microactis 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, 32.0169° W, 35.4000° N, 29 Apr. 1979.
Spiniphryne gladisfenae (Beebe, 1932) – No common name; ②

Family Thaumatichthyidae

Lasiggnathus amphihamphalus Pietsch, 2005 – No common name; ②
The species L. amphihamphalus (Holotype – BMNH 2003.11.16.12, 29.8450° W, 32.3700° 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 are off the Azores, in the PECS area (54 NM southwest of the Plato Seamount).
Lasiggnathus beebei Regan & Trewavas, 1932 – No common name; ③
Lasiggnathus saccostoma Regan, 1925 – No common name; ②③

Family Centrophrynidae

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

Family Ceratiidae

Ceratias holboelli Krøyer, 1845 – Krøyer’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 arcuти (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-liça⑦, Tainha⑦⑧, Mugem⑧, Muja⑧⑨, Muge⑧
Liza aurata (Risso, 1810) – Golden grey mullet; Tainha-garrento⑦⑧⑨, Tainha or Tainha-amarela⑦⑧⑨, Muge or Mugem⑨
Liza ramada (Risso, 1827) – Thinlip grey mullet; Tainha-fataça⑦, Tainha⑦, Muge⑨
Liiza saliens (Risso, 1810) – Leaping mullet; Tainha-de-salto⑦
Mugil cephalus Linnaeus, 1758 – Flathead grey mullet; Tainha-olhalvo⑦, Tainha⑦
Wirtz et al. (2008) mention the need to find a specimen to confirm its presence at Madeira.
Cheilopogon cyanopterus (Valenciennes, 1847) – Margined flyingfish; ①
Cheilopogon exsiliens (Linnaeus, 1771) – Flying fish; ①, Peixe-voador②, ③
Cheilopogon furcatus (Mitchell, 1815) – Spotfin flyingfish; Peixe-voador or Voador②③
Cheilopogon heterurus (Rafinesque, 1810) – Mediterranean flyingfish; Peixe-voador①, ③

Order Beloniformes
Family Exocoetidae

Cheilopogon cyanopterus (Valenciennes, 1847) – Margined flyingfish; ①
Cheilopogon exsiliens (Linnaeus, 1771) – Flying fish; ①, Peixe-voador②, ③
Cheilopogon furcatus (Mitchell, 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-voador

Exocoetus obtusirostris Günther, 1866 – Oceanic two-wing flyingfish; Peixe-voador

Exocoetus volitans Linnaeus, 1758 – Tropical two-wing flyingfish; Peixe-voador

* Hirundichthys rondeletii (Valenciennes, 1847) – Black wing flyingfish; Peixe-voador, Voador

Hirundichthys speculiger (Valenciennes, 1847) – Mirrorwing flyingfish; Voador

Family Hemiramphidae

Hemiramphus balao Lesueur, 1821 – Balao halfbeak

Family Belonidae

* Belone belone (Linnaeus, 1761) – Garfish; Agulha, Peixe-agulha, Agulha

Belone svetovidovi Collette & Parin, 1970 – Short-beaked garfish; Agulha

Platybelone argalus argalus (Lesueur, 1821) – Keel-tail needlefish; Peixe-agulha

Tylosurus acus acus (Lacepède, 1803) – Agujon needlefish; Peixe-agulha, Agulha

Strongyura acus is a synonym of T. acus acus. Albuquerque (1954–1956) considered the presence of T. 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; Agulhão, Ratinho-do-alto, Ratinho or Catutinho

Scomberesox simulans (Hubbs & Wisner, 1980) – Dwarf saury

Order Stephanoberyciformes

Family Melamphaidae

Melamphaes indicus Ebeling, 1962 – No common name

Melamphaes falsidicus Kotlyar, 2011 – No common name

Kotlyar (2011) described the species M. falsidicus from the northern Atlantic Ocean, where it was sampled between 34°N and 58°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

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. 34850913, 27.8029° W, 45.6669° N, 11 Jun. 1982; MAR-Eco – HamPelFish, No. 34850914, 27.1369° W, 47.8720° 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

Melamphaes pumilus Ebeling, 1962 – No common name

This species occurs off the Azores, in the PECS area (118 NM southeast of the Cruiser Tablemount), SOC, Discovery No. 1126123_85_FIS_516001, 25.3408° W, 31.4258° N, 29 Jun. 1985.

Melamphaes simus Ebeling, 1962 – Ridgehead

Melamphaes suborbitalis (Gill, 1883) – Ridgehead; Peixe-rã

Melamphaes typhlops (Lowe, 1843) – Ridgehead; Peixe-rã

Poromitra capito Goode & Bean, 1883 – Crested bigscale

Poromitra crassiceps (Günther, 1878) – Crested bigscale

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Poromitra megalops (Lütken, 1878) – Ridgehead; ①
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, 14.9616° W, 39.4000° N, 1 Apr. 1984.

Poromitra nigriceps (Zugmayer, 1911) – No common name; ①

Scopeloberyx opisthopterus (Parr, 1933) – Ridgehead; ①②
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, 36.4483° W, 34.9350° 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, 35.4830° W, 34.3499° 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, 25.4324° W, 31.5229° N, 7 Jul. 1985.

Gyrinomimus myersi Parr, 1934 – No common name; ②
Proceticthys krefti Paxton, 1989 – No common name; ②

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, 25.3366° W, 31.0083° 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-vidro ③
Hoplostethus atlanticus Collett, 1889 – Orange roughy; Olho-de-vidro-laranja ①, Olho-de-vidro or Relógio ②
Hoplostethus cadenati Quéro, 1974 – Black slimehead; Olho-de-vidro-preto ①
*
Hoplostethus mediterraneus mediterraneus Cuvier, 1829 – Mediterranean slimehead; Olho-de-vidro ①②, Relógio ②, Alfonsim-do-alto ③

Family Berycidae

* Beryx decadactylus Cuvier, 1829 – Alfonsino; Imperador ①②, Alfonsim ②, Alfonsim-da-costa-larga ③
* Beryx splendidus Lowe, 1834 – Splendid alfonsino; Imperador-de-costa-estreita ①, Alfonsim ②, Alfonsim-da-costa-estreita ③

Family Holocentridae

Sargocentron hastatum (Cuvier, 1829) – Red squirrelfish; Esquilo-real ①

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, 43°-44° N).

Neocyttus helgae (Holt & Byrne, 1908) – False boarfish, ②③
Neocyttus rhomboidalis Gilchrist, 1906 – Spiky orec; 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-natura ①②, Peixe-galo ②③, Peixe-galo-de-natura ③

Family Zeniontidae (Zenionidae)

* Zenion hololepis (Goode & Bean, 1896) – No common name; Galito-rosado ①
Family Grammicolepididae

* Grammicolepis brachiusculus Poey, 1873 – Thorny tinselfish;

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 ①
* 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, 20.0° W, 40.0° 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, 20.0° W, 40.0° 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, 30.0° W, 35.0° N; ZMUC, No. 312, 30.0° W, 35.0° N; ZMUC, No. 357, 34.4200° W, 32.2700° N; ZMUC, No. 381, 32.0° W, 34.0° N; ZMUC, No. 384, 32.0° W, 39.0° N.
Syngnathus phlegon Risso, 1827 – No common name; ①
* Syngnathus rostellatus Nilsson, 1855 – Nilsson’s pipefish; Marinha-cabeça-chata①
* Syngnathus typhle 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-rosada♂, ♡

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, ♡

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Family Macroramphosidae

*◇* Macroramphosus gracilis (Lowe, 1839) – Slender snipefish; Trombeteiro♂ ♢ ♣

*◇* Macroramphosus scolopax (Linnaeus, 1758) – Longspine snipefish; Trombeteiro♂ ♢ ♣, Peixetrombeteiro ♡

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-leque♂, ♢ ♣

Wirtz *et al.* (2008) considered this as a doubtful record for Madeira.

Family Scorpaenidae

*◇* Helicolenus dactylopterus dactylopterus (Delaroche, 1809) – Blackbelly rosefish; Cantariholo-legitimo♂, Boca-negra♀ ♢

*◇* Phenacoscorpius nebris Eschmeyer, 1965 – No common name; ♢

This species is recorded off Madeira, in the PECS area (Josephine Bank), SDSC, No. 16587, 14.2266° W, 36.7183° N.

*◇* Pontinus kuhlii (Bowdich, 1825) – Offshore rockfish; Cantariholo-requeime♂, Brage, Cantariholo or Cântaro♂, Requeme or Vermelho ♢

*◇* Scorpaena azorica Eschmeyer, 1969 – No common name; ♡

*◇* Scorpaena canariensis (Sauvage, 1878) – No common name; ♢ ♣

*◇* Scorpaena elongata Cadenat, 1943 – Slender rockfish; Rascasso-rosado♂

*◇* Scorpaena laevis Troschel, 1866 – Senegalese rockfish; ♢ ♣

*◇* Scorpaena loppei Cadenat, 1943 – Cadenat’s rockfish; ♢ ♢ ♣

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- *Scorpaena maderensis* Valenciennes, 1833 – Madeira rockfish; ①, Rascasso or Coça②, Rocaz③
- *Scorpaena notata* Rafinesque, 1810 – Small red scorpionfish; Rascasso-escorição①, 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-carnheiro③

*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

- *Myxocephalus scorpius* (Linnaeus, 1758) – Shorthorn sculpin; Escorião①

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; Escorião-roco①

### Family Psychrolutidae

- *Cottunculus thomsonii* ( Günther, 1882) – Pallid sculpin; ①
Family Cyclopteridae

*Cyclopterus lumpus* Linnaeus, 1758 – Lumpfish; Peixe-lapa

*Eumicrotremus spinosus* (Fabricius, 1776) – Atlantic spiny lumpsucker;

Family Liparidae

*Paraliparis copei copei* Goode & Bean, 1896 – No common name;

*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;

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;

*Howella atlantica* Post & Quéro, 1991 - No common name;

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;

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 Robalo

* *Dicentrarchus punctatus* (Bloch, 1792) – Spotted seabass; Robalo-baila or Baila
Family Polyprionidae

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

Family Serranidae

* Anthias anthias (Linnaeus, 1758) – Swallowtail seaperch; Canário-do-mar; Folião or Piriquito; Castanheta-do-alto or Imperador

Epinephelus aeneus (Geoffroy Saint-Hilaire, 1817) – White grouper; Garoupa-legítima

Epinephelus caninus (Valenciennes, 1843) – Dogtooth grouper; Mero-gigante

Epinephelus costae (Steindachner, 1878) – Goldblotch grouper

* Epinephelus marginatus (Lowe, 1834) – Dusky grouper; Mero

Mycteroperca fusca (Lowe, 1838) – Island grouper; Badejo

Mycteroperca phenax (Jordan & Swain, 1884) – Scamp

Mycteroperca rubra (Bloch, 1793) – Mottled grouper; Garoupa-chumbo

* Serranus atricauda Günther, 1874 – Blacktail comber; Serrano-de-rolo; Garoupa

* Serranus cabrilla (Linnaeus, 1758) – Comber; Serrano-alecrim; Garoupa-do-alto; Garoupa

* Serranus hepatus (Linnaeus, 1758) – Brown comber; Serrano-ferreiro

Serranus scriba (Linnaeus, 1758) – Painted comber; Serrano-riscado

Family Callanthiidae

* Callanthias ruber (Rafinesque, 1810) – Parrot seaperch; Canarinho-do-mar; Papagaio; Castanheta-amarela-do-alto

Family Priacanthidae

* Cookeolus japonicus (Cuvier, 1829) – Longfinned bullseye

* Heteropriacanthus cruentatus (Lacepède, 1801) – Glasseye; Fura-vasos-da-rocha, Fura-vasos

* Priacanthus arenatus Cuvier, 1829 – Atlantic bigeye; Fura-vasos-vulgar or Catalufa

Family Apogonidae

Apogon imberbis (Linnaeus, 1758) – Cardinal fish; Alcarraz; Folião or Cardeal; Alfonsinho-da-Costa or Alcaraz

Family Epigonidae

Epigonus constanciae (Giglioli, 1880) – No common name

Epigonus denticulatus Dieuzeide, 1950 – Pencil cardinal

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°- 44° N).

* Epigonus telescopus (Risso, 1810) – Black cardinal fish; Olhudo; Escamuda, Escuro, Jordão or Preto; Robaldo, Robaldo-do-alto or Robalo-preto

Microichthys coccoi Rüppell, 1852 – No common name

Family Pomatomidae

* Pomatomus saltatrix (Linnaeus, 1766) – Bluefish; Anchova; Enchova
Family Coryphaenidae

- *Coryphaena equiselis* Linnaeus, 1758 – Pompano dolphinfish; Doirado-pamponge, Dourado, Doirado or Doirado-amarelo, Dourada or Delfim

- *Coryphaena hippurus* Linnaeus, 1758 – Common dolphinfish; Doirado, Dourado, Doirado or Doirado-amarelo, Dourada or Delfim

Family Echeneidae

- *Echeneis naucrates* Linnaeus, 1758 – Live sharksucker; Rémora, Agarrador or Pegador

- *Phtheirichthys lineatus* (Menzies, 1791) – Slender suckerfish; Agarrador, Pegador or Rémora

- *Remora albescens* (Temminck & Schlegel, 1850) – White suckerfish; Agarrador, Rémora, Pegador, Chupa-sangue

- *Remora brachyptera* (Lowe, 1839) – Spearfish remora; Pegador, Agarrador, Pegador or Rémora, Chupa-sangue

- *Remora osteochir* (Cuvier, 1829) – Marlinsucker; Agarrador, Pegador or Rémora, Chupa-sangue

- *Remora remora* (Linnaeus, 1758) – Sharksucker; Pegador, Rémora, Agarrador, Pegador or Rémora

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* Slekier, *Pseudocaranx* Bleeker, *Ulua* Jordan & Snyder, *Uraspis* Bleeker and *Caranx* (sensu stricto) (Gunn 1990).

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

- *Campogramma glaycos* (Lacepède, 1801) – Vadigo; Xareu-palheta

- *Caranx crysos* (Mitchill, 1815) – Blue runner; Xareu-azul, Irio-de-serra or Xareu-gacesse

- *Caranx hippos* (Linnaeus, 1766) – Crevalle jack; Xareu-macoa, Charéu or Encharéu-de-natura

- *Caranx latus* Agassiz, 1831 – Horse-eye jack

- *Caranx lugubris* Poey, 1860 – Black jack; Encharéu or Charéu

- *Caranx rhonchus* Geoffroy Saint-Hilaire, 1817 – False scad; Charro-amarelo

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

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

*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 Encharéu

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-preta

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

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

- *Elagatis bipinnulata* (Quoy & Gaimard, 1825) – Rainbow runner; Fuguetaro-arco-iris, Salemão

- *Lichia amia* (Linnaeus, 1758) – Leerre; Palombeta or Doirada

- *Naucrates ductor* (Linnaeus, 1758) – Pilotfish; Peixe-piloto, Romeiro
Pseudocaranx dentex (Bloch & Schneider, 1801) – White trevally; Xareu-bicudo or Xaréu, Encharéu, Charéu
Selene dorsalis (Gill, 1863) – African moonfish; Corcovado-africano
Seriola dumerili (Risso, 1810) – Greater amberjack; Charuteiro-catarino, Írio or Lírio, Charuteiro
Seriola fasciata (Bloch, 1793) – Lesser amberjack; Charuteiro
Seriola lalandi Valenciennes, 1833 – Yellowtail amberjack; Enchova, Charuteiro
Seriola rivoliana Valenciennes, 1833 – Longfin yellowtail; Írio or Lírio, Charuteiro
* Trachinotus carolinus (Linnaeus, 1766) – Florida pompano; Sereia-da-Florida
* Trachinotus ovatus (Linnaeus, 1758) – Pompano; Sereia-camochilo, Cabra, Plombeta or Prombeta, Trombeta, Facaio or Ranhosa
* Trachurus mediterraneus (Steindachner, 1868) – Mediterranean horse mackerel; Carapau-do-Mediterrâneo
* Trachurus picturatus (Bowdich, 1825) – Blue jack mackerel; Carapau-negrão, Chicharro-do-alto, Chicharro
* Trachurus trachurus (Linnaeus, 1758) – Atlantic horse mackerel; Carapau, Chicharro-charéu

Family Bramidae

Brama brama (Bonnaterre, 1788) – Atlantic pomfret; Xaputa, Chaputa, Freira
Pteryclus carolinus Valenciennes, 1833 – Fanfish; Freira or Xaputa

Pterycombus brama Fries, 1837 – Atlantic fanfish; Freira
Taractes asper Lowe, 1843 – Rough pomfret; Freira
Taractes rubescens (Jordan & Evermann, 1887) – Dark pomfret
Taractichthys longipinnis (Lowe, 1843) – Big-scale pomfret; Xaputa-galhuda, Xaputa, Freira-de-natura

Family Caristiidae

Caristius macrops (Bellotti, 1903) – Manefish; Freira
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, 32.0169º W, 35.4000º N, 29 Apr. 1979; MAR-ECO – HamPelFish, No. 34843842, 27.1369º W, 47.8720º N, 13 Jun. 1982; MAR-ECO – HamPelFish, No. 34843842, 27.1369º W, 47.8720º N, 13 Jun. 1982.

Paracaristius maderensis (Maul, 1949) – No common name; Freira
Platyberyx maoui Kukuev, Parin & Trunov, 2012 – No common name; Freira
According to Kukuev et al. (2012), the specimen described by Maul in 1949 as Platyberyx opalescens Zugmayer, 1911 concerns P. maoui, 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; Freira
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 (bathyal-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
29.7833° W, 36.8833° 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-salmão

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, 30.2500° W, 30.2916° N, 29 Jan. 1966.

Family Lobotidae

* Lobotes surinamensis* (Bloch, 1790) – Tripletail; Furriel ², Lobotes or Peixe-folha ², ³

Family Haemulidae

* Parapristipoma humile* (Bowdich, 1825) – Guinean grunt; Roncador-canela ³, ³

* Parapristipoma octolineatum* (Valenciennes, 1833) – African striped grunt; Riscado ³, ³

* Plectorhinchus mediterraneus* (Guichenot, 1850) – Rubberlip grunt; Pombo ³

* Pomadasys incisus* (Bowdich, 1825) – Bastard grunt; Roncador-bravura ³, Roncador ³, Ronqueirão ³, Músico ³

Family Sparidae

* Boops boops* (Linnaeus, 1758) – Bogue; Boga-do-mar ³, Boga ³, ³

* Dentex canariensis* Steindachner, 1881 – Canary dentex; Dentão-das-Canárias ³

* Dentex dentex* (Linnaeus, 1758) – Common dentex; Capatão-legítimo ³, ³

* Dentex gibbosus* (Rafinesque, 1810) – Pink dentex; Capatao-de-bandeira ³, ³

* Dentex macropthalimus* (Bloch, 1791) – Large-eye dentex; Cachucho ³

* Dentex maroccanus* Valenciennes, 1830 – Morocco dentex; Cachucho-dentão or Dentão-de-Marrocos ³

* Diplodus annularis* (Linnaeus, 1758) – Annular seabream; Sargo-alcorraz ³, ³

* Diplodus bellotti* (Steindachner, 1882) – Senegal seabream; Sargo-do-Senegal or Mucharra ³

* Diplodus cervinus cervinus* (Lowe, 1838) – Zebra seabream; Sargo-veado ³, ³

* Diplodus punctazo* (Walbaum, 1792) – Sharpsnout seabream; Sargo-bicudo ³

* Diplodus sargus cadenati* de la Paz, Bauchot & Daget, 1974 – Moroccan white seabream; Sargo-legítimo ³, Sargo ³, ³

* Diplodus sargus sargus* (Linnaeus, 1758) – White seabream; Sargo-legítimo-do-Mediterrâneo ³, ³, Sargo or Sargo-branco ³

* Diplodus vulgaris* (Geoffroy Saint-Hilaire, 1817) – Common two-banded seabream; Sargo-safia ³, ³, Seifia ³

* Lithognathus mormyrus* (Linnaeus, 1758) – Sand steenbras; Ferreira ³, Riscado ³

* Oblada melanura* (Linnaeus, 1758) – Saddled seabream; Dobradiça ³, Dobrada ³

* Pagellus acarne* (Risso, 1827) – Axillary seabream; Besugo ³, ³

* Pagellus bellottii* Steindachner, 1882 – Red pandora; Bica-buço ³
* Pagellus bogaraveo (Brünich, 1768) – Blackspot seabream; Goraz, Carapau or Peixão
* Pagellus erythrinus (Linnaeus, 1758) – Common Pandora; Bica
* Pagrus auriga Valenciennes, 1843 – Redbanded seabream; Pargo-sêmola
* Pagrus caeruleostictus (Valenciennes, 1830) – Bluespotted seabream; Pargo-ruço
* Pagrus pagrus (Linnaeus, 1758) – Red porgy; Pargo-legítimo, Pargo
* Sparus aurata (Linnaeus, 1758) – Gilthead seabream; Dourada
* Sarda salpa (Linnaeus, 1758) – Salema; Salema
* Spondyliosoma cantharus (Linnaeus, 1758) – Black seabream; Choupa

Family Centracanthidae

* Centracanthus cirrus Rafinesque, 1810 – Curled picarel; Boqueirão
* Spicara maena (Linnaeus, 1758) – Blotched picarel; Trombeiro-choupa
* Spicara melanurus (Valenciennes, 1830) – Blackspot picarel; Trombeiro-malha-redonda
* Spicara smaris (Linnaeus, 1758) – Picarel; Trombeiro-boga

Family Sciaenidae

* Argyrosomus regius (Asso, 1801) – Meagre; Corvina-legítima
* Sciaena umbra Linnaeus, 1758 – Brown meagre; Roncadeira-preta
* Umbrina canariensis Valenciennes, 1843 – Canary drum; Calafate-das-Canárias
* Umbrina cirrosa (Linnaeus, 1758) – Shi drum; Calafate-de-riscas
* Umbrina ronchus Valenciennes, 1843 – Fusca drum

Family Mullidae

* Mullus barbatus barbatus Linnaeus, 1758 – Red mullet; Salmonete-da-vasa, Salmonete
* Mullus surmuletus Linnaeus, 1758 – Surmullet; Salmonete-legítimo, Salmonete-vermelho, Salmonete-do-rolo

Family Kyphosidae

* Kyphosus incisor (Cuvier, 1831) – Yellow sea chub; Patruça, Preguiçosa or Salema-do-Brasil
* Kyphosus sectatrix (Linnaeus, 1758) – Bermuda sea chub; Preguiçosa-branca, Patruça or Salema-do-Brasil, Preguiçosa

Family Chaetodontidae

Chaetodon ocellatus Bloch, 1787 – No common name
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-borboleta

Family Cepolidae

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

Family Pomacentridae

* Abudedefduf luridus (Cuvier, 1830) – Canary damsel; Castanheta-preta, Castanheta-ferreira
* Abudedefduf saxatilis (Linnaeus, 1758) – Sergeant-major
* Chromis chromis (Linnaeus, 1758) – Damselfish; Castanheta
Chromis limbata (Valenciennes, 1833) – Azores chromis; Castanheta-amarela, Castanheta-báia or Castanheta-branca

Family Labridae

* Acantholabrus palloni (Risso, 1810) – Scale-rayed wrasse; Bodião-do-alto, Truta-do-alto
* Bodianus scrofa (Valenciennes, 1839) – Barred hogfish; Bodião-dente-de-cão, Peixe-cão, Gaio or Viola
Bodianus speciosus (Bowdich, 1825) – Blackbar hogfish; Peixe-cão or Coa

Centrolabrus caeruleus Azevedo, 1999 – Emerald wrasse; Centrolabrus exoletus (Linnaeus, 1758) – Rock cook; Bodião

Centrolabrus trutta (Lowe, 1834) – Emerald wrasse; Bodião-verde or Maracoto, Truta-verde or Truta-da-costa

* Coris julis (Linnaeus, 1758) – Mediterranean rainbow wrasse; Judia, Lambaz, Peixe-rei
Ctenolabrus rupestris (Linnaeus, 1758) – Goldsinny-wrasse; Bodião-rupestre

Labrus bergylta Ascanius, 1767 – Ballan wrasse; Bodião-reticulado, Bodião-vermelho, Truta-da-costa or Truta-vermelha

Labrus viridis Linnaeus, 1758 – Green wrasse; Bodião-torto

* Labrana fasciata (Cocco, 1833) – Pointed spotty; Bodiano, Verdelhão or Verdelho
* Symphodus bailloni (Valenciennes, 1839) – Baillon’s wrasse; Bodião
Symphodus cinctus (Bonnaterre, 1788) – Grey wrasse; Bodião-cinzentó

Symphodus mediterraneus (Linnaeus, 1758) – Axillary wrasse; Bodião-do-Mediterrâneo, Abadejo or Costureira, Trombetão

* Symphodus melops (Linnaeus, 1758) – Corkwing; Bodião-vulgar
Symphodus ocellatus (Forsskål, 1775) – No common name; Bodião-de-pinta
Symphodus roissali (Risso, 1810) – Five-spotted wrasse; Bodião-manchado
Symphodus rostratus (Bloch, 1791) – No common name; Bodião-das-ervas
Symphodus tinca (Linnaeus, 1758) – East Atlantic peacock wrasse; Bodião-pavão

Thalassoma pavo (Linnaeus, 1758) – Ornate wrasse; Bodião-verde, Bodião, Bodeão, Rainha, Torcida or Verdugo, Cagão, Peixe-de-rolo or Peixe-verde

Xyrichtys novacula (Linnaeus, 1758) – Pearly razorfish; Mordedor, Bodião-da-areia or Peixe-padre, Papagaio

Family Scaridae

Sparisoma cretense (Linnaeus, 1758) – Parrotfish; Papagaio-velho, Veja or Véja, Bodião

Family Zoarcidae

Lycenchelys alba (Vaillant, 1888) – No common name
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
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
Pachycara saldanhai Biscoito & Almeida, 2004 – No common name

Family Chiasmodontidae

- **Chiasmodon niger** Johnson, 1864 – Black swallow; ℃③, Pancinha or Sapinho-de-fundura③
- **Dysalotus alcocki** MacGilchrist, 1905 – No common name; ℃
- **Dysalotus oligoscolus** Johnson & Cohen, 1974 – No common name; ℃

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, 27.8029° W, 45.6669° N, 11 Jun. 1982; MAR-ECO – HamPelFish, No. 34848746, 39.6829° W, 32.9830° N, 27 Apr. 1979.

- **Kali indica** Lloyd, 1909 – No common name; ℃

This species is recorded off the Azores, in the PECS area (96 NM northwest of the Maxwell Fracture Zone), MAR-ECO 2004, No. 6971, 29.5709° W, 48.0029° N, 25 Apr. 2004.

- **Kali kerberti** (Weber, 1913) – No common name; ℃

*K. kerberti* is reported off the Azores, in the PECS area (13 NM northwest of the Olympus Knoll), MAR-ECO – HamPelFish, No. 34844461, 27.8029° 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; ℃
- **Kali macrura** (Parr, 1933) – No common name; ℃③
- **Kali parri** Johnson & Cohen, 1974 – No common name; ℃

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, 39.6829° W, 32.9830° N, 27 Apr. 1979.

- **Pseudoscopelus altipinnis** Parr, 1933 – No common name; ℃②③

- **Pseudoscopelus obtusifrons** (Fowler, 1934) – No common name; ℃

- **Pseudoscopelus scutatus** Krefft, 1971 – No common name; ℃

Family Ammodytidae

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

Family Trachinidae

- **Echiichthys viper** (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-borboleta⁷; Caboz-ocelado⁷

*Coryphoblennius galerita* (Linnaeus, 1758) – Montagu’s blenny; Marachomba⁷, Caboz-de-crista⁷; Caboz⁷

*Hypleurochilus bananensis* (Poll, 1959) – No common name; ⁷

*Hypleurochilus fissicornis* (Quoy & Gaimard, 1824) – No common name; ⁷

*Lipophrys canevae* (Vinciguerra, 1880) – No common name; ⁷

*Lipophrys pholis* (Linnaeus, 1758) – Shanny; Marachomba-frade⁷; Caboz-gigante⁷, Caboz⁷

*Parablennius gattorugine* (Brünnich, 1768) – Tompot blenny; Marachomba-babosa⁷; Caboz⁷, Caboz⁷, Caboz⁷

*Parablennius incognitus* (Bath, 1968) – No common name; ⁷, Caboz-das-cracas⁷, ⁷

*Parablennius parvicornis* (Valenciennes, 1836) – Rock-pool blenny; Caboz-das-poças⁷, ⁷

*Parablennius rouxi* (Cocco, 1833) – No common name; ⁷

*Parablennius ruber* (Valenciennes, 1836) – Portuguese blenny; Caboz-português⁷, ⁷, Caboz-lusitano⁷, ⁷, Caboz⁷

*Parablennius tentacularis* (Brünnich, 1768) – Tentacled blenny; ⁷

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-pavão⁷, ⁷

Family Clinidae

* *Clinitrachus argentatus* (Risso, 1810) – Cline; Peixe-macaco⁷

Family Labrisomidae

* *Labrisomus nuchipinnis* (Quoy & Gaimard, 1824) – Hairy blenny; ⁷

Family Gobiesocidae

*Apletodon dentatus* (Facciolà, 1887) – Small-headed clingfish; Pegador⁷

*Apletodon incognitus* Hofrichter & Patzner, 1997 – No common name; ⁷, Peixe-ventosa-dos-ouriços⁷, ⁷

*Apletodon pellegrini* (Chabanaud, 1925) – Chubby clingfish; Peixe-ventosa⁷, Sugador⁷

*Diplecogaster bimaculata* (Bonnaterre, 1788) – Two-spotted clingfish; Pegador⁷, ⁷

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

*Lepadogaster candolli* Risso, 1810 – Conmemarra clingfish; ⁷⁷

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

*Lepadogaster lepadogaster* (Bonnaterre, 1788) – Shore clingfish; Sugador⁷, ⁷, Chupa-sangue⁷

The species *Lepadogaster zebrina* Lowe, 1839 is a synonym of *L. lepadogaster*, according to Almada et al. (2008). All records of *L. zebrina* should be considered as *L. lepadogaster*. ⁷
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, 20.0° W, 40.0° 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; ①
This species is reported off the Azores, in the PECS area (Great Meteor Tablemount), SDSC, No. 23042, 28.4833° W, 29.8258° N; SDSC, No. 23041, 28.4966° W, 29.8366° N; SDSC, No. 23043, 28.4000° W, 30.0183° N.

* Synchiropus phaeton (Günther, 1861) – No common name; Peixe-pau-rosa①②, ②③

Family Draconettidae

Centrodraco acanthopoma (Regan, 1904) – No common name; ① ② ③

Family Gobiidae

* Aphia minuta (Risso, 1810) – Transparent goby; Caboz-transparente①

Buemia jeffreysii (Günther, 1867) – Jeffrey’s goby; ①

* Chromogobius britoi Van Tassell, 2001 – Brito’s goby; ① ③

* Crystallogobius linearis (Düben, 1845) – Crystal goby; ① ③

* 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; ① ③

* Gobius ater Bellotti, 1888 – Bellotti’s goby; ①

* Gobius auratus Risso, 1810 – Golden goby; Caboz-dourado or Caboz-das-pedras①, ③

* Gobius buchichi Steindachner, 1870 – Buchich’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, Velha①

* Gobius roulei de Buen, 1928 – Roule’s goby; ① ③

* Gobius xanthocephalus Heymer & Zander, 1992 – No common name; ①

* Gobiusculus flavescens (Fabricius, 1779) – Two-spotted goby; Caboz or Alcaboz①

* Lebetus guillei (Le Danois, 1913) – Guillet’s goby; ① ③

* Lebetus scorpioides (Collet, 1874) – Diminutive goby; ①

* Lesueurigobius friesii (Malm, 1874) – Fries’s goby; Caboz-de-escama-grande①

* Lesueurigobius heterofasciatus Maul, 1971 – Striped goby; ①
Lesueurigobius sanzi (de Buen, 1918) – Sanzo’s goby; Caboz-de-bandeira
Lesueurigobius suerii (Risso, 1810) – Lesueur’s goby; Caboz-de-bandeira

Mauligobius maderensis (Valenciennes, 1837) – No common name; Caboz-de-escama

Pomatoschistus knerii (Steindachner, 1861) – Kner’s goby; Caboz-de-escama

Pomatoschistus lozanoi (de Buen, 1923) – Lozano’s goby; Caboz-de-escama

Pomatoschistus marmoratus (Risso, 1810) – Marbled goby; Caboz-de-escama

Pomatoschistus microps (Kroyer, 1838) – Common goby; Caboz-de-escama

Pomatoschistus minutus (Pallas, 1770) – Sand goby; Caboz-da-areia

Pomatoschistus pictus (Malm, 1865) – Painted goby; Góbio-da-areia

Thorogobius ephippiatus (Lowe, 1839) – Leopard-spotted goby; Bochecha-pintada, Caboz or Caboz-de-escama

Vanneaugobius canariensis Van Tassel, Miller & Brito, 1988 – No common name; Caboz-da-areia

Family Luvaridae

Luvarus imperialis Rafinesque, 1810 – Luvar; Boquinho or Peixe-sol, Boquinho

Family Acanthuridae

Acanthurus monroviae Steindachner, 1876 – Monrovia doctorfish; Unha

Family Scombrolabracidae

Scombrolabrax heterolepis Roule, 1921 – Longfin escolar; Caboz-de-escama

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 (39°59.257’N, 10°3.025’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-gigante

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

*Sphyraena viridensis* Cuvier, 1829 – Yellowmouth barracuda; Bicuda

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

*Gempylus serpens* Cuvier, 1829 – Snake mackerel; Escolar

*Lepidocybium flavobrunneum* (Smith, 1843) – Escolar; Escolar-preto

*Nealotus tripes* Johnson, 1865 – Black snake mackerel; Peixe-coelho-de-natura

*Promethichthys prometheus* (Cuvier, 1832) – Roudi escolar; Escolar-branco

*Ruvettus pretiosus* Cocco, 1833 – Oilfish; Escolar

Family Trichiuridae

*Aphanopus carbo* Lowe, 1839 – Black scabbardfish; Peixe-espada-preto

*Aphanopus intermedius* Parin, 1983 – Intermediate scabbardfish

*Benthodesmus elongatus* (Clarke, 1879) – Elongate frostfish; Espada-de-má-água

*Benthodesmus simonyi* (Steindachner, 1891) – Simony’s frostfish; Peixe-espada

*Lepidopus caudatus* (Euphrasen, 1788) – Silver scabbardfish; Peixe-espada-branco, Talabarte

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

Family Scombridae

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

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

*Auxis thazard thazard* (Lacepède, 1800) – Frigate tuna; Judeu-liso

*Euthynnus alletteratus* (Rafinesque, 1810) – Little tunny; Merma

*Katsuwonus pelamis* (Linnaeus, 1758) – Skipjack tuna; Gaiado

*Sarda sarda* (Bloch, 1793) – Atlantic bonito; Sardajão, Serra, Cerda or Serralhão

*Scomber colias* Gmelin, 1789 – Atlantic chub mackerel; Cavala

*Scomber scombrus* Linnaeus, 1758 – Atlantic mackerel; Sarda, Cavala

*Thunnus alalunga* (Bonnaterre, 1788) – Albacore; Atum-voador

*Thunnus albacares* (Bonnaterre, 1788) – Yellowfin tuna; Atum-albacora

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

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

*Thunnus obesus* (Lowe, 1839) – Bigeye tuna; Atum-patudo; Patudo, Albacora, Alvacor or Alvacora
**Thunnus thynnus** (Linnaeus, 1758) – Atlantic bluefin tuna; Atum-rabilho, Albacora, Alvacor, Rabão or Rabilo, Atum-rabil or Rabilho

Family Xiphiidae

**Xiphius gladius** Linnaeus, 1758 – Swordfish; Espadarte, Peixe-agulha, Agulhão

Family Istiophoridae

*Istiophorus platypterus* (Shaw & Nodder, 1792) – Sailfish; Veleiro-do-Atlântico, Espadim-branco-do-Atlântico, Espadim-branco or Marlin-branco, Peto

*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-Atlântico, Espadim-azul-do-Atlântico, Espadim-azul

*Makaira nigricans* Lacepède, 1802 – Blue marlin; Espadim-azul-do-Atlântico, Espadim-azul

**Tetrapturus belone** Rafinesque, 1810 – Mediterranean spearfish; Espadim-do-Mediterrâneo, Peto

**Tetrapturus georgii** Lowe, 1841 – Roundscale spearfish; Espadim-peto, Peito

**Tetrapturus fluviigeri** Robins & de Sylva, 1963 – Longbill spearfish; Espadim-bicudo

Family Centrolophidae

**Centrolophus niger** (Gmelin, 1789) – Rudderfish; Liro-preto, Liro

**Hyperoglyphe perciformis** (Mitchill, 1818) – Barreelfish; Liro

**Schedophilus maculatus** Günther, 1860 – Pelagic butterfish

**Schedophilus medusophagus** (Cocco, 1839) – Cornish blackfish; Liro-mole

**Schedophilus ovalis** (Cuvier, 1833) – Imperial blackfish; Liro-imperial, Choupa, Lírio or Liro

Family Nomeidae

**Cubiceps gracilis** (Lowe, 1843) – Driftfish; Tirone

**Nomeus gronovii** (Gmelin, 1789) – Man-of-war fish; Pequeno-argonauta

**Psenes cyanophrys** Valenciennes, 1833 – Freckled driftfish

**Psenes maculatus** Lütken, 1880 – Silver driftfish

Family Tetragonuridae

**Tetragonurus atlanticus** Lowe, 1839 – Bigeye squaretail, Escolar-de-natura

**Tetragonurus cuvieri** Risso, 1810 – Smalleye squaretail, Escolar-de-natura

Family Stromateidae

**Stromateus atola** Linnaeus, 1758 – Blue butterfish; Pampo-godinho

Family Caproidae

**Antigonia capros** Lowe, 1843 – Deepbody boarfish, Periquito

**Capros aper** (Linnaeus, 1758) – Boarfish; Pimpim, Peixe-pau, Tem-te-em-pé

Order Pleuronectiformes

Family Citharidae

**Citharus linguatula** (Linnaeus, 1758) – Atlantic spotted flounder; Carta-de-bico
Family Scophthalmidae

* Lepidorhombus boscii (Risso, 1810) – Fourspotted megrim; Areeiro-de-quatro-manchas
* Lepidorhombus whiffiagonis (Walbaum, 1792) – Megrim; Areeiro
* Scophthalmus maximus (Linnaeus, 1758) – Turbot; Pregado
* Scophthalmus rhombus (Linnaeus, 1758) – Brill; Rodovalho
* Zeugopterus punctatus (Bloch, 1787) – Topknot; Rodovalho-bruxa
* Zeugopterus regius (Bonnaterre, 1788) – Eckström’s topknot; Bruxa

Family Paralichthyidae

Syacium papillosum (Linnaeus, 1758) – Dusky flounder; Solha

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-limão
* Platichthys flatus (Linnaeus, 1758) – European flounder; Solha-das-pedras or Patruça
* Pleuronectes platessa Linnaeus, 1758 – European plaice; Solha

Family Bothidae

* Arnoglossus imperialis (Rafinesque, 1810) – Imperial scaldfish; Carta-imperial
* Arnoglossus laterna (Walbaum, 1792) – Scald fish; Carta-do-Mediterrâneo
* Arnoglossus rueppelii (Cocco, 1844) – Ruppell’s scaldback; Carta-estreitado
* Arnoglossus thori Kyle, 1913 – Thor’s scaldfish; Carta-pontuada
* Bothus podas (Delaroche, 1809) – Wide-eyed flounder; Carta-de-olhos-grandes, Solha
* Chascanopsetta lugubris Alcock, 1894 – Pelican flounder; Carta-pelicano
* Monolene microstoma Cadenat, 1937 – Smallmouth moonflounder; Carta-de-boca-pequena

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-fundura
* Buglossidium luteum (Risso, 1810) – Solenette; Lingua-de-gato
* Dicologlossa cuneata (Moreau, 1881) – Wedge sole; Lingua
* Dicologlossa hexophthalma (Bennett, 1831) – Ocellated wedge sole; Linguado-de-olhos
* Microchirus azevia (de Brito Capello, 1867) – Bastard sole; Azevia
* Microchirus boscanion (Chabanaud, 1926) – Lusitanian sole; Azevia-marginada
* Microchirus ocellatus (Linnaeus, 1758) – Four-eyed sole; Azevia-de-malhas
* Microchirus variegatus (Donovan, 1808) – Thickback sole; Azevia-raiada or Raposo
* Microchirus wittei Chabanaud, 1950 – Banded sole; Azevia-raiada-africana
* Monochirus hispidus Rafinesque, 1814 – Whiskered sole; Cascarra
* Pegusa impar (Bennett, 1831) – Adriatic sole
*Pegusa lascaris* (Risso, 1810) – Sand sole; Linguado-da-areia, Linguado-de-areia, Linguado-branco, Languado-legítimo
*Solea senegalensis* Kaup, 1858 – Senegalese sole; Linguado-branco, Língua-de-vaca, Língua-português
*Solea solea* (Linnaeus, 1758) – Common sole; Linguado-legítimo, Linguado-branco, Linguado-português
*Synaptura lusitanica lusitanica* de Brito Capello, 1868 – Portuguese sole; Língua-de-vaca or Linguado-português
*Synapturichthys kleinii* (Risso, 1827) – Klein’s sole; Family Cynoglossidae

*S. insularis* Munroe, Brito & Hernández, 2000 – No common name; *S. nigrescens* Rafinesque, 1810 – Tonguesole; Língua-avessa, Língua
*Symphurus reticulatus* Munroe, 1990 – No common name; Order Tetraodontiformes

*Family Balistidae*

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

*Family Ostraciidae*

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

*Family Tetraodontidae*

*Canthigaster capistrata* (Lowe, 1839) – Sharpnose puffer; Porquinho or Sapo
*Canthigaster rostrata* (Bloch, 1786) – Sharpnose puffer; Peixe-balão or Porquinho, Sapinho
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; *Lagocephalus laevigatus* (Linnaeus, 1758) – Smooth puffer; Baiacu-verde, Sapo
*Lagocephalus lagocephalus lagocephalus* (Linnaeus, 1758) – Oceanic puffer; Peixe-balão, Sapo

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**Sphoeroides marmoratus** (Lowe, 1838) – Guinean puffer; Peixe-balão, Sopapo or Sapo, Sapinho

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-bola, Peixe-balão or Sapo-do-alto, Sapinho

**Family Diodontidae**

◇ **Chilomycterus atringa** (Linnaeus, 1758) – Porcupine fish; Peixe-porco, Sapo

◇ **Chilomycterus reticulatus** (Linnaeus, 1758) – Spotfin burrfish; Peixe-porco, Sapo

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

* Chilomycterus spinosus spinosus* (Linnaeus, 1758) – No common name; Diodon eydouxii* Brisout de Barneville, 1846 – Pelagic porcupinefish; Peixe-ouriço

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

* Diodon hystrix* Linnaeus, 1758 – Spot-fin porcupinefish; Peixe-ouriço, Sapo-grande, Peixe-balão-espinhoso, Sapinho, Sapo or Sapinho

**Family Molidae**

◇ **Masturus lanceolatus** (Liénard, 1840) – Sharptail mola; Peixe-lua-rabudo, Peixe-lua, Peixe-porco

* Mola mola* (Linnaeus, 1758) – Ocean sunfish; Peixe-lua, Peixe-lua-comprido

* Ranzania laevis* (Pennant, 1776) – Slender sunfish; Peixe-lua-

**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 Cyttropsis 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 subtropical 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 (CO₂) 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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