

# BOLETÍN

INSTITUTO ESPAÑOL  
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## An annotated and updated checklist of the opisthobranchs (Mollusca: Gastropoda) from Spain and Portugal (including islands and archipelagos)

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\*César Gavaia died on 3<sup>rd</sup> July 2003, in a car accident

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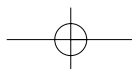
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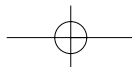
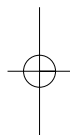
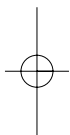
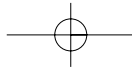
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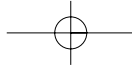
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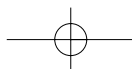
## PREFACE

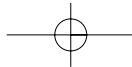
During the last decades, the living systems of our planet had experienced a sharp decline in biological diversity. The consequences of this process are not completely understood, but may have fundamental implications for the future of the biosphere and the wellbeing of the next generations.

To deal with this crisis of planetary proportions we need instruments that allow us to understand the magnitude of the problem and predict its consequences. These tools draw from a comprehensive knowledge of biological diversity, including the evolutionary history and ecology of living organisms. The foundation of this knowledge are the taxonomic inventories of biological diversity and particularly the inventories of species, the basic units of biodiversity.

Precisely at the time in which we are confronting a biodiversity crisis, is when taxonomy is also confronting its own survival crisis. The international scientific community has witnessed a decline in the number of taxonomists at the same time that other biological disciplines are flourishing. Some countries have reacted to the problem by creating scientific programs to promote the training of new taxonomists and the development of taxonomy through the investment of economic resource; PEET (Partnership for Enhancing Expertise in Taxonomy) in the USA is probably the best known. Some political leaders have realized that taxonomy is just too important to let it disappear as a scientific discipline. Unfortunately for some fields of taxonomy these programs come too late and in some cases there are no living experts who can identify organisms of several taxonomic groups.

The field of Malacology in Spain and Portugal, and particularly the study of opisthobranchs in both countries, is one of the most noticeable exceptions to the rule. Thanks to the efforts of a small group of scientific pioneers in the 70s and 80s (Ros, Ortea, García-Gómez, Ballesteros, Talavera, Luque, Cervera, Templado, Urgorri, and others) the Iberian Peninsula has created the most prolific school of opisthobranch specialists in the world. At the present time, there are probably more active opisthobranch researchers in Spain and Portugal than in the rest of the countries together. This effort has also been reflected in a impressive number of publications, doctoral dissertations, and in the description of more than a hundred new species during the last 25 years.



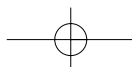


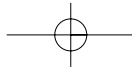
*Ángel Valdés Gallego*

*Preface*

The present monograph constitutes an excellent example of a comprehensive study of the marine diversity in a region with a great biological importance, and it constitutes the culmination of several decades of biological research. This publication has been possible thanks to the work of many and I hope it will become a model to follow in other regions in need of biological inventories.

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## An annotated and updated checklist of the opisthobranchs (Mollusca: Gastropoda) from Spain and Portugal (including islands and archipelagos)

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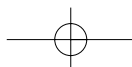
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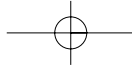
### ABSTRACT

The present publication is a new annotated and updated checklist of the opisthobranchs (Mollusca, Gastropoda) from the Spanish and Portuguese coasts, including their Atlantic archipelagos (Azores, Madeira, Selvagens and Canary Islands). The bathyal species recorded from the continental shelf of all these areas are also included. Incorporating a review of the literature, 523 species are included on the present checklist, 23 belonging to Architectibranchia, 111 to Cephalaspidea s. s., 14 to Anaspidea, 4 to Acochlidomorpha, 37 to Thecosomata, 7 to Gymnosomata, 43 to Sacoglossa, 3 to Umbraculoidea, 16 to Pleurobranchioidea and 265 to Nudibranchia: 127 Doridoidea, 42 Dendronotoidea, 9 Arminoidea, and 87 Aeolidioidea. The records these species have been divided into 12 geographic sectors: 1) Spanish coast on the Bay of Biscay; 2) Galicia; 3) mainland coast of Portugal; 4) Andalusian Atlantic coast; 5) Straits of Gibraltar, including Ceuta (northern Africa); 6) Andalusian Mediterranean coast, including Alborán Island; 7) Spanish Levant, from Cape Gata to Catalonia; 8) Catalonia, including the Columbretes Islands; 9) Balearic Islands; 10) Canary and Selvagens Islands; 11) Madeira; and 12) the Azores. The biogeographical relationships among these selected areas are discussed in the present paper's Conclusions. Taxonomic comments about many of the taxa cited are also included. It is noteworthy that since 1975, a total of 117 specific taxa have been described as new to science in the studied area. Some of them are currently considered synonyms, and others are pending an adequate revision.

**Keywords:** Opisthobranchs, Iberian Peninsula, Balearic Islands, Macronesia, checklist.

\* **Obituary note:** César Gavaia died tragically on the 3rd of July 2003 in a car accident on his way home after collecting opisthobranchs on the Algarve coast. César was a student of Marine Biology at the University of the Algarve, where he was finishing his BSc thesis on southern Portuguese opisthobranchs. The present catalogue includes some of César's results, which did not live to see published, and is a modest tribute to his valuable contribution to the study of the diversity and biology of these molluscs.





## RESUMEN

### **Catálogo actualizado de los opisthobranchios (Mollusca: Gastropoda) de España y Portugal, incluyendo islas y archipiélagos**

Se presenta un nuevo catálogo actualizado y comentado de los opisthobranchios (Mollusca, Gastropoda) de España y Portugal, incluyendo sus archipiélagos atlánticos (Azores, Madeira, Salvajes y Canarias). Asimismo, se recogen las referencias relativas a especies batiales halladas en las proximidades de las plataformas continentales de las áreas consideradas. Se citan en total 523 especies, de las cuales 23 son *Architectibranchia*, 111 *Cephalaspidea* s. s., 14 *Anaspidea*, 4 *Acochlidomorpha*, 37 *Thecosomata*, 7 *Gymnosomata*, 43 *Sacoglossa*, 3 *Umbraculoidea*, 16 *Pleurobranchioidea* y 265 *Nudibranchia* (127 *Doridoidea*, 42 *Dendronotoidea*, 9 *Arminoidea* y 87 *Aeolidoidea*). Con el fin de visualizar mejor la distribución geográfica de cada especie, las citas referentes a cada una se han dividido en 12 sectores (1: costas cantábricas, 2: costas gallegas, 3: costas continentales de Portugal, 4: costas atlánticas andaluzas, 5: costas del estrecho de Gibraltar, incluyendo las de Ceuta, 6: costas mediterráneas andaluzas, incluyendo la isla de Alborán, 7: costas del Levante español, desde el cabo de Gata hasta Cataluña, 8: costas catalanas, 9: Baleares, 10: islas Canarias y Salvajes, 11: Madeira, y 12: Azores). Con los datos obtenidos de la distribución de las especies por sectores, se presenta al final del trabajo un análisis biogeográfico. Se ofrecen, además, numerosos comentarios taxonómicos sobre muchos de los taxones mencionados. Cabe destacar que desde 1975 se han descrito en el área considerada 117 taxones nuevos de nivel específico, algunos de los cuales se consideraban sinónimos en la actualidad o su validez está pendiente de una adecuada revisión. Todo ello se comenta en el apartado Remarks y en las conclusiones finales.

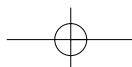
**Palabras clave:** Opisthobranchios, península Ibérica, islas Baleares, Macaronesia, catálogo.

## INTRODUCTION

The first checklist of opisthobranch molluscs from the Spanish coast was published by Joandomènec Ros (1976) and included 258 species. In that meritorious work, all previous records were listed, most of them being quite old (late 19th century and early 20th century) and mainly referring to shelled species. The author also included all of the records that he had obtained by himself whilst his doctoral thesis on Iberian opisthobranchs (Ros, 1973). Jesús Ortea also began to study these gastropods intensively and finished his doctoral thesis in 1977, mainly focusing on the Asturian opisthobranchs (Ortea, 1977c). With these two authors, Spanish malacology entered a golden era in the study of this broad and diversified group of gastropods, an era that continues to this day. The studies of Ros and Ortea fascinated many young researchers to the extent that they became interested in molluscs, including some of the present paper's contributors. The Spanish Malacological Society had just been born (1980), paving the way for fruitful collaborations among those interested in the subject. A growing group of young malacologists that focused their investigations on opisthobranchs then arose. Soon, a number of Ph.D. theses followed the pioneering works of Ros and Ortea: Ballesteros (1980a), Urgorri (1981), Templado (1983), García-Gómez

(1984a), Luque (1986), Medina (1986), García (1987), Cervera (1988) and Marín (1988). As a result of this accumulation of knowledge, the number of publications on opisthobranchs increased dramatically, often including the description of new species and bringing together considerable information on this group in Iberian waters. Therefore, it was decided to update and publish a new checklist of the opisthobranchs of the Iberian Peninsula, as well as the Balearic and Canary Islands (Cervera *et al.*, 1988). Consequently, the total number of recorded species rose to 389, including data from Ceuta and Alborán Island.

In turn, these researchers were training others, and the interest in opisthobranchs had already spread to Portugal by the time the Fauna Ibérica programme took its first steps. The incorporation of young Portuguese malacologists into the 'team' has been very productive, vastly increasing our store of knowledge on opisthobranchs in this southwestern part of the Iberian Peninsula, including the archipelagos of Madeira and the Azores. At the time, few records were available other than those of De Oliveira (1895) and Nobre (1896, 1932, 1936, 1938-40). Therefore, after this second checklist (Cervera *et al.*, 1988) had appeared, the number of publications on opisthobranchs continued to rise, almost exponentially. The rhythm of descriptions of new species did not flag, despite all the progress made in the 1980s concerning



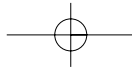
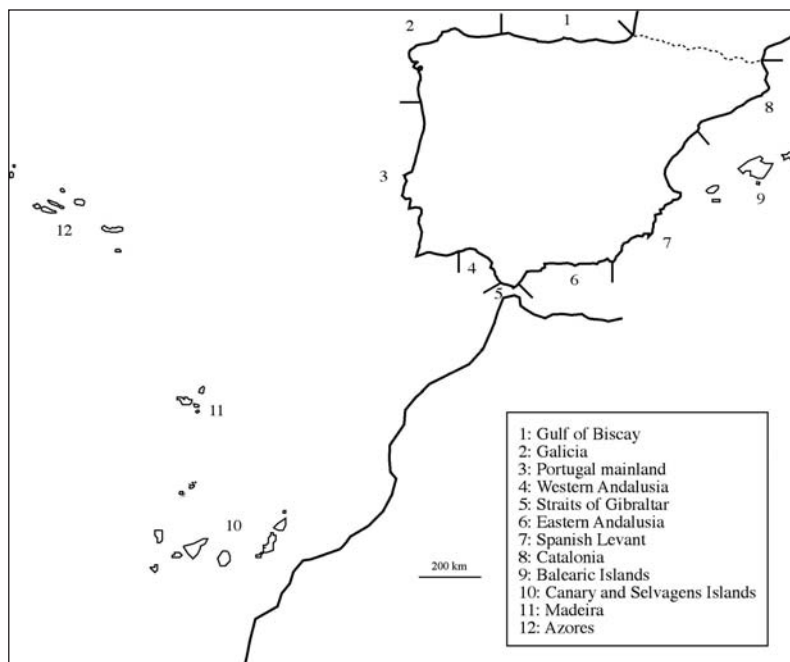


Figure 1. Geographical study areas (most of them are delimited by arrows)



research on this group's faunistic and taxonomic aspects. As a result of this, a new crop of Ph.D., MSc and Honours theses has been produced (Ávila Escartín, 1993; Álvarez Orive, 1994; Martínez Cueto-Felgueroso, 1995; Valdés, 1996; Malaquias, 1996, 2003; Giménez-Casalduero, 1997; Aguado, 2000; Megina, 2000; Calado, 2001; Sánchez Tocino, 2003; Grande, 2004). Furthermore, a checklist of opisthobranchs of the Canary Islands was published (Ortea *et al.*, 2001), with 245 species being reported for this archipelago, including many new records. This checklist was updated later by Moro *et al.* (2003).

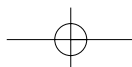
This constant inflow of new information, together with the multiple changes incorporated due to taxonomic and phylogenetic revisions in many high-level taxa (Mikkelsen, 1996; Jensen, 1996, 1997; Valdés, 2001, 2002; Valdés and Gosliner, 1999, 2001; Wollscheid and Wägele, 1999; Wägele and Willan, 2000; Wollscheid-Lengeling *et al.*, 2001; Vonnemann *et al.*, in press) or other key opisthobranch taxa (Schrödl and Wägele, 2001; Schrödl, Wägele and Willan, 2001), led us to the elaboration of the present updated checklist.

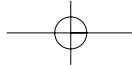
Naturally, the percentage of papers devoted strictly to taxonomic and faunistic aspects dropped off, but new and more diversified lines of investigation arose, dealing with ecological and other bio-

logical aspects of malacology. It is not within the scope of the present checklist to detail all of these publications, but we would like to highlight the field research on opisthobranch chemical defences, since it was a result of the collaboration initiated in the 1980s with the Institute of Biomolecular Chemistry, in Naples, Italy, led by Guido Cimino. As an example, we cite the review papers by Ávila Escartín (1993), Marín *et al.* (1999), and Marín and Ros (2004), amongst others. In the present work, we only include those publications that feature chorological or taxonomic data.

The geographical range of this checklist is larger than that of the two previous ones. It now includes the Portuguese archipelagos of Selvagens, Madeira, and the Azores, as well as bathyal species recorded close to the continental shelf of the study area.

For each species, references are split by areas, as in the previous checklist by Cervera *et al.* (1988), but with two new ones corresponding to the Madeira and Azores archipelagos. The Selvagens archipelago was included in the area of the Canary Islands. The idea of splitting the Iberian Portuguese coast into two areas was initially considered, but a recent biogeographical analysis (Calado *et al.*, 2003) based on all the opisthobranch records in that region did not corroborate such a division. Therefore, the defined areas, numbered 1 to 12 (figure 1), are as follows:





1. Spanish coasts of the Bay of Biscay, from the French border to 6° W, near Concha de Artedo (Asturias region).
2. Galicia region and western Asturias, from 6° W to the Portuguese border.
3. Iberian Portuguese coasts.
4. Western Andalusia, from the Portuguese border to Cape Roche, Cadiz.
5. Straits of Gibraltar, from Cape Roche to Punta Chullera, Malaga. We include in this area the records from the Spanish city of Ceuta, on the African side of the Straits.
6. Iberian coasts of the Alborán Sea (eastern Andalusia), from Punta Chullera to Cape Gata, Almería. This area includes Alborán Island and its surrounding shelf.
7. Spanish Levant, from Cape Gata to the southern limit of Catalonia. This area includes the Columbretes Islands.
8. Catalonia, to the French border.
9. Balearic Islands.
10. Canary and Selvagens Islands.
11. Madeira Islands.
12. Azores Islands.

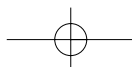
The criteria chosen to define these areas are arbitrary, especially along coast of the Iberian Peninsula. These divisions were established based on the current knowledge and traditional sampling efforts as reported in some of the works cited above. The data compiled by area were used for a biogeographical analysis presented at the end of the present checklist.

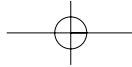
In the high-level taxa, the systematic arrangement followed is based upon the aforesaid recent phylogenetic studies. Nonetheless, one has to accept that such classifications, and the taxonomic rank assigned to each of the high-level taxa, are inevitably provisional until a stable classification of gastropods (and of opisthobranchs) can be established. In this sense, it has not been possible to assign a taxonomic rank to some of the recently proposed high-level taxa within nudibranchs, as Labiostomata, Porostomata or Dexiarchia. Moreover, those groups currently considered to be non-monophyletic are indicated by quotation marks.

Furthermore, we point out the monophyly versus paraphyly of Opisthobranchia, which in the end involves its taxonomical validity. This subject is right now at the core of many scientific discussions.

Distinct phylogenetic analyses based both on morphological and molecular characters seem to indicate that opisthobranchs are not monophyletic (e.g., Haszprunar, 1985; Salvini-Plawen and Steiner, 1996; Ponder and Lindberg, 1997; Thöllessen, 1999a; Wollscheid and Wägele, 1999; and Dayrat and Tillier, 2002). In the meantime, we shall continue referring to the Opisthobranchia 'group' in the same sense as the term has been used in recent decades, even though in our view, this high-level taxon should be redefined, possibly with the inclusion of other Heterobranchia groups (such as the Siphonarioidea, previously considered basal pulmonates) if its monophyly or taxonomic validity are stretched (Grande *et al.*, 2002, 2004a,b). The main changes adopted here regarding the traditional classification of opisthobranchs into eight/nine orders (see Thompson, 1976, one of the standard classifications) are the split of the classical Cephalaspidea into Cephalaspidea s. s. and Architectibranchia (according to Mikkelsen, 1996, 2002; Wägele, Vonnemann and Wägele, 2003; Grande *et al.*, 2004b, among others), and the division of the traditional Notaspidea into Tylodinoidea and Pleurobrancoidea. This last division was proposed by Schmekel (1985) and Salvini-Plawen (1991), and later confirmed by several phylogenetic analyses based on morphological studies (Wägele and Willan, 2000) and molecular data (Wollscheid-Lengeling *et al.*, 2001; Wägele, Vonnemann and Wägele, 2003; Grande *et al.*, 2004a,b; Vonnemann *et al.*, in press). Although Rhodopemomorpha has been considered an order of opisthobranchs since Salvini-Plawen's research (1991) came to light, none of the species in this group has been found in the geographic area covered by the present checklist.

For lower level taxa, our classification is based on multiple taxonomic and systematic contributions published since 1988. Details on all this information are given in the section Remarks; therefore, many of the taxa listed herein are followed by a reference number between brackets which corresponds to a comment in that section. The list of synonyms is not included. However, when the original name of the listed taxa in each reference is different from the one currently considered as valid, or some confusion with a different taxon may occur, this is noted.





## RESULTS

### Order ARCHITECTIBRANCHIA Haszprunar, 1985

#### Family Ringiculidae Meeck, 1862 <sup>(1)</sup>

Genus *Ringicula* Deshayes, 1838

#### *Ringicula auriculata* (Ménard, 1811)

- 1: Hidalgo (1917), Ortea (1977c), Lastra *et al.* (1988).
- 2: Hidalgo (1917), Cadée (1968), Rolán (1983), Urgorri and Besteiro (1983).
- 3: De Oliveira (1895), Hidalgo (1917), Nobre (1936).
- 4: Hidalgo (1917), Templado *et al.* (1993b).
- 5: Hidalgo (1917), Rueda, Salas and Gofas (2000).
- 6: Hidalgo (1917).
- 7: Hidalgo (1917), García Raso *et al.* (1992).
- 8: Hidalgo (1917).
- 9: Hidalgo (1917).
- 10: Odhner (1931), Nordsieck (1972), Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: McAndrew (1852), Watson (1897), Nobre (1937), Nordsieck (1972), Nordsieck and García-Talavera (1979).

#### *Ringicula buccinea* (Brocchi, 1814)

- 1: Hidalgo (1917).
- 2: Rolán (1983).
- 3: De Oliveira (1895), Hidalgo (1917), Nobre (1936).
- 8: Altimira (1975, 1977a).

#### *Ringicula nitida* Verrill, 1872 <sup>(2)</sup>

- 1: Hidalgo (1917), Pruvot-Fol (1954), Bouchet (1975, bathyal).
- 2: Hidalgo (1917), Hernández and Jiménez (1972), Bouchet (1975, bathyal).
- 3: Locard (1897, as *R. leptocheila*, bathyal), Hidalgo (1917), Nobre (1936, as *R. leptocheila*).
- 4: Hidalgo (1917).

#### *Ringicula conformis* Monterosato, 1877

- 1: Hidalgo (1917), Ortea (1977c), Flor *et al.* (1981), Flor, Llera and Ortea (1982), Borja (1987).
- 2: Hidalgo (1917), Rolán (1983).
- 3: Hidalgo (1917), Nobre (1936).
- 4: Hidalgo (1917).
- 5: Aartsen, Menkhorst and Gittenberger (1984).
- 6: Sierra, García and Lloris (1978), Ballesteros *et al.* (1986).

7: Hidalgo (1917).

8: Altimira (1977b).

9: Hidalgo (1917).

10: Nordsieck (1978), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003), Rodríguez *et al.* (2003).

11: Nobre (1889), Nordsieck and García-Talavera (1979, as *R. (Plicatra) conformis*), Malaquias, Martínez and Abreu (2002).

#### *Ringicula someri* De Folin, 1879

10: Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).

11: Nobre (1889, 1894, 1937), Watson (1897), Nordsieck and García-Talavera (1979).

#### *Ringicula minutula* Locard, 1897 <sup>(3)</sup>

8: Nordsieck (1972).

9: Nordsieck (1972).

#### *Ringicula blanchardi* Dautzenberg and Fischer, 1896

1: Ciccone and Savona (1983).

2: Rolán and Pérez-Gándaras (1981, bathyal), Rolán (1983, bathyal).

3: Locard (1897, bathyal), Ciccone and Savona (1983).

12: Dautzenberg and Fischer (1896, 1897), Mikkelsen (1995), Malaquias (2001).

#### *Ringicula semistriata* D'Orbigny, 1853

12: Nordsieck (1972), Mikkelsen (1995), Malaquias (2001).

### Family Acteonidae D'Orbigny, 1835

Genus *Acteon* Montfort, 1810

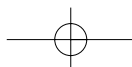
#### *Acteon tornatilis* (Linnaeus, 1758)

1: Bouchet (1975), Ortea (1977c), Flor *et al.* (1981), Flor, Llera and Ortea (1982), Borja (1987), Ávila Escartín (1993), Martínez and Andarraga (2003).

2: Hidalgo (1917), Cadée (1968), Hernández and Jiménez (1972), Nordsieck (1972, as *Pseudacteon augustoi*), Ortea (1977c), Rolán (1983), Urgorri and Besteiro (1983), Laborda and Maze (1987), Trigo and Otero (1987).

3: De Oliveira (1895), Hidalgo (1917), Nobre (1932, as *Actaeon augustoi*), Nobre (1936), Wirz-Mangold and Wyss (1958).

4: Hidalgo (1917), Templado *et al.* (1993b).



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Checklist of opisthobranchs from Spain and Portugal

- 5: García-Gómez (1982), Aartsen, Menkhorst and Gittenberger (1984), Rueda, Salas and Gofas (2000).  
 6: Hidalgo (1917), Sierra, García and Lloris (1978), Luque (1983, 1986), Ocaña *et al.* (2000).  
 7: Hidalgo (1917).  
 8: Hidalgo (1917), Altimira (1975, 1976, 1980).  
 9: Hidalgo (1917), Gasull and Cuerda (1974).  
 10: Ortea *et al.* (2001), Moro *et al.* (2003).  
 12: Watson (1897), Nobre (1937), Nordsieck and García-Talavera (1979), Malaquias (2001).

***Acteon monterosatoi* Dautzenberg, 1889**

- 3: Locard (1897, bathyal), Nobre (1936, bathyal), Nordsieck (1972, bathyal).  
 6: Peñas *et al.* (in press).  
 8: Peñas and Giribet (2003).  
 12: Dautzenberg (1889), Dautzenberg and Fisher (1896, 1897), Nordsieck (1972, as *Acteon* (*Metacteon*)), Mikkelsen (1995), Malaquias (2001).

***Acteon incisus* Dall, 1881**

- 12: Dautzenberg and Fisher (1896), Mikkelsen (1995), Malaquias (2001).

Genus *Crenilabium* Cossmann, 1889***Crenilabium exile* (Forbes in Jeffreys, 1870)**

- 1: Hidalgo (1917, as *Acteon exilis*), Pruvot-Fol (1954, as *Lissacteon*), Nordsieck (1972), Bouchet (1975, bathyal).  
 2: Bouchet (1975, bathyal).  
 6: Peñas *et al.* (in press).  
 9: Nordsieck (1972).  
 12: Dautzenberg (1889, as *Acteon*), Dautzenberg and Fisher (1896, 1897, as *Acteon* (*Lisacteon*)), Watson (1886, as *Acteon*), Nordsieck (1972, as *Crenilabrum*), Mikkelsen (1995), Malaquias (2001).

Genus *Pseudacteon* Thiele, 1925***Pseudacteon luteofasciatus* (Mühlfeldt, 1829)**

- 8: De Chia (1911-1913), Altimira (1977b).

Genus *Japonacteon* Taki, 1956***Japonacteon pusillus* (MacGillivray, 1843) <sup>(4)</sup>**

- 1: Bouchet (1975).

- 3: Locard (1897, as *Acteon pusillus*, bathyal), Hidalgo (1917, as *Acteon*), Nobre (1936, as *Acteon*), Nordsieck (1972, as *Pseudacteon*).  
 4: Bouchet (1975).  
 8: Ros (1975, as *Pseudacteon*).  
 10: Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Watson (1886, 1897, both as *Acteon pusillus*), Nobre (1937, as *A. pusillus*), Nordsieck and García-Talavera (1979, as *A. pusillus*), Nordsieck (1972, as *Pseudactaeon pusillus*).  
 12: Bouchet (1975), Mikkelsen (1995), Malaquias (2001).

Genus *Liocarenus* Harris and Burrows, 1891***Liocarenus globulinus* (Forbes, 1843)**

- 8: Hidalgo (1917, as *Acteon*).  
 12: Watson (1886, as *Acteon*), Dautzenberg (1889, as *Acteon*), Nordsieck (1972), Mikkelsen (1995), Malaquias (2001).

Genus *Callostracon* Hamlin, 1884***Callostracon amabile* (Watson, 1883)**

- 10: Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Nordsieck (1972), Nordsieck and García-Talavera (1979, as *C. (Ovactaeonina) amabilis*).  
 12: Watson (1883, 1886, both as *Acteon*), Dautzenberg (1889, as *Acteon*), Dautzenberg and Fisher (1897, as *Acteon*), Nordsieck (1972, as *Callostracon* (*Ovactaeonina*)), Mikkelsen (1995), Malaquias (2001).

***Callostracon meeki* (Dall, 1889) <sup>(5)</sup>**

- 12: Nordsieck (1972, as *Ovulacteon*), Mikkelsen (1995, as *Ovulacteon*), Malaquias (2001, as *Ovulacteon*).

Genus *Acteonina* D'Orbigny, 1850***Acteonina charis* (Watson, 1883)**

- 12: Watson (1883, 1886, as *Acteon*), Dautzenberg (1889, as *Acteon*), Dautzenberg and Fisher (1897, as *Acteon* (*Acteonina*)), Nordsieck (1972, as *Callostracon* (*Ovactaeonina*)), Mikkelsen (1995), Malaquias (2001).

Genus *Tomlinula* Strand, 1932***Tomlinula turrita* (Watson, 1886)**

- 12: Bouchet (1975, as *Mysouffa*), Dautzenberg and Fisher (1896, as *Acteon grimaldii*), Mikkelsen (1995, as *Mysouffa*), Malaquias (2001, as *Mysouffa*).

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Genus *Inopinodon* Bouchet, 1975***Inopinodon azoricus* (Locard, 1897)**

12: Locard (1897), Bouchet (1975), Mikkelsen (1995), Malaquias (2001).

**Family Amplusridae Gray, 1847<sup>(6)</sup>**Genus *Hydatina* Schumacher, 1817***Hydatina physis* (Gmelin, 1794)<sup>(7)</sup>**

3: Macedo, Macedo and Borges (1999).

10: Nordsieck and García-Talavera (1979), Pérez-Sánchez and Moreno (1990), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).

11: Wirtz (1995b), Malaquias, Martínez and Abreu (2002), Wirtz and Debelius (2003).

12: Wirtz (1999), Malaquias (2001), Wirtz and Debelius (2003).

***Hydatina velum* (Gmelin, 1794)<sup>(8)</sup>**

7: ?Acuña (1981).

10: Odhner (1931, as *H. stromfelti*), Duffus and Johnston (1969, as *H. stromfelti*).Genus *Micromelo* Pilsbry, 1895***Micromelo undatus* (Bruguère, 1792)**10: Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).

12: Nordsieck (1972), García-Talavera (1983), Mikkelsen (1995), Malaquias (2001), Wirtz and Debelius (2003).

**Order CEPHALASPIDEA s. s. Mikkelsen, 1996****Family Diaphanidae Odhner, 1914**Genus *Diaphana* Brown, 1827***Diaphana minuta* Brown, 1827**

2: Cadée (1968), Rolán (1983).

6: Peñas *et al.* (in press).

8: Altimira (1977b).

10: Pruvot-Fol (1954), Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).11: McAndrew (1852, as *Amphisphyra hyalina*), Nordsieck and García-Talavera (1979, as *Micromelo minuta*).***Diaphana globosa* (Lovén, 1846)<sup>(9)</sup>**1: Hidalgo (1917, as *Diaphana hiemalis*).***Diaphana expansa* Jeffreys, 1864**

1: Hidalgo (1917), Pruvot-Fol (1954).

3: Nordsieck (1972).

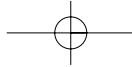
***Diaphana seguenzae* (Watson, 1886)**12: Watson (1886), Dautzenberg (1889, as *Amphisphyra*), Nordsieck (1972, as *Toledonia seguenzae*), Mikkelsen (1995), Malaquias (2001).***Diaphana flava* (Watson, 1897)**11: Watson (1897, as *Amphisphyra flava*), Nobre (1937, as *A. flava*), Nordsieck and García-Talavera (1979, as *Micromelo flava*), Schiøtte (1998), Malaquias (2004).Genus *Colobocephalus* M. Sars, 1870***Colobocephalus striatulus* (Monterosato, 1874)**

1: Hidalgo (1917), Nordsieck (1972, bathyal).

8: Peñas and Giribet (2003, as *Philine striatula*).Genus *Colpodaspis* M. Sars, 1870***Colpodaspis pusilla* M. Sars, 1870**6: Peñas *et al.* (in press).

8: Peñas and Giribet (2003).

Genus *Rhinodiaphana* Lemche, 1967***Rhinodiaphana ventricosa* (Jeffreys, 1865)**6: Peñas *et al.* (in press).**Family Retusidae Thiele, 1926**Genus *Retusa* Brown, 1827***Retusa truncatula* (Bruguère, 1792)**1: Hidalgo (1917), Ortea (1975-76), Ortea (1977c), Flor *et al.* (1981), Flor, Llera and Ortea (1982), Borja (1987, as *Cylichna semisulcata* and *R. truncatella*).2: Hidalgo (1917), Cadée (1968, as *R. truncata*), Rolán (1983, as *R. semisulcata* and *R. truncatella*), Urgorri and Besteiro (1983), Trigo and Otero (1987), Troncoso *et al.* (1988).3: Hidalgo (1917), Nobre (1936), Nordsieck (1972), Saldanha (1974, as *Acteocina truncatula*), Burnay (1986), García-Gómez *et al.* (1991), Machado and Fonseca (1997, as *R. cf. truncatella*), Macedo, Macedo and Borges (1999).



- 4: Hidalgo (1917), Sánchez-Moyano *et al.* (2000, as *R. truncatella*).
- 5: Hidalgo (1917), Aartsen, Menkhorst and Gittenberger (1984), Rueda, Salas and Gofas (2000).
- 6: Luque (1983, as *R. semisulcata*), Ballesteros *et al.* (1986), Salas and Hergueta (1986), Peñas *et al.* (in press).
- 7: Hidalgo (1917, as *R. semisulcata*), Olmo and Ros (1984), Rubio and Ros (1984), Templado, Talavera and Murillo (1997), Templado *et al.* (2002), García Raso *et al.* (1992).
- 8: De Sama (1916), Hidalgo (1917, as *R. truncatella*), Altimira (1975, as *R. truncatella*, 1976).
- 9: Hidalgo (1917, as *R. semisulcata*), Altimira (1972, also as *R. semisulcata*), Nordsieck (1972, as *R. semisulcata* and *R. truncatella*), Schröder (1978, as *R. semisulcata*), Luque and Templado (1981, as *R. semisulcata*), Ballesteros, Álvarez and Mateo (1986, also as *R. semisulcata*), Altaba (1993).
- 10: Nordsieck (1972), Nordsieck and García-Talavera (1979), Malaquias and Calado (1997), Malaquias (2000), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).
- 11: Watson (1897, as *Utricularius truncatulus*), Nobre (1937, as *Tornatina truncatula*), Nordsieck (1972, as *R. mariae*), Nordsieck and García-Talavera (1979, as *R. mariae*), Malaquias *et al.* (2001).
- 12: Dautzenberg (1889, both as *Tornatina truncatula* and *Tornatina mariei* n. sp.), Nordsieck (1972 as *Retusa (Coleophysis) mariei*), Nordsieck and García-Talavera (1979 as *Retusa mariae*), Mikkelsen (1995), Morton *et al.* (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

#### ***Retusa obtusa* (Montagu, 1803)**

- 1: Flor, Llera and Ortea (1982).
- 3: Hidalgo (1917).
- 7: Hidalgo (1917).
- 8: Hidalgo (1917).
- 9: Nordsieck (1972).

#### ***Retusa leptoneilema* (Brusina, 1865)**

- 9: Ballesteros, Álvarez and Mateo (1986).
- 10: Nordsieck and García-Talavera (1979), Malaquias and Calado (1997), Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: Talavera (1978), Nordsieck and García-Talavera (1979, as *R. leptoleynema*), Malaquias *et al.* (2001).

#### ***Retusa pellucida* G. O. Sars, 1878 <sup>(10)</sup>**

- 2: Cadée (1968).
- 6: Sierra, García and Lloris (1978, as *R. truncatula* cf. *pellucida*).

#### ***Retusa piriformis* Monterosato, 1878**

- 9: Nordsieck (1978).

#### ***Retusa mammillata* (Philippi, 1880) <sup>(11)</sup>**

- 1: Hidalgo (1917, also as *Retusa striatula*), Ortea (1977c, as *Mamilloretusa*), Borja (1987, as *Mamilloretusa* in the latter work).
- 2: Sykes (1905, as *C. hoernesii*), Hidalgo (1917), Rolán (1983, as *Mamilloretusa*), Urgorri and Besteiro (1983).
- 3: Hidalgo (1917, as *R. mammillata* and *R. striatula*, the author also refers the occurrence of this species in southern Spain, although without precise the locality), Nobre (1938-40, as *Tornatina mammillata*), Malaquias and Morenito (2000).
- 5: Aartsen, Menkhorst and Gittenberger (1984), Rueda, Salas and Gofas (2000).
- 6: Moreno and Templado (1998), Peñas *et al.* (in press).
- 7: Templado *et al.* (2002).
- 8: De Chia (1911-13), Ros (1975), Altimira (1975, 1977b), Peñas and Giribet (2003).
- 9: Hidalgo (1917), Altimira (1972), Nordsieck (1972), Luque and Templado (1981).
- 10: Nordsieck (1972), Malaquias and Calado (1997), Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: Nordsieck (1972, as *Mamilloretusa mamillata*), Nordsieck and García-Talavera (1979, as *M. mamillata*), Malaquias *et al.* (2001).

#### ***Retusa obesa* Jeffreys, 1880 <sup>(12)</sup>**

- 3: Nordsieck (1972).

#### ***Retusa tornata* (Watson, 1880)**

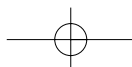
- 2: Hidalgo (1917), Rolán (1983).
- 10: Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: Watson (1886, 1897, as *Utricularius tornatus*), Nobre (1937, as *Utricularius tornatus*), Nordsieck (1972, as *Semiretusa tornata*), Nordsieck and García-Talavera (1979, as *S. tornata*), Malaquias *et al.* (2001).

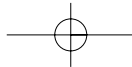
#### ***Retusa mariae* (Dautzenberg, 1889)**

- 10: Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).

#### ***Retusa leuca* (Watson, 1883)**

- 12: Watson (1883, 1886 as *Utricularius leucus*), Dautzenberg (1889, as *Tornatina*), Nordsieck (1972), Mikkelsen (1995), Malaquias (2001).





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Checklist of opisthobranchs from Spain and Portugal

***Retusa multiquadrata* Oberling, 1970<sup>(13)</sup>**

12: Mikkelsen (1995), Morton *et al.* (1998), Ávila *et al.* (1998), Malaquias (2001).

Genus *Cylichnina* Monterosato, 1884

***Cylichnina umbilicata* (Montagu, 1803)<sup>(14)</sup>**

- 1: Hidalgo (1917), Ortea (1977c, as *Cylichnina*), Flor, Llera and Ortea (1982), Borja (1987, as *Cylichnina subcylindrica* and *Cylichnina umbilicata*).
- 2: Hidalgo (1917), Cadée (1968), Rolán (1983, as *Cylichnina subcylindrica*), Urgorri and Besteiro (1983).
- 3: Hidalgo (1917).
- 5: Hidalgo (1917), Aartsen, Menkhorst and Gittenberger (1984).
- 6: Luque (1983, as *Cylichnina subcylindrica*), Moreno and Templado (1998), Peñas *et al.* (in press).
- 7: Hidalgo (1917).
- 8: Hidalgo (1917), Altimira (1977b, as *C. subcylindrica*).
- 9: Nordsieck (1972, as *C. subcylindrica*), Ballesteros, Álvarez and Mateo (1986, as *C. subcylindrica*).
- 11: Watson (1897, as *Cylichna umbilicata*), Nobre (1937, as *Tornatina umbilicata*), Nordsieck and García-Talavera (1979, as *Cylichnina subcylindrica*).
- 12: Ávila and Azevedo (1996), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

***Cylichnina nitidula* (Lovén, 1846)**

- 1: Ortea (1977c, bathyal), Borja (1987).
- 2: Hidalgo (1917) (as *Retusa*).
- 7: Hidalgo (1917) (as *Retusa*).
- 10: Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: Locard (1897), Watson (1897, as *Utricularius nitidulus*), Nobre (1937, as *Utricularius nitidulus*), Talavera (1978, as *Retusa nitidula*), Nordsieck and García-Talavera (1979).

***Cylichnina robagliana* (P. Fischer, 1874)**

- 1: Hidalgo (1917, as *Retusa*).
- 3: Nordsieck (1972).

***Cylichnina crebrisculpta* (Monterosato, 1884)**

- 1: Hidalgo (1917).

***Cylichnina canariensis* Nordsieck and García-Talavera, 1979**

- 10: Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).

***Cylichnina tenerifensis* Nordsieck and García-Talavera, 1979**

- 10: Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Volvulella* Newton, 1891

***Volvulella acuminata* (Bruguière, 1792)**

- 1: Hidalgo (1917, as *Volvula acuminata*), Ortea (1977c, as *Rhizorus acuminatus*), Flor *et al.* (1981, as *Rhizorus acuminatus*), Borja (1987, as *Rhizorus acuminatus*).
- 2: Hidalgo (1917), Cadée (1968, as *Rhizorus acuminatus*), Rolán (1983, as *Rhizorus acuminatus*), Urgorri and Besteiro (1983, as *Rhizorus acuminatus*).
- 3: Hidalgo (1917).
- 5: Hidalgo (1917).
- 6: Hidalgo (1917).
- 7: Hidalgo (1917).
- 8: Hidalgo (1917), Altimira (1975, 1980, as *Rhizorus acuminatus*), Ros (1975, as *Rhizorus acuminatus*).

Genus *Pyrrunculus* Pilsbry, 1895

***Pyrrunculus ovatus* (Jeffreys, 1870)**

- 1: Pruvot-Fol (1954, as *Retusa ovata*), Bouchet (1975, bathyal).
- 2: Bouchet (1975, bathyal).
- 3: Nobre (1936), Nordsieck (1972), Bouchet (1975).
- 12: Watson (1886), Dautzenberg (1889), Dautzenberg and Fischer (1896, 1897), Locard (1897), Bouchet (1975), Mikkelsen (1995), Malaquias (2001).

All authors as *Cylichna ovata*.

***Pyrrunculus hoernesii* (Weinkauff, 1866)**

- 6: Moreno and Templado (1998), Peñas *et al.* (in press).

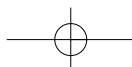
***Pyrrunculus spretus* (Watson, 1897)**

- 11: Watson (1897, as *Cylichna spreta*), Nobre (1937, *C. spreta*), Nordsieck and García-Talavera (1979, as *C. spreta*), Malaquias *et al.* (2002), Malaquias (2004).

Genus *Relichna* Bouchet, 1975

***Relichna simplex* (Locard, 1897)**

- 12: Bouchet (1975), Mikkelsen (1995), Malaquias (2001).



**Family Cylichnidae Rudman, 1978**Genus *Acteocina* Gray, 1847***Acteocina protracta* (Dautzenberg, 1889)**12: Dautzenberg (1889, as *Tornatina*), Dautzenberg and Fischer (1896, 1897, as *Tornatina*), Mikkelsen (1995), Malaquias (2001).***Acteocina pusillina* Locard, 1897**

1: Nordsieck (1972).

Genus *Cylichna* Lovén, 1846***Cylichna cylindracea* (Pennant, 1777)**

- 1: Hidalgo (1917), Ortea (1977c), Flor *et al.* (1981), Flor, Llera and Ortea (1982), Lastra *et al.* (1988), Martínez and Andarraga (2003).
- 2: Hidalgo (1917), Cadée (1968), Hernández and Jiménez (1972), Rolán (1983), Urgorri and Besteiro (1983), Trigo and Otero (1987).
- 3: De Oliveira (1895), Hidalgo (1917), Nobre (1936).
- 4: Hidalgo (1917).
- 5: Hidalgo (1917), Aartsen, Menkhorst and Gittenberger (1984).
- 6: Luque (1983, 1986), Moreno and Templado (1998), Peñas *et al.* (in press).
- 7: Hidalgo (1917), Rubio and Ros (1984).
- 8: Hidalgo (1917), Ros (1975), Altimira (1977b).
- 9: Hidalgo (1917), Altimira (1972), Schroder (1978).
- 10: Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003), Rodríguez *et al.* (2003).
- 11: McAndrew (1852), Nobre (1895), Locard (1897), Watson (1897), Nobre (1937), Nordsieck (1972), Nordsieck and García-Talavera (1979), Malaquias *et al.* (2001), Malaquias, Martínez and Abreu (2002).
- 12: Pilsbry (1895), Sykes (1904), Nordsieck (1972), Mikkelsen (1995), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

***Cylichna alba* (Brown, 1827)**

- 1: Hidalgo (1917), Pruvot-Fol (1954).
- 3: Nordsieck (1972).
- 9: Nordsieck (1972), Altimira (1973), Luque and Templado (1981), Altaba and Traveset (1985).
- 12: Watson (1886), Sykes (1904), Nordsieck (1972), Mikkelsen (1995), Ávila *et al.* (1998), Malaquias (2001).

***Cylichna crossei* (Bucquoy, Dautzenberg and Dolfus, 1886)**

- 8: Altimira (1975), Ros (1975).
- 9: Altimira (1972), Altaba and Traveset (1985).

***Cylichna richardi* (Dautzenberg, 1889) <sup>(15)</sup>**

- 3: Locard (1897, as *Tornatina mirabilis*), Nobre (1936, bathyal), Nordsieck (1972).
- 12: Dautzenberg (1889, as *Cylichna richardi*), Dautzenberg and Fischer (1897, as *Cylichna*), Nordsieck (1972), Mikkelsen (1995), Malaquias (2001).

***Cylichna propeicylindracea* (De Gregorio, 1890)**

- 10: Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003), Rodríguez *et al.* (2003).

***Cylichna piettei* Dautzenberg and Fisher, 1896**

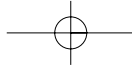
- 12: Dautzenberg and Fischer (1896, 1897), Mikkelsen (1995), Malaquias (2001).

***Cylichna chevreuxi* Dautzenberg, 1889**

- 12: Dautzenberg (1889), Dautzenberg and Fischer (1896, 1897), Nordsieck (1972), Mikkelsen (1995), Malaquias (2001).

Genus *Scaphander* Montfort, 1810***Scaphander lignarius* (Linnaeus, 1758)**

- 1: Hidalgo (1917), Bouchet (1975), Ortea (1977c), Borja (1987), Lastra *et al.* (1988), Ávila Escartín (1993), Martínez *et al.* (1993), Martínez and Andarraga (2003).
- 2: Hidalgo (1917), Cadée (1968), Hernández and Jiménez (1972), Bouchet (1975), Rolán (1983), Urgorri and Besteiro (1983).
- 3: De Oliveira (1895), Hidalgo (1917), Nobre (1983).
- 4: Hidalgo (1917), Templado *et al.* (1993b).
- 5: Hidalgo (1917), Aartsen, Menkhorst and Gittenberger (1984), Rueda, Salas and Gofas (2000).
- 6: Hidalgo (1917), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).
- 7: Hidalgo (1917), Templado, Talavera and Murillo (1983).
- 8: Hidalgo (1917), Altimira (1975, 1977b), Ros (1975).
- 9: Hidalgo (1917).
- 10: Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: Nordsieck and García-Talavera (1979).

***Scaphander punctostriatus* (Mighels and Adams, 1842)**

- 1: Hidalgo (1917), Nordsieck (1972), Bouchet (1975, bathyal), Borja (1987), Martínez *et al.* (1993).  
 3: Locard (1897, bathyal).  
 8: Ros (1975), Giribet and Peñas (1997).  
 10: Ortea *et al.* (2001), Moro *et al.* (2003).  
 12: Watson (1886), Dautzenberg (1889), Dautzenberg and Fischer (1896, 1897), Locard (1897), Nordsieck (1972), Bouchet (1975), Mikkelsen (1995), Malaquias (2001).

***Scaphander gracilis* Watson, 1883**

- 12: Watson (1883, 1886), Dautzenberg (1889), Dautzenberg and Fischer (1896, 1897), Locard (1897), Nordsieck (1972), Bouchet (1975), Mikkelsen (1995), Malaquias (2001).

***Scaphander nobilis* Verrill, 1884**

- 12: Bouchet (1975), Mikkelsen (1995), Malaquias (2001).

Genus *Meloscaplander* Schepman, 1913

***Meloscaplander imperceptus* Bouchet, 1975**

- 12: Bouchet (1975), Mikkelsen (1995), Malaquias (2001).

Genus *Roxania* Leach in Gray, 1847

***Roxania utriculus* (Brocchi, 1814)**

- 1: Bouchet (1975).  
 2: Urgorri and Besteiro (1983).  
 3: Hidalgo (1917, as *Atys*), Nobre (1936, as *Bulla*), Bouchet (1975), Machado and Fonseca (1997).  
 6: Sierra, García and Lloris (1978).  
 7: Hidalgo (1917).  
 8: Hidalgo (1917), Altimira (1977b).  
 9: Hidalgo (1917).  
 10: Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Nordsieck and García-Talavera (1979).

***Roxania pinguicola* (Seguenza, 1879) <sup>(16)</sup>**

- 1: Nordsieck (1972), Bouchet (1975, as *Bulla* ? *abyssicola*).  
 3: Locard (1897, as *Bulla pinguicola*), Nobre (1936, bathyal), Nordsieck (1972, as *B. subrotunda*).

- 12: Watson (1886), Dautzenberg (1889), Nordsieck (1972), Mikkelsen (1995), Malaquias (2001). All authors but Nordsieck (1972) as *Bulla pinguicola*.

***Roxania monterosatoi* Dautzenberg and Fischer, 1896**

- 12: Dautzenberg and Fischer (1896, 1897), Mikkelsen (1995), Malaquias (2001).

**Family Philinidae Gray, 1850**

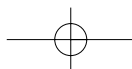
Genus *Philine* Ascanius, 1772

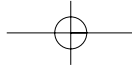
***Philine aperta* (Linnaeus, 1767)**

- 1: Hidalgo (1917), Ortea (1977c, as *P. quadripartita*), Flor *et al.* (1981, as *P. quadripartita*), Borja (1987), Lastra *et al.* (1988), Ávila Escartín (1993).  
 2: Hidalgo (1917), Margalef (1958), Cadée, (1968), Hernández and Jiménez (1972), Rolán (1983), Urgorri and Besteiro (1983), Laborda and Maze (1987).  
 3: De Oliveira (1895), Hidalgo (1917), Nobre (1936), Saldanha (1974), Calvário (1986), García-Gómez *et al.* (1991, as *P. cf. aperta*), Machado and Fonseca (1997), Calado *et al.* (1999), Malaquias and Morenito (2000, as *P. cf. aperta*).  
 4: Hidalgo (1917).  
 5: Rueda, Salas and Gofas (2000).  
 6: Hidalgo (1917), Luque (1983, 1986), Ávila Escartín (1993).  
 7: Hidalgo (1917), Murillo and Talavera (1983), Olmo and Ros (1984), Templado, Talavera and Murillo (1987), Marín and Ros (1987), García Raso *et al.* (1992).  
 8: Hidalgo (1917), Altimira (1976, 1980, as *P. quadripartita*), Ros (1975, as *P. quadripartita*), Ávila Escartín (1993).  
 9: Hidalgo (1917), Altimira (1972), Luque and Templado (1981).  
 10: Moro *et al.* (2003).  
 11: McAndrew (1852), Watson (1897), Nobre (1937), Nordsieck and García-Talavera (1979, as *P. quadripartita*), Linden (1995), Malaquias, Martínez and Abreu (2002).

***Philine scabra* (O. F. Müller, 1776)**

- 1: Hidalgo (1917).  
 2: Hidalgo (1917), Cadée (1968), Rolán (1983).





- 3: Hidalgo (1917), Nordsieck (1972), Bouchet (1975, bathyal).  
 5: Aartsen, Menkhorst and Gittenberger (1984).  
 6: Moreno and Templado (1998).  
 8: Tomas (1909), De Chia (1911-13), Altimira (1976, 1977a, 1980).  
 10: Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Watson (1897), Nobre (1937), Malaquias, Martínez and Abreu (2002).

***Philine punctata* (J. Adams, 1800)**

- 2: Cadée (1968), Rolán (1983), Urgorri and Besteiro (1983), Troncoso *et al.* (1988).  
 3: Hidalgo (1917), Machado and Fonseca (1997, as *P. cf. punctata*).  
 5: Aartsen, Menkhorst and Gittenberger (1984).  
 6: Peñas *et al.* (in press).  
 8: Peñas and Giribet (2003).

***Philine catena* (Montagu, 1803)**

- 1: Hidalgo (1917), Ortea (1977c), Flor, Llera and Ortea (1982).  
 2: Hidalgo (1917), Cadée (1968), Rolán (1983), Urgorri and Besteiro (1983).  
 3: Machado and Fonseca (1997, as *P. cf. catena*).  
 5: Aartsen, Menkhorst and Gittenberger (1984).  
 6: Hidalgo (1917), Luque (1983, 1986), Peñas *et al.* (in press).  
 7: Hidalgo (1917), Templado (1982b, 1983, 1984), Rubio and Ros (1984).  
 8: Ros (1975).  
 9: Hidalgo (1917), Altimira (1972), Luque and Templado (1981).  
 10: Pruvot-Fol (1954), Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Nordsieck and García-Talavera (1979), Malaquias, Martínez and Abreu (2002).

***Philine lima* (Brown, 1827)**

- 2: Rolán (1983, refers this species to Galicia Bank, bathyal as *P. cf. lima*).  
 12: Dautzenberg (1889), Nordsieck (1972), Mikkelsen (1995), Malaquias (2001).

***Philine quadrata* Wood, 1839**

- 1: Pruvot-Fol (1954, as *Laona*), Ortea (1977c, as *Laona*).  
 2: Urgorri and Besteiro (1983).

- 3: Nordsieck (1972, as *Laona*).  
 12: Watson (1886), Dautzenberg (1889), Nordsieck (1972, as *Laona (Ossiania)*), Mikkelsen (1995), Linden (1995), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

***Philine angulata* Jeffreys, 1867**

- 6: Templado and Moreno (1998), Peñas *et al.* (in press).  
 10: Moro *et al.* (2003).

***Philine intricata* Monterosato, 1884**

- 3: Linden (1994).  
 6: Moreno and Templado (1998), Peñas *et al.* (in press).  
 10: Linden (1994), Ortea *et al.* (2001), Moro *et al.* (2003).  
 12: Linden (1994, 1995), Malaquias (2001).

***Philine monterosatoi* Vayssière, 1885<sup>(17)</sup>**

- 1: Hidalgo (1917), Bouchet (1975, bathyal).  
 3: Hidalgo (1917), Nordsieck (1972, as *Phillingwynia*).  
 8: Hidalgo (1917).  
 11: Nordsieck (1972, as *Phillingwynia monterosatoi*), Nordsieck and García-Talavera (1979), Malaquias *et al.* (2001).

***Philine approximans* Dautzenberg and Fischer, 1896**

- 12: Dautzenberg and Fischer (1896, 1897), Bouchet (1975), Mikkelsen (1995), Malaquias (2001).

***Philine azorica* Bouchet, 1975**

- 12: Bouchet (1975), Mikkelsen (1995), Malaquias (2001).

***Philine monilifera* Bouchet, 1975**

- 12: Bouchet (1975), Mikkelsen (1995), Linden (1995 as *P. cf. monilifera*), Malaquias (2001).

***Philine rugulosa* Dautzenberg and Fischer, 1896**

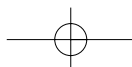
- 12: Dautzenberg and Fischer (1896), Malaquias (2001).

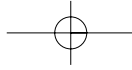
***Philine calva* Linden, 1995**

- 10: Moro *et al.* (2003).  
 12: Linden (1995), Malaquias (2001).

***Philine condensa* Linden, 1995**

- 10: Moro *et al.* (2003).  
 12: Linden (1995), Malaquias (2001).





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***Philine complanata* Watson, 1897**

11: Watson (1897), Nobre (1937), Nordsieck and García-Talavera (1979), Malaquias (2004).

***Philine desmotis* Watson, 1897**

11: Watson (1897), Nobre (1937), Nordsieck and García-Talavera (1979), Malaquias *et al.* (2001), Malaquias (2004).

***Philine trachyostraca* Watson, 1897**

11: Watson (1897), Nobre (1937), Nordsieck and García-Talavera (1979), Malaquias (2004).

***Philine iris* Tringali, 2001**

5: Moreno and Templado (1998, as *Philine* sp.).  
6: Moreno and Templado (1998, as *Philine* sp.).  
7: Moreno and Templado (1998, as *Philine* sp.).  
10: Ortea *et al.* (2003).

Genus *Laona* A. Adams, 1865

***Laona pruinosa* (Clark, 1837)**

3: Nordsieck (1972).

**Family Philinoglossidae Hoffmann, 1833**

Genus *Philinoglossa* Hertling, 1932

***Philinoglossa helgolandica* Hertling, 1932**

2: Urgorri and Besteiro (1983).

**Family Gastropteridae Swainson, 1840**

Genus *Gastropteron* Koose, 1813

***Gastropteron rubrum* (Rafinesque, 1814)**

1: Bouchet (1975), Ortea (1977c).  
2: Ros (1975).  
3: García-Gómez *et al.* (1991), Macedo, Macedo and Borges (1999).  
4: Templado *et al.* (1993b).  
5: Templado *et al.* (1993b).  
7: Ávila Escartín (1993), Templado *et al.* (2002).  
8: Ávila Escartín (1993).  
9: Ávila Escartín (1993), Ballesteros and Templado (1996).

All records except that of Bouchet (1975) are referred to *G. meckeli*.

**Family Aglajidae Renier, 1807**

Genus *Aglaja* Renier, 1807

***Aglaja tricolorata* Renier, 1807**

4: Martínez *et al.* (1993), Cervera (unpubl. data).  
6: Moreno and Templado (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Wirtz and Debelius (2003, as *Aglaja*).  
7: Marín and Ros (1987).  
10: Ortea and Moro (1998b), Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Chelidonura* A. Adams, 1850

***Chelidonura africana* Pruvot-Fol, 1953<sup>(18)</sup>**

3: Gavaia *et al.* (2004).  
5: García-Gómez and García (1984b).  
6: Ballesteros *et al.* (1986, as *C. italica*).  
7: Templado, Talavera and Murillo (1983), Templado *et al.* (2002), Marín and Ros (1987), Martínez *et al.* (1993, as *C. italica*), García Raso *et al.* (1992, as *C. italica*).  
10: Ortea, Moro and Espinosa (1996), Ortea *et al.* (2001), Martínez, Malaquias and Cervera (2002), Moro *et al.* (2003).  
11: Malaquias *et al.* (2001), Malaquias, Martínez and Abreu (2002), Martínez, Malaquias and Cervera (2002).

***Chelidonura leopoldoi* Ortea, Moro and Espinosa, 1996**

10: Ortea, Moro and Espinosa (1996), Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Odontoaglaja* Rudman, 1978

***Odontoaglaja sabadiega* (Ortea, Moro and Espinosa, 1996)<sup>(19)</sup>**

10: Moro *et al.* (2003), Ortea, Moro and Espinosa (2003).  
11: Ortea, Moro and Espinosa (1996, as *Chelidonura*).

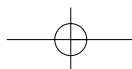
Genus *Melanochlamys* Cheeseman, 1881

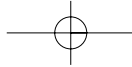
***Melanochlamys maderense* (Watson, 1897)**

10: Ortea and Moro (1998b), Ortea *et al.* (2001), Moro *et al.* (2003).  
11: Watson (1897, as *Doridium maderense*), Nobre (1937, as *D. maderense*), Nordsieck and García-Talavera (1979, as *Philine maderense*), Gosliner (1980), Ortea and Moro (1998a), Malaquias (2004).

***Melanochlamys wildpreti* Ortea, Bacallado and Moro, 2003**

10: Ortea, Bacallado and Moro (2003).





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Genus *Philinopsis* Pease, 1860***Philinopsis depicta* (Renier, 1807)<sup>(20)</sup>**

- 3: Calado (unpubl. data).
- 4: Templado *et al.* (1993b).
- 6: Moreno and Templado (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).
- 7: Marín and Ros (1987, as *Aglaja*), Martínez *et al.* (1993).
- 8: Ros (1975, as *Doridium carnosum*), Moreno and Templado (1998).
- 10: Ortea and Moro (1998b), Ortea *et al.* (2001), Moro *et al.* (2003).

***Aglajidae incerta sedis******Doridium ? laurentianum* Watson, 1897<sup>(21)</sup>**

- 11: Watson (1897), Malaquias, Martínez and Abreu (2002, as *Aglaja*), Malaquias (2004).

**Family Runcinidae H. and A. Adams, 1854**Genus *Runcina* Forbes and Hanley, 1853***Runcina coronata* (Quatrefages, 1844)<sup>(22)</sup>**

- 1: Ortea (1977c), Ballesteros and Ortea (1981).
- 2: Ballesteros and Ortea (1981), Urgorri and Besteiro (1983).
- 3: Calado *et al.* (1999, 2005).
- 4: García-Gómez, *et al.* (1986, as *R. aurata*), Templado *et al.* (1993a).
- 5: García-Gómez *et al.* (1989), Cervera, García-Gómez and García (1991), Sánchez-Moyano *et al.* (2000).
- 6: Luque (1983, 1986), García-Gómez *et al.* (1989, as *R. aurata*), Salas and Hergueta (1986, 1987).
- 7: Templado (1982b, 1983, 1984), Marín and Ros (1987).
- 12: Gosliner (1990), Mikkelsen (1995), Ávila (2000) (all these authors refer to this species as *R. aurata* García *et al.*, 1986 which is a junior synonym of *R. coronata*. For a discussion see Cervera, García-Gómez and García (1991: 200-201)) and Malaquias (2001).

***Runcina ornata* (Quatrefages, 1844)<sup>(23)</sup>**

- 5: García *et al.* (1986, as *R. coronata*), Cervera, García-Gómez and García (1991).
- 10: Malaquias and Calado (1997), Malaquias, Martínez and Abreu (2002).

***Runcina capreensis* Mazarelli, 1892<sup>(24)</sup>**

- 6: Ballesteros *et al.* (1986, as *R. cf. capreensis*).

- 7: Templado, Talavera and Murillo (1983, as *R. cf. capreensis*), Marín and Ros (1987a), García Raso *et al.* (1992).

- 8: Ballesteros and Ortea (1981).

***Runcina africana* Pruvot-Fol, 1953**

- 5: Cervera, García-Gómez and García (1991).
- 10: Ortea *et al.* (2001), Moro *et al.* (2003).

***Runcina ferruginea* Kress, 1977**

- 1: Ortea and Moro (1999).
- 2: Ortea and Urgorri (1981b), Fernández-Ovies (1983).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999), Ortea and Moro (1999).
- 5: García-Gómez *et al.* (1989), Cervera, García-Gómez and García (1991), Sánchez-Moyano *et al.* (2000).
- 7: Marín and Ros (1987).

***Runcina adriatica* Thompson, 1980<sup>(25)</sup>**

- 10: Malaquias and Calado (1997), Ortea *et al.* (2001), Moro *et al.* (2003).
- 12: Gosliner (1990), Mikkelsen (1995), Ávila (2000), Malaquias (2001), Ávila *et al.* (in press, as *R. cf. adriatica*).

***Runcina falciforme* Ortea, Rodríguez and Valdés, 1990**

- 10: Ortea, Bacallado and Pérez Sánchez (1990), Ortea *et al.* (2001, 2003), Moro *et al.* (2003), Ortea *et al.* (2003).

***Runcina paupera* Ortea, Rodríguez and Valdés, 1990**

- 10: Ortea *et al.* (2001), Moro *et al.* (2003).

***Runcina macrodenticulata* García, García-Gómez and López de la Cuadra, 1990<sup>(23)</sup>**

- 5: García, García-Gómez and López de la Cuadra (1990), Cervera, García-Gómez and García (1991).

***Runcina bahiensis* Cervera, García-Gómez and García, 1991**

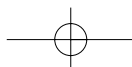
- 5: Cervera, García-Gómez and García (1991), Sánchez-Moyano *et al.* (2000), Templado *et al.* (1993a).

***Runcina genciana* Ortea and Nicieza, 1999**

- 10: Ortea and Nicieza (1999), Ortea *et al.* (2001), Moro *et al.* (2003).

***Runcina hidalgoensis* Ortea and Moro, 1999**

- 10: Ortea and Moro (1999), Ortea *et al.* (2001), Moro *et al.* (2003).



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12: Gosliner (1990), Mikkelsen (1995), Ávila (2000) (all these authors referred to this species as *Runcina* sp.), Ortea and Moro (1999), Malaquias (2001).

***Runcina medanensis* Ortea and Moro, 1999**

10: Ortea and Moro (1999), Ortea *et al.* (2001), Moro *et al.* (2003).

***Runcina palominoi* Ortea and Moro, 1999**

10: Ortea and Moro (1999), Ortea *et al.* (2001), Moro *et al.* (2003).

**Family Bullidae Lamarck, 1801** <sup>(26)</sup>

Genus *Bulla* Linnaeus, 1758

***Bulla striata* Bruguière, 1792** <sup>(27)</sup>

- 2: Ortea (1977c).  
 3: De Oliveira (1895), Hidalgo (1917), Nobre (1938-40), Ferreira (1966, as *Bullaria*), Silvestre, Baptista and Jorge (1979), Silvestre and Baptista (1980), Calvario (1986, 1995), Macedo, Macedo and Borges (1999), Muzavor and Morenito (1999), Malaquias and Morenito (2000).  
 4: Hidalgo (1917), Álvarez Orive (1994).  
 5: Hidalgo (1917), Nordsieck (1972, as *B. dactylis*), García-Gómez (1982), Aartsen, Menkhorst and Gittenberger (1984), Rueda, Salas and Gofas (2000).  
 6: Hidalgo (1917), Sierra, García and Lloris (1978), Luque (1983, 1986), Ballesteros *et al.* (1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: Hidalgo (1917), Templado (1982b, 1983), García Raso *et al.* (1992), Álvarez Orive (1994), Murillo and Templado (1998).  
 8: Hidalgo (1917), Altimira (1976, 1977b).  
 9: Altimira (1972), Nordsieck (1972), Ros (1975), Luque and Templado (1981), Altaba (1993).  
 10: Nordsieck (1972), Nordsieck and García-Talavera (1979) (all these authors referred to this species either as *B. occidentalis*, *B. mabiliei* cf. *dactylis* or *B. adansonii*), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Nordsieck (1972, as *Bulla dactylis* Menke, 1853).  
 12: Drouët (1858), Dautzenberg (1889), Rush (1891), Nordsieck (1972), García-Talavera (1983), Mikkelsen (1995), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

***Bulla amygdala* Dillwyn, 1816**

3: Macedo, Macedo and Borges (1999).

10: Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).  
 11: Wirtz and Debelius (2003).

***Bulla semilaevis* Seguenza, 1879** <sup>(28)</sup>

3: Locard (1897, as *B. guernei*), Nordsieck (1972, bathyal), Bouchet (1975, as *Roxania? semilaevis*).  
 12: Watson (1886, as *Bulla*), Dautzenberg (1889, as *Bulla guernei* and also as *Bulla semilaevis*), Dautzenberg and Fischer (1896, 1897 as *Bulla guernei*), Nordsieck (1972, as *Bulla (Leucophysena)*), Mikkelsen (1995, as "*Bulla*" *semilaevis*), Malaquias (2001).

***Bulla mabiliei* Locard, 1896**

10: Odhner (1931), Nordsieck (1972), Talavera (1978), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Pérez Sánchez and Moreno (1990), Malaquias and Calado (1997), Malaquias (2000, as *B. amygdala*), Malaquias, Martínez and Abreu (2002), Moro *et al.* (2003).  
 11: Watson (1897, as *Bulla punctata* A. Adams, 1868), Nobre (1937, as *B. punctata*), Nordsieck (1972), Nordsieck and García-Talavera (1979), Malaquias, Martínez and Abreu (2002).

***Bulla millepunctata* Locard, 1897**

1: Nordsieck (1972).  
 3: Nordsieck (1972).

**Family Haminoeidae Pilsbry, 1895**

Genus *Haminoea* Turton and Kingston, 1830

***Haminoea hydatis* (Linnaeus, 1758)** <sup>(29)</sup>

2: Hernández and Jiménez (1972), Rolán (1983).  
 3: De Oliveira (1895, as *Bulla hydatis*), Ferreira (1966), Silvestre, Baptista and Jorge (1979), Silvestre and Baptista (1980), Calvario (1986), Reis *et al.* (1986), Santos, Castro and Raimundo (1986), García-Gómez *et al.* (1991), Gamito (1994), Muzavor and Morenito (1999).  
 4: Cervera and García-Gómez (1986).  
 5: García-Gómez (1982), Aartsen, Menkhorst and Gittenberger (1984).  
 6: Luque (1983, 1986), Salas and Luque (1986), Álvarez Orive (1994), Peñas *et al.* (in press).  
 7: Acuña (1981), Templado (1982b, 1983, 1984), Murillo and Talavera (1983), Olmo and Ros (1984), Talavera, Murillo and Templado (1987), Templado *et al.* (2002), Marín and Ros (1987), García Raso *et al.* (1992), Álvarez Orive (1994).

- 8: Maluquer (1904, 1907), De Chia (1911-13), De Sama (1916), Altimira (1976), Altimira, Huelin and Ros (1981), Huelin and Ros (1984).  
 9: Altimira (1972), Nordsieck (1972), Gasull and Cuerda (1974), Ballesteros, Álvarez and Mateo (1986, and also as *H. cymoelium*).  
 10: Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Talavera (1978), Malaquias and Calado (1997), Malaquias, Martínez and Abreu (2002), Moro *et al.* (2003).  
 11: Watson (1897, as *Bulla (Haminea) hydatis*), Nobre (1937, as *Haminea hydatis*), Nordsieck and García-Talavera (1979, as *Haminaea hydatis*).  
 12: García-Talavera (1983), Mikkelsen (1995), Ávila *et al.* (1998, as *H. cf hydatis*), Ávila (2000), Malaquias (2001).

***Haminoea navicula* (Da Costa, 1778) <sup>(30)</sup>**

- 1: Ortea (1975-76, 1977c).  
 2: Cadée (1968), Ortea (1977c), Rolán (1983), Urgorri and Besteiro (1983).  
 3: De Oliveira (1895), Nobre (1936), Machado and Fonseca (1997), Malaquias (2003), Malaquias and Cervera (in press).  
 6: Peñas *et al.* (in press).  
 7: Templado, Talavera and Murillo (1983), Murillo and Talavera (1983), Olmo and Ros (1984), Talavera, Murillo and Templado (1987).  
 8: Maluquer (1904, 1907), De Chia (1911-13), Ros and Altimira (1977).

***Haminoea orbignyana* (Férussac, 1822)**

- 2: Rolán (1983), Álvarez Orive (1994).  
 3: Hidalgo (1917, as *H. elegans*), Nobre (1938-40, as *H. elegans*), Malaquias (2003), Malaquias *et al.* (2004), Malaquias and Sprung (in press), Malaquias and Cervera (in press).  
 4: Álvarez Orive (1994).  
 6: Ballesteros *et al.* (1986).  
 7: Murillo and Talavera (1983), Templado, Talavera and Murillo (1983), Olmo and Ros (1984), Talavera, Murillo and Templado (1987), García Raso *et al.* (1992), Álvarez Orive (1994).  
 8: Ballesteros (1984a, as *H. navicula*).  
 9: Gasull and Cuerda (1974).  
 10: Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).

***Haminoea elegans* Leach, 1852 <sup>(31)</sup>**

- 10: Ortea *et al.* (2001), Moro *et al.* (2003).

***Haminoea ortei* Talavera, Murillo and Templado, 1987**

- 6: Ballesteros *et al.* (1986).  
 7: Talavera, Murillo and Templado (1987), García Raso *et al.* (1992), Templado *et al.* (1993a), Álvarez Orive (1994).  
 10: Malaquias and Calado (1997, as *H. cf. ortei*), Ortea *et al.* (2001, 2003), Malaquias, Martínez and Abreu (2002), Moro *et al.* (2003), Wirtz and Debelius (2003).  
 12: Mikkelsen (1995), Morton *et al.* (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Haminoea callidegenita* Gibson and Chia, 1989**

- 1: Álvarez *et al.* (1993), Álvarez Orive (1994).  
 2: Álvarez *et al.* (1993), Álvarez Orive (1994).  
 4: Cervera (unpubl. data).  
 5: Álvarez Orive (1994).

***Haminoea templadoi* García, Pérez-Hurtado and García-Gómez, 1991**

- 4: García, Pérez Hurtado and García-Gómez (1991), Templado *et al.* (1993a).

***Haminoea exigua* Schaefer, 1992**

- 5: Sánchez-Moyano *et al.* (2000), Templado *et al.* (1993a).  
 7: Schaefer (1992), Templado *et al.* (1993a).

Genus *Atys* Montfort, 1810***Atys blainvilliana* (Récluz, 1843)**

- 7: Marín and Ros (1987).  
 8: De Sama (1916).  
 9: Nordsieck (1972).

***Atys jeffreysi* (Weinkauff, 1866)**

- 5: Aartsen, Menkhorst and Gittenberger (1984).  
 6: Peñas *et al.* (in press).  
 7: Marín and Ros (1987).  
 8: Altimira (1977b).  
 9: Nordsieck (1972), Gasull and Cuerda (1974), Altaba and Traveset (1985).  
 10: Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Nobre (1889, 1937, as *Roxaniella jeffreysi*), Watson (1897), Nordsieck and García-Talavera (1979, as *A. (Roxaniella) jeffreysi*).

***Atys macandrewi* Smith, 1872**

- 10: Odhner (1931), Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001),

Talavera (1978), Malaquias and Calado (1997), Malaquias, Martínez and Abreu (2002), Rodríguez *et al.* (2003).

- 11: Nordsieck (1972, as *A. Limulatys macandrewi*), Malaquias, Martínez and Abreu (2002).  
 12: Marcus (1970), Nordsieck (1972, as *Atys (Limulatys)*), García-Talavera (1983), Mikkelsen (1995), Ávila (2000), Malaquias (2001).

Genus *Weinkauffia* Monterosato, 1884

***Weinkauffia turgidula* (Forbes, 1843)**

- 3: Nordsieck (1972).  
 6: Templado and Moreno (1998).  
 7: Templado *et al.* (2002).  
 10: Odhner (1931, as *Atys*), Nordsieck (1972), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Watson (1897, as *Scaphander (Weinkauffia) diaphana*), Nobre (1937, as *Scaphander (Weinkauffia) diaphana*), Nordsieck and García-Talavera (1979, as *Weinkauffia semistriata*), Malaquias *et al.* (2001, as *Scaphander (Weinkauffia) diaphana*).

Genus *Cylichnium* Dall, 1908 <sup>(32)</sup>

***Cylichnium africanum* (Locard, 1897)**

- 1: Locard (1897, as *Cylichna fischeri*), Bouchet (1975, bathyal).

***Cylichnium oliviforme* (Watson, 1883)**

- 2: Fechter (1979) (bathyal).  
 12: Watson (1883, 1886, both as *Utriculus*), Dautzenberg (1889, as *Tornatina*), Dautzenberg and Fischer (1896, 1897, both as *Utriculus*), Nordsieck (1972), Mikkelsen (1995, as *Cylichna oliviformis*), Malaquias (2001, as *Cylichna oliviformis*).

**Haminoeidae *incerta sedis***

***Weinkauffia ? semistriata* (Réquien, 1848) <sup>(33)</sup>**

- 3: Nordsieck (1972).  
 7: Hidalgo (1917, as *Atys diaphana*), Templado (1984).  
 9: Templado (1982a).  
 10: Nordsieck (1972), Nordsieck and García-Talavera (1979), Ortea *et al.* (2001), Moro *et al.* (2003).

**Order ANASPIDEA Fischer, 1883**

**Family Akeridae Odhner, 1922 <sup>(34)</sup>**

Genus *Akera* Müller, 1776

***Akera bullata* Müller, 1776**

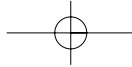
- 1: Hidalgo (1917), Ortea (1975-76, 1977c), Lastra *et al.* (1988), Ávila Escartín (1993), Martínez Cueto-Felgueroso (1995).  
 2: Hidalgo (1917), Cadee (1968), Hernández and Jiménez (1972), Rolán (1983), Urgorri and Besteiro (1983).  
 3: De Oliveira (1895), Hidalgo (1917), Nobre (1936), Machado and Fonseca (1997).  
 6: Moreno and Templado (1998).  
 7: Templado, Talavera and Murillo (1983), Olmo and Ros (1984).  
 8: Altimira (1977b).  
 9: Ballesteros and Templado (1996).  
 10: Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Watson (1897, as *Acera bullata*), Nobre (1937, as *Acera bullata*), Ledoyer (1967, as *Acera bullata*).  
 12: Nobre (1924), Ávila (2000), Malaquias (2001).

**Family Aplysiidae Lamarck, 1809**

Genus *Aplysia* Linnaeus, 1767

***Aplysia depilans* Gmelin, 1791**

- 1: Hidalgo (1917), Ortea (1977c), Martínez Cueto-Felgueroso (1995).  
 2: Hidalgo (1917), Ros (1975), Ortea (1977c), Rolán (1983), Urgorri and Besteiro (1983).  
 3: De Oliveira (1895), Hidalgo (1917), Nobre (1936), Saldanha (1974), Silvestre, Baptista and Jorge (1979), Silvestre and Baptista (1980), Martínez Cueto-Felgueroso (1995), Calado *et al.* (1999, 2004), Malaquias and Morenito (2000).  
 5: García-Gómez (1982).  
 6: Ros (1975), Martínez Cueto-Felgueroso (1995).  
 7: Hidalgo (1917), Templado, Talavera and Murillo (1983), Ramos (1985), Ballesteros *et al.* (1986), Marín and Ros (1987a), Martínez Cueto-Felgueroso (1995).  
 8: Hidalgo (1917), Altimira (1975, 1976), Ros (1975), Altimira, Huelin and Ros (1981), Huelin and Ros (1984).  
 9: Hidalgo (1917), Ros (1981b), Ballesteros (1998).  
 10: Altimira and Ros (1979), Nordsieck and García-Talavera (1979), Ortea and Martínez (1991), Martínez Cueto-Felgueroso (1995), Malaquias and Calado (1997), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).



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Checklist of opisthobranchs from Spain and Portugal

- 11: Watson (1897), Eales (1957, 1960), Nordsieck and Talavera (1979), Wirtz (1999), Wirtz and Debelius (2003).  
 12: Azevedo and Gofas (1990, as *Aplysia* sp), Wirtz (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

***Aplysia fasciata* Poiret, 1789**

- 1: Hidalgo (1917, as *A. leporina*), Ortea (1975-76, 1977c), Ávila Escartún (1993), Martínez Cueto-Felgueroso (1995), Martínez and Ortea (2002).  
 2: Rolán (1983).  
 3: Oliveira (1895, as *A. limacina*), Hidalgo (1917), Nobre (1936), Silvestre, Baptista and Jorge (1979), Silvestre and Baptista (1980), García-Gómez *et al.* (1991), Muzavor and Morenito (1999), Malaquias and Morenito (2000), Calado *et al.* (2004).  
 4: Cervera (unpubl. data).  
 5: García-Gómez (1982), Rueda, Salas and Gofas (2000).  
 6: Luque (1983, 1986), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: Hidalgo (1917), Templado, Talavera and Murillo (1983), Templado *et al.* (2002), Ballesteros *et al.* (1986), Marín and Ros (1987a).  
 8: Maluquer (1904, 1907), Ros (1975).  
 9: Hidalgo (1917).  
 10: Odhner (1931), Eales (1957), Ortea and Martínez (1991), Malaquias and Calado (1997), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).  
 11: Nordsieck and Talavera (1979), Wirtz (1999), Wirtz and Debelius (2003).  
 12: Wirtz and Martins (1993), Ávila and Azevedo (1997), Wirtz (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Aplysia punctata* Cuvier, 1803**

- 1: Hidalgo (1917), Ros (1975), Ortea (1977c), Martínez Cueto-Felgueroso (1995).  
 2: Hidalgo (1917), Ros (1975), Niell (1977), Ortea (1977c), Rolán (1983), Urgorri and Besteiro (1983), Trigo and Otero (1987), Martínez Cueto-Felgueroso (1995).  
 3: De Oliveira (1895), Nobre (1938-40), Marques *et al.* (1982), García-Gómez *et al.* (1991), Calado *et al.* (2004).  
 4: Cervera and García-Gómez (1986), Templado *et al.* (1993b).  
 5: García-Gómez (1982), García-Gómez *et al.* (1989), Sánchez-Moyano *et al.* (2000).

- 6: Luque (1983, 1986), Ballesteros *et al.* (1986), Salas and Luque (1986), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).  
 7: Hidalgo (1917), Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Marín and Ros (1987a), Templado *et al.* (2002).  
 8: Hidalgo (1917), Altimira (1975, 1976, as *A. rosea*), Altimira (1980), Ros (1975), Ros and Altimira (1977), Ballesteros (1978), Altimira, Huelin and Ros (1981), Bibiloni (1981), Huelin and Ros (1984).  
 9: Hidalgo (1919), Ros (1975), Templado (1982a), Ballesteros, Álvarez and Mateo (1986), Altaba (1993).  
 10: Odhner (1931, as *A. rosea*), Eales (1957), Nordsieck (1972), Ortea and Martínez (1991), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Watson (1897), Nobre (1937), Nordsieck and Talavera (1979), Wirtz (1999).  
 12: Simroth (1888), Ávila and Azevedo (1997), Wirtz (1998), Morton *et al.* (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

***Aplysia dactylomela* Rang, 1828**

- 10: Odhner (1931), Eales (1957), Nordsieck (1972), Ros (1975), Nordsieck and García-Talavera (1979), Pérez-Sánchez and Moreno (1990), Ortea and Martínez (1991), Martínez Cueto-Felgueroso (1995), Malaquias and Calado (1997), Malaquias (2000), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).  
 11: Watson (1897, as *A. ocellata*), Nobre (1937, as *A. ocellata*), Wirtz (1995b, 1999), Wirtz and Debelius (2003).

***Aplysia juliana* Quoy and Gaimard, 1832**

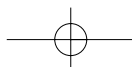
- 10: Martínez, Ortea and Pérez-Sánchez (1991), Ortea and Martínez (1991), Ortea *et al.* (2001), Moro *et al.* (2003).

***Aplysia morio* Verrill, 1901**

- 10: Ortea *et al.* (2001), Moro *et al.* (2003).

***Aplysia parvula* Guilding in Mörch, 1863 (35)**

- 1: Ortea (pers. comm.), Martínez Cueto-Felgueroso (1995).  
 2: Martínez Cueto-Felgueroso (1995).  
 3: Eales (1957a), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2004).  
 4: Martínez Cueto-Felgueroso (1995), Templado *et al.* (1993b).



- 5: García-Gómez *et al.* (1989), Sánchez-Moyano *et al.* (2000).  
 6: Ballesteros and Templado (1987), Martínez Cueto-Felgueroso (1995), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).  
 7: Ballesteros and Templado (1987), Templado, Talavera and Murillo (1987), Templado *et al.* (2002).  
 8: Ballesteros and Templado (1987), Martínez Cueto-Felgueroso (1995).  
 9: Ballesteros, Álvarez and Mateo (1986).  
 10: Malaquias and Calado (1997), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Wirtz (1999), Eales (1957a, 1960), Malaquias *et al.* (2001).  
 12: Eales (1960), Wirtz (1998), Ávila *et al.* (1998), Malaquias (2001), Wirtz and Debelius (2003).

Genus *Bursatella* De Blainville, 1817

***Bursatella leachi* De Blainville, 1817**

- 9: Oliver and Terrasa (2004).

**Family Dolabriferidae Pilsbry, 1895**

Genus *Petalifera* Gray 1847

***Petalifera petalifera* (Rang, 1828)**

- 3: De Oliveira (1895, as *Phyllaplysia depressa*), Nobre (1936, as *P. paulinoi*), Silvestre, Baptista and Jorge (1979, as *P. paulinoi*).  
 6: Templado, Luque and Moreno (1988), Ocaña *et al.* (2000).  
 7: Templado (1982b, 1983, 1984, as *Phyllaplysia depressa*), Marín and Ros (1987a, as *P. depressa*), Templado, Luque and Moreno (1988), Martínez Cueto-Felgueroso (1995), Martínez (1996).  
 8: Hidalgo (1917, as *Petalifera virescens*), Huelin and Ros (1984, as *P. lafonti*).  
 9: Ros (1981b, as *Petalifera lafonti*), Martínez Cueto-Felgueroso (1995), Martínez (1996).  
 10: Ortea and Martínez (1991), Martínez Cueto-Felgueroso (1995), Malaquias and Calado (1997), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Wirtz (pers. comm.).

***Petalifera ramosa* Baba, 1959<sup>(36)</sup>**

- 10: Ortea and Martínez (1991), Martínez Cueto-Felgueroso (1995), Malaquias and Calado (1997), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).

Genus *Dolabrifera* Gray, 1847

***Dolabrifera dolabrifera* (Cuvier, 1817)**

- 10: Martínez Cueto-Felgueroso (1995), Malaquias and Calado (1997), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).  
 11: Ledoyer (1967, as ? *Phyllaplysia depressa*), Wirtz (1995a,b), Malaquias and Cervera (unpubl. data).

**Family Notarchidae Eales and Engel, 1935**

Genus *Notarchus* Cuvier, 1817

***Notarchus punctatus* Philippi, 1836**

- 8: Ros (1975).  
 10: Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Stylocheilus* Gould, 1852

***Stylocheilus striatus* (Quoy and Gaimard, 1832)**

- 10: Malaquias and Calado (1997, as *S. longicauda*), Wirtz and Debelius (2003).  
 11: Wirtz (pers. comm.).  
 12: Wirtz and Debelius (2003).

**Order ACOCHLIDIOMORPHA Salvini-Plawen, 1983**

**Family Hedylopsidae Odhner, 1952**

Genus *Hedylopsis* Thiele, 1931

***Hedylopsis spiculifera* (Kowalevsky, 1901)**

- 2: Urgorri and Besteiro (1983), Arnaud *et al.* (1986).  
 3: Calado *et al.* (1999).  
 7: Salvini-Plawen and Templado (1990).  
 11: Fonseca, Guerreiro and Gil (1995).

**Family Asperinidae Rankin, 1979**

Genus *Asperina* Rankin, 1979

***Asperina loricata* (Swedmark, 1968)**

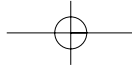
- 2: Arnaud *et al.* (1986).

**Family Microhedyliidae Hertling, 1930**

Genus *Unela* Marcus, 1953

***Unela glandulifera* (Kowalevsky, 1901)**

- 2: Urgorri and Besteiro (1983, as *Unela odhneri*), Arnaud *et al.* (1986).



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Checklist of opisthobranchs from Spain and Portugal

7: Salvini-Plawen and Templado (1990).

Genus *Pontohedyle* Golikov and Starobogatov, 1972***Pontohedyle milaschewitchii* (Kowalevsky, 1901)**

2: Salvini-Plawen (pers. comm.).

6: Salvini-Plawen and Templado (1990).

7: Salvini-Plawen and Templado (1990).

**Order THECOSOMATA Blainville, 1824****Suborder EUTHECOSOMATA Meisenheimer, 1905****Family Cavoliniidae D'Orbigny, 1842**Genus *Cavolinia* Abildgaard, 1791***Cavolinia tridentata* (Forskål, 1775)**

3: Nobre (1938-40).

6: Rampal (1968).

7: Hidalgo (1917).

8: Hidalgo (1917).

9: Hidalgo (1917).

10: Odhner (1931), Ortea *et al.* (2001), Moro *et al.* (2003).***Cavolinia inflexa* (Lesueur, 1813)**

1: Rampal (2002).

2: Vayssière (1915), Rolán (1983), Urgorri and Besteiro (1983).

3: Locard (1897, as *C. trispinosa*), Nobre (1938-40, bathyal), Rampal (2002).6: Rampal (1968), Templado *et al.* (1986), Peñas *et al.* (in press).

7: Hidalgo (1917), Vives (1966).

8: Tomás (1909), De Chia (1911-1913), Altimira (1977b).

9: Hidalgo (1914), Rampal (1963), Altimira (1972b).

10: Odhner (1931), Hernández *et al.* (1991), Lozano-Soldevilla and Hernández (1991), Hernández and Jiménez (1992), Hernández, Jiménez and Silva (1997a, 1997b), Ortea *et al.* (2001), Moro *et al.* (2003).***Cavolinia uncinata* (Rang, 1829)**

8: Ballesteros (unpubl. data).

10: Lozano-Soldevilla and Hernández (1991), Ortea *et al.* (2001), Moro *et al.* (2003)***Cavolinia flava* (D'Orbigny, 1836) <sup>(37)</sup>**

5: Hidalgo (1917), Rampal (2002).

6: Rampal (1968, 2002).

8: Hidalgo (1917).

10: Odhner (1931), Ortea *et al.* (2001), Rampal (2002), Moro *et al.* (2003).

11: Rampal (2002).

All records except those of Rampal (2002) are referred to *C. gibbosa*.***Cavolinia globulosa* Rang, 1845**10: Odhner (1931), Ortea *et al.* (2001), Moro *et al.* (2003).Genus *Diacria* Gray, 1847***Diacria quadridentata* (Lesueur, 1821)**

6: Rampal (1968).

10: Lozano-Soldevilla and Hernández (1991), Ortea *et al.* (2001), Moro *et al.* (2003).***Diacria trispinosa* (Lesueur, 1821) <sup>(38)</sup>**

2: Vayssière (1915), Rolán (1983), Urgorri and Besteiro (1983).

3: Hidalgo (1917), Locard (1897, as *Calvolinia trispinosa*, bathyal), Nobre (1938-40), Rampal (2002).

5: Hidalgo (1917).

6: Rampal (1968, 2002), Templado *et al.* (1986), Peñas *et al.* (in press).

7: Vives (1966).

10: Odhner (1932), Hernández *et al.* (1991), Hernández, Ferrandis and Lozano Soldevilla (1993), Lozano-Soldevilla and Hernández (1991), Ortea *et al.* (2001), Moro *et al.* (2003).***Diacria atlantica* Dupont in Bontes and Van der Spoel, 1998**

12: Bontes and Van der Spoel (1998).

***Diacria rubecula* Bontes and Van der Spoel, 1998**

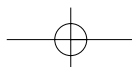
10: Bontes and Van der Spoel (1998).

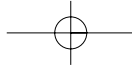
12: Bontes and Van der Spoel (1998).

Genus *Clio* Linnaeus, 1767***Clio pyramidata* Linnaeus, 1767**2: Hidalgo (1917, as *Cleodora*), Rolán (1983), Urgorri and Besteiro (1983).

3: Locard (1897, bathyal), Hidalgo (1917).

5: Hidalgo (1917).

6: Rampal (1968, 2002), Vives, Santamaría and Trepal (1975), Templado *et al.* (1986), Sánchez-Moyano *et al.* (2000), Peñas *et al.* (in press).



8: Hidalgo (1917).

9: Rampal (2002).

10: Odhner (1931), Hernández *et al.* (1991), Lozano-Soldevilla and Hernández (1991), Hernández and Jiménez (1992), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Moro *et al.* (2003).

***Clio cuspidata* (Bosc, 1802)**

3: Hidalgo (1917, as *Cleodora*), McAndrew (1850, in Nobre 1938-40, as *Cleodora*).

5: Vives, Santamaría and Trepal (1975, as *Euclio*).

6: Rampal (1968, as *Euclio*), Peñas *et al.* (in press).

7: Hidalgo (1917).

10: Lozano-Soldevilla and Hernández (1991), Ortea *et al.* (2001), Moro *et al.* (2003).

***Clio recurva* (Children, 1823)**

1: Hidalgo (1917, as *Cleodora balantium*).

***Clio polita* (Pelseneer, 1887)**

10: Lozano-Soldevilla and Hernández (1991), Hernández and Jiménez (1992), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Creseis* Rang, 1828

***Creseis acicula* Rang, 1828**

2: Cadée (1968).

5: Hidalgo (1917), Vives, Santamaría and Trepal (1975).

6: Rampal (1968, 2002), Peñas *et al.* (in press).

7: Hidalgo (1917), Vives (1966).

8: Hidalgo (1917).

9: Rampal (1963).

10: Hernández *et al.* (1991), Hernández and Jiménez (1993), Hernández, Ferrandis and Lozano Soldevilla (1993), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Moro *et al.* (2003).

12: Rampal (2002).

***Creseis conica* Eschscholtz, 1829<sup>(39)</sup>**

2: Rolán (1983), Rampal (2002).

3: Rampal (2002).

6: Rampal (1968, 2002).

9: Rampal (1963).

10: Hernández, Ferrandis and Lozano Soldevilla (1993), Ortea *et al.* (2001), Moro *et al.* (2003).

12: Rampal (2002).

All records except those of Rampal (2002) as *C. virgula* Rang, 1828.

Genus *Hyalocylis* Folin, 1875

***Hyalocylis striata* (Rang, 1828)**

6: Rampal (1966).

10: Lozano-Soldevilla and Hernández (1991), Hernández and Jiménez (1992), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Styliola* Blainville, 1827

***Styliola subula* (Quoy and Gaimard, 1827)**

3: Locard (1897, as *S. subulata*, batthyal).

6: Rampal (1968), Sánchez-Moyano *et al.* (2000).

7: Hidalgo (1917).

8: Ros (1976a).

9: Locard (1868), Rampal (1963), Altimira (1973).

10: Odhner (1931), Nordsieck and García-Talavera (1979), Lozano-Soldevilla and Hernández (1991), Hernández and Jiménez (1993), Hernández, Ferrandis and Lozano Soldevilla (1993), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Cuvierina* Boas, 1886

***Cuvierina columnella* (Rang, 1827)**

3: Locard (1897, as *Cuvieria*).

6: Rampal (1963, 1968, 2002), Peñas *et al.* (in press).

10: Hernández and Jiménez (1992), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Rampal (2002), Moro *et al.* (2003).

***Cuvierina spoeli* Rampal, 2002**

3: Rampal (2002).

7: Rampal (2002).

Genus *Diacavolinia* Van der Spoel, 1987

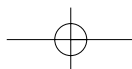
***Diacavolinia limbata* (D'Orbigny, 1836)<sup>(40)</sup>**

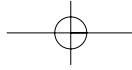
6: Rampal (1968).

8: Hidalgo (1917).

10: Odhner (1931), Nordsieck and García-Talavera (1979), Van der Spoel, Bleeker and Kobayasi (1993), Ortea *et al.* (2001), Moro *et al.* (2003).

All records as *C. longirostris*, except those of Van der Spoel, Bleeker and Kobayasi (1993), Ortea *et al.* (2001) and Moro *et al.* (2003).





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***Diacavolinia constricta* Van der Spoel, Bleeker and Kolayashi, 1993**

10: Van der Spoel, Bleeker and Kobayasi (1993).

***Diacavolinia deshayesi* Van der Spoel, Bleeker and Kolayashi, 1993**

10: Van der Spoel, Bleeker and Kobayasi (1993).

***Diacavolinia atlantica* Van der Spoel, Bleeker and Kolayashi, 1993**

10: Van der Spoel, Bleeker and Kobayasi (1993).

**Family Limacinidae Gray, 1840**Genus *Limacina* Bosc, 1817***Limacina helicina* (Phipps, 1774)**

1: Hidalgo (1917).

2: Hidalgo (1917), Rolán (1983).

3: Nordsieck (1972, as *Spiratella*).***Limacina retroversa* (Fleming, 1823)**

2: Rolán and Pérez Gándaras (1981), Rolán (1983).

6: Peñas *et al.* (in press).10: Hernández and Jiménez (1992), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Moro *et al.* (2003).***Limacina bulimoides* (D'Orbigny, 1836)**

2: Rolán (1983).

3: Rampal (1968, as *Spiratella*).10: Lozano-Soldevilla and Hernández (1991), Hernández and Jiménez (1992), Hernández, Ferrandis and Lozano Soldevilla (1993), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Moro *et al.* (2003).***Limacina inflata* (D'Orbigny, 1836)**

2: Rolán (1983).

4: Vives, Santamaría and Trepát (1975).

5: Vives, Santamaría and Trepát (1975).

6: Rampal (1968), Vives, Santamaría and Trepát (1975), Peñas *et al.* (in press).

7: Vives (1966).

8: Ros (1976a).

9: Rampal (1963), Riera and Blasco (1967).

10: Hernández *et al.* (1991), Lozano-Soldevilla and Hernández (1991), Hernández and Jiménez (1992), Hernández, Ferrandis and Lozano Soldevilla (1993), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Moro *et al.* (2003).All records except those of Rolán (1983) and Ortea *et al.* (2001), as *Spiratella*.***Limacina lesueurii* (D'Orbigny, 1836)**

1: Nordsieck (1972).

6: Rampal (1963, 1968), Peñas *et al.* (in press).10: Lozano-Soldevilla and Hernández (1991), Hernández and Jiménez (1993), Ortea *et al.* (2001), Moro *et al.* (2003).The records from areas 1 and 6 as *Spiratella*.***Limacina trochiformis* (D'Orbigny, 1836)**6: Rampal (1968), Vives, Santamaría and Trepát (1975), Peñas *et al.* (in press).

7: Vives (1966).

9: Rampal (1963).

10: Lozano-Soldevilla and Hernández (1991), Hernández and Jiménez (1993), Ortea *et al.* (2001), Moro *et al.* (2003).All records as *Spiratella*, except those of Ortea *et al.* (2001) and Moro *et al.* (2003).**Suborder PSEUDOTHECOSOMATA Meisenheimer, 1905****Family Cymbuliidae Cantraine, 1841**Genus *Cymbulia* Péron and Lesueur, 1810***Cymbulia peroni* Blainville, 1827**

1: Martínez, Rodríguez and Rodríguez (1993).

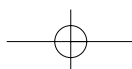
2: Vayssière (1915).

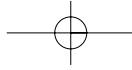
6: Rampal (1968), Vives, Santamaría and Trepát (1975), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).7: Vayssière (1902), García Raso *et al.* (1992).

8: Ros (1975).

10: Hernández, Ferrandis and Lozano Soldevilla (1993), Hernández, Jiménez and Silva (1997a,b), Ortea *et al.* (2001), Moro *et al.* (2003).***Cymbulia parvidentata* Pelseneer, 1888**

6: Vives, Santamaría and Trepát (1975).

Genus *Corolla* Dall, 1871***Corolla ovata* (Quoy and Gaimard, 1832)**10: Hernández, Jiménez and Silvia (1997a), Ortea *et al.* (2001), Moro *et al.* (2003).**Family Desmopteridae Chun, 1889**Genus *Desmopterus* Chun, 1889



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***Desmopterus cirroptera* (Gegenbaur, 1855)**

3: Nordsieck (1972).

10: Pruvot-Fol (1954), Ortea et al. (2001), Moro et al. (2003).

***Desmopterus papilio* Chun, 1889**

10: Hernández et al. (1991), Hernández, Jiménez and Silva (1997a,b), Ortea et al. (2001), Moro et al. (2003).

**Family Peraclidae Tesch, 1913**Genus *Peraclis* Forbes, 1844***Peraclis reticulata* (D'Orbigny, 1836)**3: Hidalgo (1917, as *Peraclis*).

5: Vives, Santamaría and Trepal (1975).

6: Rampal (1968), Peñas et al. (in press).

10: Hernández et al. (1991, as *Peraclis*), Ortea et al. (2001), Moro et al. (2003).***Peraclis bispinosa* (Pelseneer, 1888)**3: Locard (1897, as *P. diversa*, bathyal).

6: Rampal (1968).

***Peraclis triacantha* (Fischer, 1882)**

5: Vives, Santamaría and Trepal (1975).

6: Hidalgo (1917, as *Peraclis*).**Order GYMNOSOMATA Blainville, 1894****Family Pneumodermatidae Latreille, 1825**Genus *Pneumoderma* Perón and Lesueur, 1910***Pneumoderma mediterraneum* Van Beneden, 1836**

8: Pruvot-Fol (1924).

***Pneumoderma violaceum* (D'Orbigny, 1836)**

2: Vayssière (1902).

7: Pruvot-Fol (1924).

8: Pruvot-Fol (1924).

9: Pruvot-Fol (1924).

10: Odhner (1931), Ortea et al. (2001), Moro et al. (2003).

All records, except those of Ortea et al. (2001) and Moro et al. (2003) as *Pneumoderma atlanticum*.**Family Clionidae Oken, 1815**Genus *Clione* Pallas, 1774***Clione limacina* (Phipps, 1773)**

3: Nordsieck (1972).

8: Ballesteros (unpubl. data).

Genus *Paraclione* Tesch, 1903***Paraclione longicaudata* (Souleyeti, 1840)**

9: Pruvot-Fol (1924).

**Family Notobranchaeidae Pelseneer, 1886**Genus *Notobranchaea* Pelseneer, 1886***Notobranchaea hjorti* (Bonnievie, 1913)**

2: Van der Spoel and Pafort (1985).

***Notobranchaea bleekerae* Van der Spoel and Pafort (1985)**

12: Van der Spoel and Pafort (1985).

Genus *Schleschia* Strand, 1932***Schleschia tetrabranchiata* (Bonnievie, 1913)**

12: Van der Spoel and Pafort (1985).

**Order SACOGLOSSA Von Ihering, 1876<sup>(41)</sup>****Suborder OXYNOACEA H. Adams and A. Adams, 1854****Family Volvatellidae Pilsbry, 1895**Genus *Ascobulla* Marcus, 1972***Ascobulla fragilis* (Jeffreys, 1856)**

1: Pruvot-Fol (1954), Nordsieck (1972).

6: Ballesteros et al. (1986).

7: Hidalgo (1917, as *Cylindrobulla*), Templado, Talavera and Murillo (1983, as *Cylindrobulla*), Murillo, Templado and Talavera (1985, as *Cylindrobulla*), Marín and Ros (1988).

10: Ortea et al. (1998, 2001), Moro et al. (2003).

11: Watson (1897, as *Cylindrobulla*), Nobre (1937, as *Cylindrobulla*), Nordsieck and García-Talavera (1979, as *Cylindrobulla*), Malaquias et al. (2001).**Family Oxynoidae H. Adams and A. Adams, 1854**Genus *Oxynoe* Rafinesque, 1819***Oxynoe olivacea* Rafinesque, 1819**

3: Macedo, Macedo and Borges (1999).

5: García-Gómez (2002).

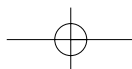
7: Templado (1982b, 1983, 1984), Murillo, Templado and Talavera (1985), Marín and Ros (1988).

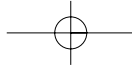
9: Bucquoy, Dautzenberg and Dollfus (1886), Hidalgo (1917), Nordsieck (1972).

10: Ortea (1981), Pérez-Sánchez and Moreno (1990), Ortea et al. (1998, 2001), Moro et al. (2003).

***Oxynoe benchijigua* Ortea, Moro and Espinosa, 1999<sup>(42)</sup>**

10: Ortea, Moro and Espinosa (1999), Ortea et al. (2001), Moro et al. (2003).





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Genus *Lobiger* Krohn, 1847***Lobiger serradifalci* (Calcara, 1840)**

- 5: García Gómez (2002).  
 7: Templado (1982b, 1983, 1984), Murillo, Templado and Talavera (1985), Marín and Ros (1988).  
 8: Altaba and Traveset (1985).  
 9: Hidalgo (1917).  
 10: Pérez-Sánchez and Moreno (1990), Ortea *et al.* (1998, 2001), Moro *et al.* (2003).

**Suborder PLAKOBRANCHACEA Rang, 1829**

Superfamily PLAKOBRANCHOIDEA Rang, 1829

**Family Plakobranchidae Rang, 1829 (= Elysiidae Forbes and Hanley, 1851)**Genus *Elysia* s. l. Risso, 1818 <sup>(43)</sup>***Elysia viridis* (Montagu, 1804)**

- 1: Ortea (1977a,c).  
 2: Ortea (1977a,c), Urgorri and Besteiro (1983), Rolán (1983).  
 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932), García-Gómez *et al.* (1991), Macedo, Macedo and Borges (1999), Malaquias and Morenito (2000), Calado *et al.* (2003).  
 4: Cervera (1988).  
 5: García-Gómez (1982), García-Gómez *et al.* (1989), Sánchez-Moyano *et al.* (2000).  
 6: Ballesteros *et al.* (1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: De Fez (1974), Templado (1982b, 1983, 1984), Murillo and Talavera (1983), Olmo and Ros (1984), Ballesteros *et al.* (1986), Marín and Ros (1987, 1988), Templado *et al.* (2002).  
 8: Maluquer (1904, 1907), Maluquer (1906, 1909, 1912, 1915, 1916), Ros (1975), Altimira, Huelin and Ros (1981), Ballesteros (1984a, 1985), Huelin and Ros (1984).  
 9: Templado (1982a), Altaba (1993, as *Elysia* cf. *viridis*).  
 10: Malaquias and Calado (1997), Ortea *et al.* (1998, 2001), Moro *et al.* (2003).  
 11: Wirtz (1995a).  
 12: Azevedo (1991), Ávila (2000), Malaquias (2001).

***Elysia timida* (Risso, 1818)**

- 5: García Gómez (2002).  
 6: Ocaña *et al.* (2000).

- 7: Templado (1982b), Murillo and Talavera (1983), Olmo and Ros (1984), Ros and Rodríguez (1985), Ballesteros (1985), Marín and Ros (1987, 1988, 1992, 1993), Giménez-Casaldueiro (1997, 1999), Aguado-Giménez (2000).  
 8: Ballesteros (1979, 1985), Pereira (1980), Huelin and Ros (1984).  
 9: Ros (1981b, 1985b), Ballesteros (1985).

***Elysia ornata* (Swainson, 1840)**

- 10: Jensen (1992a), Ortea, Moro and Espinosa (1997), Ortea *et al.* (1998, 2001), Moro *et al.* (2003).  
 11: Wirtz (1999).  
 12: Wirtz (1995b, 1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Elysia flava* Verrill, 1901**

- 7: Ballesteros *et al.* (1986).  
 8: Ballesteros (unpubl. data).  
 10: Ortea (1981), Ortea *et al.* (1998, 2001), Moro *et al.* (2003).  
 11: Ortea, Moro and Espinosa (1997), Malaquias *et al.* (2001).

***Elysia papillosa* Verrill, 1901**

- 10: Ortea *et al.* (1998, 2001), Moro *et al.* (2003).  
 11: Wirtz (1999).

***Elysia subornata* Verrill, 1901**

- 10: Ortea, Moro and Espinosa (1997), Ortea *et al.* (1998) both as *Elysia cause*, Ortea *et al.* (2001, 2003), Moro *et al.* (2003).  
 11: Ortea, Moro and Espinosa (1997, as *Elysia cause*).

***Elysia translucens* Pruvot-Fol, 1957 <sup>(44)</sup>**

- 6: García Raso *et al.* (1992).  
 7: Marín and Ros (1987, 1988), Templado, Talavera and Murillo (1987), Templado *et al.* (2002).  
 9: Ballesteros and Templado (1996).

***Elysia fezi* Vilella, 1968 <sup>(45)</sup>**

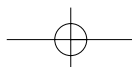
- 8: Vilella (1968).

***Elysia margaritae* Fez, 1974 <sup>(46)</sup>**

- 7: De Fez (1974).

***Elysia gordanae* Thompson and Jaklin, 1988 <sup>(46)</sup>**

- 4: Cervera and López-González (1996).  
 6: García Raso *et al.* (1992).  
 10: Ortea *et al.* (1998, 2001, 2003, all as *E. margaritae*), Moro *et al.* (2003, as *E. margaritae*), Wirtz and Debelius (2003, as *E. margaritae*).



12: Wirtz and Debelius (2003, as *E. margaritae*).

Genus *Thuridilla* Bergh, 1872 <sup>(47)</sup>

***Thuridilla hopei* (Vérany, 1853)**

4: Cervera and García-Gómez (1986).

5: García-Gómez (1982).

6: Luque (1983, 1986, both as *Elysia*), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000), García Raso et al. (1992).

7: De Fez (1974, as *T. splendida*), Templado (1983, as *Elysia*), Ballesteros et al. (1986, as *Elysia*), Marín and Ros (1987, 1988), Templado et al. (2002).

8: Vicente (1964, as *T. splendida*), Storch and Welsch (1972), Ros (1975, 1978, 1985a), Ros and Altimira (1981), Pereira (1981), Huelin and Ros (1984), Ballesteros (1985).

9: Ros (1975, 1978b, 1981b), Ballesteros (1985), Ballesteros, Álvarez and Mateo (1986), Dekker (1986).

***Thuridilla picta* (Verrill, 1901)**

10: Ortea, Luque and Templado (1988, as *Elysia*), Ortea, Moro and Espinosa (1997), Ortea et al. (1998, 2001, 2003), Pérez-Sánchez and Moreno (1990, as *T. hopei*).

11: Wirtz (1999, as *Elysia*).

**Family Boselliidae Marcus, 1982**

Genus *Bosellia* Trinchese, 1891

***Bosellia mimetica* Trinchese, 1891**

6: García Raso et al. (1992).

7: Templado (1982b), Ballesteros et al. (1986), Marín and Ros (1987, 1988), Templado et al. (2002).

8: Altava and Traveset (1985).

9: Ballesteros (1979).

***Bosellia leve* Fernández-Ovies and Ortea, 1986 <sup>(48)</sup>**

10: Fernández-Ovies and Ortea (1986), Ortea et al. (1998, 2001, 2003), Moro et al. (2003).

Superfamily LIMAPONTIOIDEA Gray, 1847

**Family Polybranchiidae O'Donoghue, 1929**

(= **Caliphyllidae Thiele, 1931**) <sup>(49)</sup>

Genus *Polybranchia* Pease, 1860

***Polybranchia viridis* (Deshayes, 1857)**

10: Ortea (1981), Ortea et al. (1998, 2001), Moro et al. (2003), Wirtz and Debelius (2003).

***Polybranchia borgnini* (Trinchese, 1896)**

10: Ortea (1981), Ortea et al. (1998, 2001), Moro et al. (2003).

Genus *Caliphylla* A. Costa, 1867

***Caliphylla mediterranea* A. Costa, 1867**

5: García-Gómez (2002).

6: Luque (1983, 1986), García Raso et al. (1992), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000).

7: Templado, Talavera and Murillo (1987), Templado et al. (2002).

10: Ortea (1981), Ortea et al. (1998, 2001), Moro et al. (2003).

Genus *Cyerce* Bergh, 1871

***Cyerce antillensis* Engel, 1927**

11: Wirtz (pers. comm.).

12: Wirtz and Debelius (2003).

**Family Hermaeidae H. Adams and A. Adams, 1854**

Genus *Aplysiopsis* Deshayes, 1853

***Aplysiopsis elegans* (Deshayes, 1854)**

9: Ballesteros and Templado (1996).

10: Ortea et al. (1998, 2001), Moro et al. (2003).

***Aplysiopsis formosa* Pruvot-Fol, 1953**

4: Cervera (unpubl. data).

10: Ortea, Bacallado and Pérez Sánchez (1990), Ortea et al. (1998, 2001), Moro et al. (2003), Wirtz and Debelius (2003).

12: Jensen (1995), Wirtz (1998), Ortea et al. (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

Genus *Hermaea* Lovén, 1844 <sup>(50)</sup>

***Hermaea bifida* (Montagu, 1815)**

2: Rolán (1983).

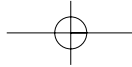
3: De Oliveira (1895), Hidalgo (1917), Nobre (1936), Machado and Fonseca (1997, as *H. cf. bifida*), Calado et al. (1999, 2003).

4: Cervera, García-Gómez and Ortea (1991, as *H. boucheti*).

5: García-Gómez (2002).

7: Fez (1974), Templado (1982b, 1983, 1984), Marín and Ros (1988).

8: Ballesteros (unpubl. data).



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***Hermaea cruciata* A. A. Gould, 1870**10: Ortea *et al.* (2001, 2003), Moro *et al.* (2003).***Hermaea paucicirra* Pruvot-Fol, 1953**

- 1: Ortea (1977a,c).
- 2: Urgan and Besteiro (1983).
- 3: Calado *et al.* (1999).
- 4: Cervera and García-Gómez (1986), Cervera, García-Gómez and Ortea (1991).
- 6: Sánchez Tocino, Ocaña and García (2000a).
- 7: Marín and Ros (1987, 1988).
- 8: Ballesteros (1980b).
- 10: Ortea *et al.* (2003).

Genus *Hermaeopsis* A. Costa, 1869 <sup>(51)</sup>***Hermaeopsis variopicta* A. Costa, 1869**

- 1: Martínez *et al.* (1990).
  - 2: Ortea (1977a,c), Urgan and Besteiro (1983).
  - 3: Calado *et al.* (1999, 2005).
  - 4: Cervera (unpubl. data).
  - 5: García-Gómez (1987).
  - 6: García Raso *et al.* (1992).
  - 7: Templado, Talavera and Murillo (1987), Templado, Luque and Moreno (1988).
  - 9: Ballesteros and Templado (1996, as *Hermaea*).
  - 10: Ortea *et al.* (1998, 2001).
- All published records, except Calado *et al.* (2003) as *Hermaea*.

**Family Limapontiidae Gray, 1847 (= Stiligeridae Iredale and O'Donoghue, 1923) <sup>(50)</sup>**Genus *Stiliger* Ehrenberg, 1831***Stiliger llerai* Ortea, 1981**

- 10: Ortea (1981), Pérez-Sánchez and Moreno (1990), Malaquias and Calado (1997), Ortea *et al.* (1998, 2001), Moro *et al.* (2003).

Genus *Limapontia* Johnston, 1836***Limapontia capitata* O. F. Müller, 1774**

- 1: Ortea (1977a,c, as *Limapontia nigra*).
- 2: Urgan and Besteiro (1983).
- 3: Hidalgo (1916), Nobre (1932).
- 5: García-Gómez (1982).
- 7: Templado, Talavera and Murillo (1983, as *L. nigra*), Marín and Ros (1987, 1988).

***Limapontia senestra* (Quatrefages, 1844)**

- 1: Ortea (1977c, as *Acteonina corrugata*), Ortea (1977a, as *A. senestra*).
- 2: Urgan and Besteiro (1983).

Genus *Calliopaea* D'Orbigny, 1837***Calliopaea bellula* D'Orbigny, 1837**

- 2: Ortea and Urgan (1981a), Urgan and Besteiro (1983), Rolán (1983). All records as *Stiliger bellulus*.
- 3: García-Gómez *et al.* (1991), Calado (unpubl. data).
- 7: Fez (1974, as *Ercolanea funerea*), Templado, Talavera and Murillo (1983), Marín and Ros (1987, 1988).
- 10: Ortea *et al.* (1998).

Genus *Ercolania* s. l. Trinchese, 1872 <sup>(52)</sup>***Ercolania viridis* (A. Costa, 1866)**

- 5: García-Gómez (1987).
- 7: Marín and Ros (1987).

***Ercolania funerea* (A. Costa, 1867)**

- 7: Marín and Ros (1988).

***Ercolania siottii* Trinchese, 1872**

- 11: Ortea and Moro (1998a), Ortea *et al.* (1998).

***Ercolania coerulea* Trinchese, 1892**

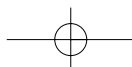
- 7: Templado (1982b, 1983, 1984), Marín and Ros (1988).
- 10: Wirtz and Debelius (2003).
- 11: Wirtz (1995a).
- 12: Wirtz and Debelius (2003).

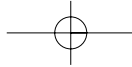
***Ercolania lozanoi* Ortea, 1981**

- 4: Cervera (unpubl. data).
- 5: Cervera and López-González (1996).
- 9: Ballesteros and Templado (unpubl. data).
- 10: Ortea (1981), Fernández-Ovies, Ortea and Pérez (1984), Ortea *et al.* (1998, 2001), Moro *et al.* (2003).

Genus *Placida* Trinchese, 1876 <sup>(50) (53)</sup>***Placida dendritica* (Alder and Hancock, 1843)**

- 1: Ortea (1977a,c, as *Hermaea*).
- 2: Urgan and Besteiro (1983, as *Hermaea*), Trigo and Otero (1987, as *Hermaea*).
- 3: García-Gómez *et al.* (1991).
- 6: García Raso *et al.* (1992).
- 7: Fez (1974, as *Hermaea*), Templado, Talavera and Murillo (1983), Templado *et al.* (2002), Ballesteros *et al.* (1986), Marín and Ros (1987, 1988).





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- 8: Ros (1975, 1978b, 1985a), Ros and Altimira (1977), Ballesteros (1985).  
 9: Ballesteros and Templado (unpubl. data).  
 11: Wirtz (1999, as *P. cf. dendritica*).

***Placida tardyi* (Trinchese, 1873) <sup>(54)</sup>**

- 3: Calado et al. (2003).  
 4: Cervera (1988, as *P. cf. tardyi*), Cervera, García-Gómez and Ortea (1991).

***Placida brevicornis* (A. Costa, 1876)**

- 5: García-Gómez (1987).

***Placida cremoniana* Trinchese, 1892**

- 3: García-Gómez et al. (1991).  
 4: Cervera (1988).  
 5: García-Gómez (1983), García-Gómez et al. (1989).  
 6: Ballesteros et al. (1986), García Raso et al. (1992), Ocaña et al. (2000).  
 7: Fez (1974, as *Hermaea carmeni*), Templado, Talavera and Murillo (1983), Marín and Ros (1987, 1988).  
 8: Ballesteros (1980b, as *Hermaea*).  
 9: Ballesteros, Álvarez and Mateo (1986).  
 10: Ortea et al. (1998, 2001), Moro et al. (2003), Wirtz and Debelius (2003).  
 12: Fontes, Tempera and Wirtz (2001), Wirtz and Debelius (2003).

***Placida verticillata* Ortea, 1981 <sup>(55)</sup>**

- 1: Ortea (1977a,c, as *Hermaea viridis*).  
 3: Calado et al. (2003).  
 5: García-Gómez (1987), Sánchez-Moyano et al. (2000).  
 6: Sánchez Tocino, Ocaña and García (2000a).  
 7: Marín and Ros (1988).  
 10: Ortea (1981), Ortea et al. (1998, 2001), Moro et al. (2003).  
 11: Malaquias (unpubl. data).  
 12: Ávila (2000), Malaquias (2001).

Genus *Costasiella* Pruvot-Fol, 1951***Costasiella virescens* Pruvot-Fol, 1951**

- 10: Ortea et al. (1998, 2001), Moro et al. (2003).

**Order UMBRACULACEA Dall, 1889 <sup>(56)</sup> <sup>(57)</sup>****Family Tylodinidae Gray, 1847**Genus *Tylodina* Rafinesque, 1814 <sup>(58)</sup>***Tylodina perversa* (Gmelin, 1791)**

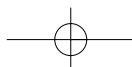
- 3: Calado and Urgorri (1999), Calado et al. (1999).  
 5: García-Gómez et al. (1989).  
 6: Templado et al. (1993b), Ocaña et al. (2000), Peñas et al. (in press).  
 7: Templado, Talavera and Murillo (1983), Templado et al. (2002).  
 8: Vicente (1964), Ros (1975, 1978b), Ros and Altimira (1977), Altimira, Huelin and Ros (1981), Ebel, Marín and Proskch (1999), Becerro et al. (2003).  
 9: Templado (1982a).  
 10: McAndrew (1857), Odhner (1931, as *T. citrina*), Pruvot-Fol (1954), Nordsieck (1972), Pérez-Sánchez and Moreno (1990), Malaquias and Calado (1997), Ortea et al. (2001, 2003), Moro et al. (2003).  
 11: Watson (1897, as *T. citrina* and *T. rafinesque*), Nobre (1937), Nordsieck and García-Talavera (1979), Wirtz (1999), Malaquias et al. (2001), Wirtz and Debelius (2003).  
 12: Dautzenberg (1889, as *T. citrina*), Wirtz (1998), Ávila et al. (1998), Ávila (2000), Malaquias (2001).

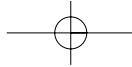
Genus *Anidolyta* Willan, 1987 <sup>(59)</sup>***Anidolyta duebenii* Lovén, 1846 <sup>(59)</sup>**

- 3: Sykes (1905, as *Tylodinella duebenii*), Pruvot-Fol (1954, as *T. duebeni*), Nordsieck (1972, as *T. duebeni*).  
 6: Peñas et al. (in press).

**Family Umbraculidae Dall, 1889**Genus *Umbraculum* Schumacher, 1817 <sup>(60)</sup>***Umbraculum umbraculum* (Lightfoot, 1786) <sup>(60)</sup>**

- 3: Hidalgo (1917), Nobre (1932, as *U. mediterraneum*).  
 4: Hidalgo (1917, as *U. mediterraneum*).  
 5: García Gómez (unpubl. data).  
 6: Hidalgo (1917), Luque (1983, as *U. mediterraneum*), Templado et al. (1993b), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000), Peñas et al. (in press).  
 7: Hidalgo (1917), Templado, Talavera and Murillo (1983, as *U. mediterraneum*).  
 8: Hidalgo (1917), Ros (1975, 1978b), Ros and Altimira (1977, as *U. mediterraneum*).  
 9: Carus (1889-1893), Hidalgo (1917, as *U. mediterraneum*), Ballesteros (1998).





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- 10: Odhner (1931, as *U. mediterraneum*), Pérez-Sánchez and Moreno (1990, as *U. mediterraneum*), Ortea et al. (2001, 2003), Moro et al. (2003).  
 11: Nobre (1895, 1937, both as *Umbrella mediterranea*), Watson (1886, as *Umbrella mediterranea*), Wirtz (1999, as *U. mediterraneum*), Malaquias et al. (2001), Wirtz and Debelius (2003).  
 12: Menezes (1991), Ávila et al. (1998), Ávila (2000), Malaquias (2001).

**Superorder NUDIPLEURA Wägele and Willan, 2000** <sup>(57)</sup>

**Order PLEUROBRANCHACEA Férussac, 1822**

**Family Pleurobranchidae Férussac, 1822**

**Subfamily Pleurobranchinae Férussac, 1822**

**Tribe Pleurobranchini Férussac, 1822**

Genus *Pleurobranchus* Cuvier, 1805

***Pleurobranchus membranaceus* (Montagu, 1815)**

- 1: Hidalgo (1917, as *Oscanius tuberculatus*), Ávila Escartín (1993).  
 3: De Oliveira (1895), Hidalgo (1917), Nobre (1932, as *O. membranaceus*), Marqués et al. (1982).  
 5: Cervera (unpubl. data).  
 6: Moreno and Templado (1998).  
 8: Maluquer, J. (1907), Maluquer M. (1906-1909, 1912), Ros (1975, 1978b, both as *Oscanius*).  
 9: Ballesteros and Templado (1996).  
 11: Malaquias (unpubl. data).

***Pleurobranchus testudinarius* (Cantraine, 1836)**

- 4: Templado et al. (1993b).  
 6: Moreno and Templado (1998), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000), Peñas et al. (in press).  
 7: Templado (1982b, as *Susania*).  
 8: Ros (1975, 1978b, as *Susania*).  
 9: Ros and Gili (1985), Ballesteros (1998) (both as *Susania*).  
 10: Ortea et al. (2001), Moro et al. (2003), Wirtz and Debelius (2003).  
 11: Wirtz (unpubl. data).  
 12: Wirtz and Martins (1993), Wirtz (1992, 1998), Ávila et al. (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Pleurobranchus areolatus* (Mörch, 1863)**

- 10: Pérez-Sánchez and Moreno (1990), Ortea et al. (2001), Moro et al. (2003).

- 11: Clode (unpubl. data).

***Pleurobranchus lowei* Watson, 1897**

- 11: Watson (1897), Nobre (1937), Malaquias (2004).

***Pleurobranchus garciagomezi* Cervera, Cattaneo-Vietti and Edmunds, 1996**

- 10: Ortea et al. (2001), Malaquias (2000), Wirtz and Debelius (2003, as *Pleurobranchus* sp.).  
 11: Wirtz and Debelius (2003, as *Pleurobranchus* sp.), Malaquias (unpubl. data).  
 12: Fontes, Tempera and Wirtz (2001), Wirtz and Debelius (2003), both records as *Pleurobranchus* sp.

**Tribe Berthellini Burn, 1962**

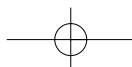
Genus *Berthella* Blainville, 1824

***Berthella plumula* (Montagu, 1803)**

- 1: Hidalgo (1917, as *Pleurobranchus*), Ortea (1977c, as *Susania testudinaria*), Ávila Escartín (1993).  
 2: Urgorri and Besteiro (1983), Rolán (1983).  
 3: De Oliveira (1895, as *Pleurobranchus plumula*), Nobre (1932), García-Gómez et al. (1991), Calado et al. (1999, 2003).  
 4: Cervera and García-Gómez (1986), Cervera et al. (2000).  
 6: Sánchez Tocino, Ocaña and García (2000a), Peñas et al. (in press).  
 7: Templado (1982b, 1983, 1984), Ballesteros et al. (1986), Marín and Ros (1987), García Raso et al. (1992).  
 9: Hidalgo (1917, as *Pleurobranchus*).  
 10: Ortea et al. (2001).  
 11: Watson (1897, as *Pleurobranchus plumula*), Nobre (1937).  
 12: Bergh (1892, 1899, both as *Pleurobranchus plumula*), Malaquias (2001).

***Berthella aurantiaca* (Risso, 1818)** <sup>(61)</sup>

- 1: Hidalgo (1917, as *Pleurobranchus aurantiacus*), Ros (1975, 1978b), Ortea (1977c, as *Bouvieria*), Ávila Escartín (1993).  
 5: García-Gómez (1987), Cervera et al. (2000).  
 6: Ocaña et al. (2000).  
 7: Marín and Ros (1987).  
 8: Maluquer, J. (1907), Maluquer, M. (1906-1909, 1912, all as *Pleurobranchus*), Ros (1975, 1978b), Altimira, Huelin and Ros (1981, as *Bouvieria*).



- 9: Hidalgo (1917), Ros (1981b), Ros and Gili (1984, 1985).  
 12: Bergh (1892, as *Pleurobranchus aurantiacus*), Malaquias (2001).

***Berthella stellata* (Risso, 1826)**

- 1: Ortea (1977c, as *B. plumula*), Ávila Escartín (1993).  
 2: Fernández-Ovies (1981, as *B. plumula*).  
 3: García-Gómez et al. (1991), Calado et al. (1999, 2003).  
 4: Cervera and García-Gómez (1986), Cervera et al. (2000).  
 5: Cervera and García-Gómez (1986), García-Gómez (1987), García-Gómez et al. (1989), Cervera et al. (2000).  
 6: García Raso et al. (1992), Sánchez Tocino, Ocaña and García (2000a).  
 7: Ballesteros et al. (1986), Templado (1982b), Marín and Ros (1987a), Templado et al. (2002).  
 9: Ros and Gili (1985, as *B. cf. stellata*), Ballesteros, Álvarez and Mateo (1986).  
 10: Malaquias and Calado (1997), Ortea et al. (2001), Wirtz and Debelius (2003).  
 11: Malaquias (unpubl. data).  
 12: Wirtz and Debelius (2003).

***Berthella ocellata* (Delle Chiaje, 1828)**

- 4: Templado et al. (1993b, as *Berthella cf. ocellata*).  
 5: García-Gómez (1987), Cervera et al. (2000).  
 6: Sánchez Tocino, Ocaña and García (2000a), Peñas et al. (in press, as *Berthella cf. ocellata*).  
 8: Ros (1975, 1978b, as *Bouvieria*).  
 9: Templado (1982a), Ros and Gili (1985, as *Berthella cf. ocellata*).  
 10: Ortea et al. (2001), Wirtz and Debelius (2003).

***Berthella sideralis* Lovén, 1846**

- 1: Bouchet (1977, bathyal).

***Berthella dautzenbergi* Watson, 1897**

- 11: Watson (1897, as *Pleurobranchus dautzenbergi*), Nobre (1937, as *P. dautzenbergi*), Nordsieck and García-Talavera (1979, as *Bouvieria dautzenbergi*), Malaquias (2004).

***Berthella africana* (Pruvot-Fol, 1953)**

- 10: Ortea et al. (2001).

***Berthella canariensis* Cervera et al., 2000**

- 10: Cervera, García-Gómez and Megina (2000), Ortea et al. (2001).

Genus *Berthellina* Gardiner, 1936<sup>(61)</sup> <sup>(62)</sup>

***Berthellina edwardsi* (Vayssière, 1897)<sup>(62)</sup>**

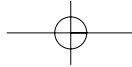
- 1: Gofas (unpubl. data).  
 3: Marqués et al. (1982, as *B. citrina*), García-Gómez et al. (1991), Calado et al. (1999), Muzavor and Morenito (1999).  
 4: Cervera and García (1986, as *Berthellina* sp.), Templado et al. (1993b, as *Berthellina* sp.), Cervera, García-Gómez and Megina (2000).  
 5: Cervera (unpubl. data).  
 6: Ballesteros et al. (1986, as *Berthella aurantiaca*), Ocaña et al. (2000), Peñas et al. (in press).  
 7: Ballesteros et al. (1986, as *Berthella aurantica*), Templado et al. (2002).  
 9: Lacaze-Duthiers (1859, as *Pleurobranchus aurantiacus*).  
 10: Pérez-Sánchez and Moreno (1990, as *Berthellina quadridens*), Malaquias (2000), Ortea et al. (2001), Moro et al. (2003), Wirtz and Debelius (2003).  
 11: Wirtz (1999), Malaquias et al. (2001), Wirtz and Debelius (2003).  
 12: Vayssière (1896, 1898, 1902), Azevedo and Gofas (1990, as *Berthellina* sp.), Wirtz (1998), Ávila et al. (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

**Subfamily Pleurobranchaeinae Pilsbry, 1896**

Genus *Pleurobranchaea* Meckel in Leue, 1813

***Pleurobranchaea meckelii* (Blainville, 1825)<sup>(63)</sup>**

- 1: Ávila Escartín (1993).  
 3: Nordsieck (1972), García-Gómez et al. (1991, collected from fisheries trawlings).  
 4: Cervera and García-Gómez (1988), Templado et al. (1993b).  
 5: Cervera (unpubl. data).  
 6: Luque (1983, 1986), Templado et al. (1993b), Templado and Moreno (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000), Peñas et al. (in press).  
 7: Templado, Talavera and Murillo (1983), Ávila Escartín (1993).  
 8: Ros (1975, 1978b), Ávila Escartín (1993).  
 9: Vayssière (1901, 1902).  
 10: Odhner (1931), Ortea et al. (2001), Wirtz and Debelius (2003).



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- 11: Wirtz (unpubl. data).  
12: Bergh (1899), Malaquias (2001), Wirtz and Debelius (2003).

***Pleurobranchaea morosa* (Bergh, 1892) <sup>(63)</sup>**

- 12: Bergh (1892, as *Pleurobranchillus morosus*), Malaquias (2001).

**Order NUDIBRANCHIA Blainville, 1814 <sup>(64)</sup>**

Suborder ANTHOBRANCHIA Minichev, 1970

**Infraorder DORIDINA Pelseneer, 1894**

**“PHANEROBRANCHIA” Fischer, 1883 <sup>(65)</sup>**

**Family Corambidae Bergh, 1871**

Genus *Corambe* Bergh, 1869

***Corambe testudinaria* Fischer, 1889**

- 2: Urgorri (1981, as *Corambe* sp.), García, Urgorri and López González (1990).  
4: García, Urgorri and López González (1990).

**Family Onchidorididae Alder and Hancock, 1845**

Genus *Adalaria* Bergh, 1878

***Adalaria proxima* (Alder and Hancock, 1854) <sup>(66)</sup>**

- 3: ? Marques *et al.* (1982).

Genus *Onchidoris* Blainville, 1816

***Onchidoris neapolitana* (Delle Chiaje, 1841-44)**

- 5: Sánchez-Santos (in press).  
8: Ros (1975, 1978b, 1985a), Ros and Altimira (1977), Altimira, Huelin and Ros (1981), Ortea and Ballesteros (1982), Huelin and Ros (1984), Ballesteros (1985).

All records before 1982 as *Lamellidoris neapolitana*.

***Onchidoris depressa* (Alder and Hancock, 1842)**

- 2: Ortea and Urgorri (1979a), Ortea and Ballesteros (1982), Urgorri and Besteiro (1983, 1984).  
3: Nobre (1938-40, as *Doris*).  
4: García-Gómez (2002, as *Onchidoris* sp.).

***Onchidoris pusilla* (Alder and Hancock, 1845)**

- 2: Ortea (1979b), Urgorri and Besteiro (1983, 1984).  
5: Sánchez Santos (pers. comm.).

***Onchidoris sparsa* (Alder and Hancock, 1846)**

- 1: Ortea (1979d).  
2: Ortea (1979d), Fernández-Ovies (1981), Urgorri and Besteiro (1983, 1984).  
7: Templado, Talavera and Murillo (1987).  
8: Ballesteros (1984b).

***Onchidoris inconspicua* (Alder and Hancock, 1851)**

- 2: Ortea and Ballesteros (1982).

***Onchidoris albonigra* (Pruvot-Fol, 1951)**

- 8: Ortea and Ballesteros (1982), Ballesteros (1985).

***Onchidoris reticulata* Ortea, 1979**

- 2: Ortea (1979b), Ortea, Llera and Vizcaino (1982).

***Onchidoris cervinoi* Ortea and Urgorri, 1979 <sup>(67)</sup>**

- 1: Ortea (1977c, as *Adalaria proxima*), Ortea and Urgorri (1979a).  
2: Ortea and Urgorri (1979a), Urgorri and Besteiro (1983, 1984).

***Onchidoris tridactyla* Ortea and Ballesteros, 1982**

- 1: Ortea and Ballesteros (1982).

Genus *Acanthodoris* Gray, 1850

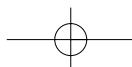
***Acanthodoris pilosa* (Abilgaard, 1789) <sup>(68)</sup>**

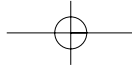
- 1: Thorson (1965).  
5: García-Gómez (1987, 2002, as *A. cf. pilosa*).

Genus *Diaphorodoris* Iredale and O'Donoghue, 1923

***Diaphorodoris luteocincta* (Sars, 1870)**

- 1: Cervera *et al.* (1988), Ávila Escartín (1993).  
3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).  
5: García-Gómez (1983), García-Gómez *et al.* (1989).  
6: Luque (1983, 1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).  
7: Ballesteros *et al.* (1986), Marín and Ros (1987).  
8: Ros (1975, 1978b, 1985a), Ros and Altimira (1977), Ballesteros (1985).  
9: Ballesteros and Templado (1996).  
10: Ortea *et al.* (2001), Moro *et al.* (2003).  
12: Wirtz and Martins (1993), Wirtz (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).





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All records before 1988, except those of Ballesteros *et al.* (1986) and Marín and Ros (1987), are referred to the variety *alba* of this species.

***Diaphorodoris papillata* Portmann and Sandmeier, 1960**

- 1: Ávila Escartín (1993).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2005), Wirtz and Debelius (2003).
- 5: García-Gómez (1983), García-Gómez *et al.* (1989).
- 6: Luque (1983, 1986), Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).
- 7: Templado (1982b, 1983, 1984), Templado, Luque and Moreno (1988).
- 8: Ros (1975, 1978b, 1985a), Ros and Altimira (1977), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ballesteros (1985), Wirtz and Debelius (2003).

**Family Goniodorididae H. and A. Adams, 1854**

Genus *Goniodoris* Forbes and Goodsir, 1839

***Goniodoris nodosa* (Montagu, 1808)**

- 1: Ortea (1977c).
- 2: Ortea (1977c), Urgorri and Besteiro (1983), Rolán (1983).
- 3: Nobre (1932), García-Gómez *et al.* (1991).

***Goniodoris castanea* Alder and Hancock, 1845**

- 1: Ortea (1977c).
- 2: Ortea (1977c), Urgorri and Besteiro (1983, 1984).
- 3: De Oliveira (1895), Nobre (1932), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 4: Cervera and García-Gómez (1986), Wägele and Cervera (2001).
- 5: García-Gómez (1983), García-Gómez *et al.* (1989), Sánchez-Moyano *et al.* (2000).
- 7: De Fez (1974), Marín and Ros (1987).
- 8: Ballesteros (1985).
- 9: Templado (1982a).
- 10: Ortea *et al.* (1996, 2001), Moro *et al.* (2003).
- 11: Malaquias (unpubl. data).

Genus *Okenia* Menke, 1830

***Okenia aspersa* Alder and Hancock, 1845<sup>(69)</sup>**

- 3: Cervera, García-Gómez and Ortea (1991).

***Okenia mediterranea* (Ihering, 1886)**

- 2: Valdés and Ortea (1995).
- 3: Calado *et al.* (2003).
- 4: Cervera, García-Gómez and Ortea (1991), Valdés and Ortea (1995).
- 5: Valdés and Ortea (1995).
- 6: Moreno and Templado (1998).
- 11: Valdés and Ortea (1995).

***Okenia zoobotryon* (Smallwod, 1910)**

- 10: Ortea *et al.* (1996, 2001, 2003), Moro *et al.* (2003).

***Okenia cupella* (Vogel and Schultz, 1970)**

- 5: Valdés and Ortea (1995).
- 6: Valdés and Ortea (1995), Peñas *et al.* (in press).
- 7: Templado (1982b, as *O. impexa*), Valdés and Ortea (1995), Templado *et al.* (2002).

***Okenia elegans* (Leuckart, 1828)**

- 5: Sánchez-Santos (unpubl. data).
- 8: Ballesteros (unpubl. data).

***Okenia hispanica* Valdés and Ortea, 1995**

- 6: Templado *et al.* (1993b, as *Okenia* sp.), Valdés and Ortea (1995), Villena *et al.* (1997), Peñas *et al.* (in press).

Genus *Ancula* Lovén, 1846

***Ancula gibbosa* (Risso, 1818)**

- 1: Ortea (1977c).
- 2: Urgorri and Besteiro (1983, 1984), Rolán (1983).
- 3: García-Gómez *et al.* (1991).
- 8: Arias and Morales (1963).

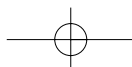
Genus *Trapania* Pruvot-Fol, 1931

***Trapania tartanella* (Ihering, 1885)**

- 1: Ortea *et al.* (1989), Templado *et al.* (1993a).
- 2: Urgorri and Besteiro (1983).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 4: Cervera, García-Gómez and Megina (2000).
- 6: Templado, Luque and Moreno (1988).

***Trapania lineata* Haefelfinger, 1960**

- 5: Sánchez Santos (unpubl. data).
- 6: Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).



- 7: Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Ávila Escartín (1993), Templado *et al.* (2002).  
 8: Ros (1978b), Ballesteros (1985), Ávila Escartín (1993).  
 9: Ávila Escartín (1993).

***Trapania maculata* Haefelfinger, 1960**

- 1: Ortea (1977c), Cervera and García-Gómez (1989c), Ávila Escartín (1993).  
 2: Ortea (1977c), Urgorri and Besteiro (1983, 1984).  
 4: Cervera and García-Gómez (1989c).  
 5: Cervera and García-Gómez (1989c), García-Gómez *et al.* (1989).  
 6: Cervera and García-Gómez (1989c), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: Ballesteros *et al.* (1986), Templado, Talavera and Murillo (1987), Templado *et al.* (2002), Cervera and García-Gómez (1989c).  
 8: Ros (1975), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ballesteros (1985), Cervera and García-Gómez (1989c), Ávila Escartín (1993).  
 9: Templado (1982a), Ávila Escartín (1993).

***Trapania pallida* Kress, 1968**

- 2: Ortea and Urgorri (1981a), Urgorri and Besteiro (1983, 1984).  
 4: García-Gómez (2002).

***Trapania ortei* García-Gómez and Cervera in Cervera and García-Gómez, 1989<sup>(70)</sup>**

- 3: Gavaia *et al.* (2004).  
 4: García-Gómez (1984a, as *T. cf. maculata*), Cervera and García (1986, as *T. cf. maculata*), Cervera and García-Gómez (1989a), Templado *et al.* (1993a), Cervera, García-Gómez and Megina (2000).  
 5: García-Gómez (1987, as *T. cf. maculata*), Cervera and García-Gómez (1989a).

***Trapania hispalensis* Cervera and García-Gómez, 1989<sup>(70)</sup>**

- 2: Martínez *et al.* (1990).  
 5: Cervera and García-Gómez (1989a), García-Gómez *et al.* (1989), Templado *et al.* (1993a).  
 6: Templado *et al.* (1993b, as *T. cf. hispalensis*), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

***Trapania luquei* Ortea, 1989**

- 10: Moro, Ortea and Bacallado (1997), Moro *et al.* (2003), Ortea *et al.* (2001).

***Trapania sanctipetrensis* Cervera, García-Gómez and Megina, 2000**

- 4: Cervera, García-Gómez and Megina (2000).

Genus *Bermudella* Odhner, 1941

***Bermudella polycerelloides* Ortea and Bouchet, 1983**

- 10: Ortea and Bouchet (1983), Ortea *et al.* (1996, 2001), Moro *et al.* (2003).

**Family Polyceridae Alder and Hancock, 1845<sup>(71)</sup>**

Genus *Limacia* O. F. Müller, 1781

***Limacia clavigera* (O. F. Müller, 1776)**

- 1: Hidalgo (1917), Ortea *et al.* (1989), Ávila Escartín (1993).  
 2: Pruvot-Fol (1954), Ortea (1977c), Urgorri and Besteiro (1983), Trigo and Otero (1987).  
 3: De Oliveira (1895), Hidalgo (1917), Nobre (1932), Ortea *et al.* (1989), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003), Muzavor and Morenito (1999), Malaquias and Morenito (2000).  
 4: Cervera (unpubl. data).  
 5: García-Gómez (1983), Sánchez-Moyano *et al.* (2000), Megina and Cervera (2003).  
 6: Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: Templado (1983, 1984), Ortea *et al.* (1989).  
 8: Ros (1975, 1978b, 1985a), Ros and Altimira (1977), Altimira, Huelin and Ros (1981).  
 9: Templado (1982a).  
 10: Ortea *et al.* (1989, 1996, 2001), Pérez-Sánchez and Moreno (1990), Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez *et al.* (1991), Moro *et al.* (2003).  
 12: Wirtz (1998), Ortea, Moro and Espinosa (1996), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

Genus *Polycera* Cuvier, 1817

***Polycera quadrilineata* (O. F. Müller, 1776)**

- 1: Hidalgo (1917), Fez (1974), Ortea (1977c).  
 2: Ortea (1977c), Urgorri and Besteiro (1983, 1984).  
 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).  
 4: García-Gómez (1982).

- 5: García-Gómez (1982), García-Gómez *et al.* (1989), Megina and Cervera (2003).  
 6: Luque (1983, 1986), Templado, Luque and Moreno (1988), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: De Fez (1974), Templado (1982b, 1983, 1984), Marín and Ros (1987), Templado, Luque and Moreno (1988).  
 8: Ros (1975), Ballesteros (1985).  
 9: Ballesteros, Álvarez and Mateo (1986), Dekker (1986), Wirtz and Debelius (2003).  
 10: Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez, Bacallado and Ortea (1991), Ortea *et al.* (1996, 2001), Moro *et al.* (2003).  
 11: Wirtz (1995b, 1999), Ortea *et al.* (1996), Wirtz and Debelius (2003).  
 12: Ortea *et al.* (1996), Wirtz (1998), Morton *et al.* (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Polycera dubia* Sars, 1829**

- 2: Fernández-Ovies (1979), Ortea and Urgorri (1981a), Urgorri and Besteiro (1983), Rolán (1983). All references as *Palio dubia*.  
 8: Vilella (1994, as *Palio espagnoli* n. sp.).

***Polycera elegans* Bergh, 1894**

- 1: Ortea (1977c), Fernández-Ovies (1981). Both records as *Greilada elegans*.  
 3: Calado *et al.* (1999).  
 5: García-Gómez *et al.* (1989), Wirtz and Debelius (2003).  
 8: Ballesteros (unpubl. data).  
 9: Wirtz and Debelius (2003).  
 10: Ortea *et al.* (1996, 2001), Moro *et al.* (2003).  
 12: Wirtz and Martins (1993), Wirtz (1998), Ortea *et al.* (1996), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Polycera faeroensis* Lemche, 1929**

- 1: Martínez *et al.* (1990).  
 2: Ortea and Urgorri (1981a), Urgorri and Besteiro (1983, 1984).  
 3: Calado *et al.* (1999, 2003), Wirtz and Debelius (2003).  
 5: García-Gómez (1983), García-Gómez *et al.* (1989), Megina and Cervera (2003).  
 6: Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

***Polycera hedgpethi* Marcus, 1964**

- 1: Caballer and Ortea (2002).

***Polycera aurantiomarginata* García-Gómez and Bobo, 1984<sup>(72)</sup>**

- 3: Gavaia *et al.* (2004).  
 4: García-Gómez and Bobo (1984), Cervera and García-Gómez (1986), Templado *et al.* (1993a), Megina and Cervera (2003).  
 6: Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

Genus *Thecacera* Fleming, 1828

***Thecacera pennigera* (Montagu, 1815)**

- 1: Hidalgo (1916), Ros (1975), Fernández-Ovies (1981).  
 3: Gavaia *et al.* (2004).  
 4: Cervera and García-Gómez (1986), Megina and Cervera (2003).  
 10: Ortea *et al.* (1996, 2001), Malaquias and Calado (1997), Moro *et al.* (2003).  
 11: Wirtz (1995a,b, 1999), Ortea *et al.* (1996), Wirtz and Debelius (2003).

Genus *Plocamopherus* Leuckart, 1828

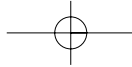
***Plocamopherus maderae* (Lowe, 1842)**

- 10: Malaquias and Calado (1997), Malaquias (2000), Ortea *et al.* (1996, 2001, 2003), Moro *et al.* (2003), Wirtz and Debelius (2003).  
 11: Lowe (1842), Watson (1897), Eliot (1906), Noble (1937), Nordsieck (1972), Ortea and Pérez (1992), Wirtz (1995b, 1999), Ortea *et al.* (1996), Malaquias *et al.* (2001), Wirtz and Debelius (2003).

Genus *Crimora* Alder and Hancock, 1862

***Crimora papillata* Alder and Hancock, 1862**

- 1: Ros (1975).  
 2: Urgorri and Besteiro (1983).  
 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).  
 4: Cervera (unpubl. data).  
 5: García-Gómez (1983), García-Gómez *et al.* (1989).  
 6: Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).  
 7: Templado, Talavera and Murillo (1987).  
 8: Ballesteros (1985), Wirtz and Debelius (2003).  
 10: Ortea *et al.* (1996, 2001), Moro *et al.* (2003), Wirtz and Debelius (2003).



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Genus *Roboastra* Bergh, 1877

***Roboastra europaea* García-Gómez, 1985**

- 3: García-Gómez *et al.* (1991), Pola, Cervera and Gosliner (2003, in press), Wirtz and Debelius (2003), Calado *et al.* (2003).
- 4: Megina and Cervera (2003).
- 5: García-Gómez (1985), Megina and Cervera (2003).
- 6: Moreno and Templado (1998), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Pola, Cervera and Gosliner (2003, in press), Wirtz and Debelius (2003).
- 8: Pola, Cervera and Gosliner (in press).
- 11: Pola, Cervera and Gosliner (in press).

Genus *Polycerella* Verrill, 1880

***Polycerella emertoni* Verrill, 1880**

- 3: García-Gómez *et al.* (1991).
- 4: García-Gómez and Bobo (1986), Cervera (1988), Megina and Cervera (2003).

Genus *Kaloplocamus* Bergh, 1880 <sup>(73)</sup>

***Kaloplocamus ramosus* (Cantraine, 1835)**

- 5: García Gómez (2002).
- 6: Templado *et al.* (1993b), Peñas *et al.* (in press).
- 7: Templado, Talavera and Murillo (1987), Templado *et al.* (2002).
- 8: Ros (1975).
- 9: Ballesteros and Templado (1996).
- 10: Odhner (1931), Ortea, Moro and Caballer (2001), Ortea *et al.* (1996, as *K. aureus*, 2001, 2003), Moro *et al.* (2003).
- 11: Malaquias (unpubl. data).
- 12: Wirtz (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Kaloplocamus atlanticus* (Bergh, 1892)**

- 10: Malaquias and Calado (1997), Malaquias (2000).
- 12: Bergh (1892, 1899, both as *Euplocamus atlanticus*), Nordsieck (1972, as *Kaloplocamus ramosus*), Malaquias (2001).

Genus *Tambja* Burn, 1962

***Tambja ceutae* García-Gómez and Ortea, 1988**

- 5: García-Gómez and Ortea (1988), García-Gómez *et al.* (1989), Megina and Cervera (2003), Wirtz and Debelius (2003), Ocaña, Sánchez-Tocino and García (2004).

- 6: Templado and Moreno (1998), Schick (1998), Sánchez Tocino, Ocaña and García (2000a,b), Ocaña *et al.* (2000), Ocaña, Sánchez-Tocino and García (2004).
- 10: Ortea *et al.* (1996, 2001), Caballer, Moro and Ortea (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).
- 11: Malaquias *et al.* (2001).
- 12: Wirtz and Martins (1993), Ortea *et al.* (1996), Wirtz (1995b, as *Tambja ceutae* and also as *Roboastra europaea*), Wirtz (1998 as *Tambja ceutae* and as *Tambja* sp.), Ávila *et al.* (1998), Ávila (2000, as *Tambja ceutae* and *Tambja* sp.), Malaquias (2001), Wirtz and Debelius (2003).

***Tambja marbellensis* Schick and Cervera, 1998**

- 3: Malaquias and Morenito (2000).
- 5: Sánchez-Santos (unpubl. data).
- 6: Schick and Cervera (1998), Sánchez Tocino, Ocaña and García (2000a,b), Ocaña *et al.* (2000), Ocaña, Sánchez-Tocino and García (2004).

**Family Aegiridae Fischer, 1883 <sup>(74)</sup>**

Genus *Aegires* Lovén, 1844

***Aegires punctilucens* (D'Orbigny, 1837) <sup>(75)</sup>**

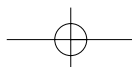
- 1: Ortea (1977c), Templado, Luque and Ortea (1987).
- 2: Urgorri and Besteiro (1983, 1984).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 5: García-Gómez *et al.* (1989).
- 6: Templado, Luque and Ortea (1987).
- 7: Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Templado, Luque and Ortea (1987), Marín and Ros (1987).
- 8: Ballesteros (unpubl. data).

***Aegires leuckarti* Vérany, 1853 <sup>(75)</sup>**

- 5: García-Gómez *et al.* (1989).
- 6: Ballesteros *et al.* (1986, as *A. punctilucens*), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).
- 7: Templado (1982b, 1983, 1984, all as *A. punctilucens*), Marín and Ros (1987, as *A. punctilucens*), Templado, Luque and Ortea (1987, as *A. punctilucens leuckarti*), Templado, Talavera and Murillo (1987, as *A. punctilucens leuckarti*).
- 8: Ballesteros (unpubl. data).
- 9: Ballesteros, Álvarez and Mateo (1986, as *A. punctilucens leuckarti*).

***Aegires sublaevis* Odhner, 1931**

- 7: Templado, Talavera and Murillo (1987).



- 10: Odhner (1931), Altimira and Ros (1979, as *Serigea sublaevis*), Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez, Bacallado and Ortea (1991), Ortea et al. (1996, 2001, 2003), Malaquias and Calado (1997).  
 11: Malaquias et al. (2001).  
 12: Calado (2002), Fahey and Gosliner (2004).

***Aegires palensis* Ortea, Luque and Templado, 1990** <sup>(76)</sup>

- 6: Moreno and Templado (1998), Fahey and Gosliner (2004).  
 7: Ortea, Bacallado and Pérez Sánchez (1990), Templado et al. (1993a).

**“CRYPTOBRANCHIA” Fischer, 1883**

LABIOSTOMATA Valdés, 2002 <sup>(77)</sup>

**Family Chromodorididae Bergh, 1891**

Genus *Glossodoris* Ehrenbergh, 1831

***Glossodoris edmundsi* Cervera, García-Gómez and Ortea, 1989** <sup>(78)</sup>

- 10: Odhner (1931), Altimira and Ros (1979), Pérez Sánchez, Ortea and Bacallado (1991, as *Chromodoris punctilucens*), Cervera, García-Gómez and Ortea (1989), Templado et al. (1993a), Ortea, Valdés and García-Gómez (1996), Ortea et al. (2001), Moro et al. (2003), Wirtz and Debelius (2003).  
 11: Wirtz (1995a,b, 1999), Ortea, Valdés and García-Gómez (1996), Wirtz and Debelius (2003).  
 12: Gosliner (1990), Wirtz (1995b, 1998), Ávila et al. (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

Genus *Hypselodoris* Stimpson, 1855 <sup>(79)</sup>

***Hypselodoris villafranca* (Risso, 1818)** <sup>(80)</sup>

- 1: Hidalgo (1916), Ros (1975, as *Glossodoris gracilis*), Ávila et al. (1991), Ávila Escartún (1993), Fontana et al. (1993), Ortea, Valdés and García-Gómez (1996).  
 2: Ortea (1977c, as *G. gracilis*), Urgorri and Besteiro (1983, as *Hypselodoris gracilis*), Otero and Trigo (1987, as *H. gracilis*), Ortea, Valdés and García-Gómez (1996).  
 3: De Oliveira (1895, as *Chromodoris villafranca* and *C. gracilis*), Nobre (1932, as *Chromodoris*), Saldanha (1974, as *Glossodoris gracilis*), García-Gómez et al. (1991), Calado et al. (1999, 2003), Macedo, Macedo and Borges (1999), Muzavor and Morenito (1999), Malaquias and Morenito (2000), Wirtz and Debelius (2003).  
 4: Cervera and García-Gómez (1986), García-Gómez, Medina and Coveñas (1991), Ortea, Valdés and García-Gómez (1996).

- 5: García-Gómez (1982, as *G. gracilis*), García-Gómez et al. (1989), García-Gómez, Medina and Coveñas (1991), Ortea, Valdés and García-Gómez (1996).  
 6: Luque (1983, 1986, both as *H. gracilis*), Salas and Luque (1986, as *G. gracilis*), Ortea, Valdés and García-Gómez (1996), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000), Peñas et al. (in press).  
 7: Fez (1974, as *G. gracilis*), Templado (1982b, 1983, 1984, all as *H. gracilis*), Ballesteros et al. (1986, as *H. gracilis*), Marín and Ros (1987), Templado et al. (2002).  
 8: Ros (1975, 1978b, 1985a, all as *G. gracilis*), Ros and Altimira (1977, as *G. gracilis*), Pereira (1980, as *G. gracilis*), Altimira, Huelin and Ros (1981, as *G. gracilis*), Huelin and Ros (1984, as *H. gracilis*), Ballesteros (1985, as *H. gracilis*), Ortea, Valdés and García-Gómez (1996).  
 9: Ros (1981b, as *G. gracilis*), Ballesteros (1981a, as *G. gracilis*), Dekker (1986).

***Hypselodoris picta* (Schultz, 1836)** <sup>(81)</sup>

- 1: Ros (1975, 1978b), Ortea (1977c), Ávila Escartún (1993), Fontana et al. (1993).  
 2: Urgorri and Besteiro (1983).  
 3: Calado et al. (1999)  
 4: Templado et al. (1993b), García-Gómez, Cimino and Medina (1990), García-Gómez, Medina and Coveñas (1991), Ortea, Valdés and García-Gómez (1996), Gosliner and Johnson (1999).  
 6: Ros (1975), Luque (1983, 1986), Salas and Luque (1986), Ballesteros et al. (1986), Ortea, Valdés and García-Gómez (1996), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000), Peñas et al. (in press).  
 7: De Fez (1974, as *Chromodoris villafranca*), Templado (1982b, 1983, 1984), Ortea and Templado (1984), Ballesteros (1985), Ramos (1985), Ballesteros et al. (1986), Marín and Ros (1987, as *Hypselodoris elegans*), Ortea, Valdés and García-Gómez (1996), Aguado-Giménez (2000), Templado et al. (2002).  
 8: Ros (1975, 1978b, 1985a,b), Ros and Altimira (1977), Pereira (1980), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ballesteros (1985), Ávila et al. (1991, as *H. webbi*), Ortea, Valdés and García-Gómez (1996).  
 9: Ballesteros (1981a), Ros (1981b), Ros and Gili (1985), Ballesteros, Álvarez and Mateo (1986), Altaba (1993, as *H. elegans*), Wirtz and Debelius (2003).  
 10: Odhner (1931), Pruvot-Fol (1954), Nordsieck (1972), Altimira and Ros (1979), Ortea and

- Templado (1984), Pérez-Sánchez and Moreno (1990), Pérez Sánchez, Bacallado and Ortea (1991), Ortea, Valdés and García-Gómez (1996), Malaquias and Calado (1997, as *H. picta webbi*), Malaquias (2000, as *H. picta webbi*), Ortea et al. (2001, as *H. picta webbi*), Moro et al. (2003), Wirtz and Debelius (2003).
- 11: Wirtz (1994, as *H. webbi*), Ortea, Valdés and García-Gómez (1996), Malaquias et al. (2001).
- 12: Bergh (1899, as *Chromodoris cantrainaei*), Gosliner (1990), Wirtz (1994, 1998, as *H. picta azorica*), Ortea, Valdés and García-Gómez (1996, as *H. picta azorica*), Ávila et al. (1998), Gosliner and Johnson (1999), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

Most of the records before 1996 refer to *Glossodoris valenciennesi*, *Hypselodoris valenciennesi* or *H. webbi*. After that year, many of the records refer to *H. picta webbi*.

***Hypselodoris orsinii* (Verany, 1846) <sup>(82)</sup>**

- 1: Ros (1975, 1978b, as *Glossodoris tricolor*), Ávila Escartún (1993).
- 5: García-Gómez (1983, as *H. coelestis*), García-Gómez et al. (1989, as *H. coelestis*), García-Gómez, Medina and Coveñas (1991, as *H. coelestis*), Ortea, Valdés and García-Gómez (1996), Gosliner and Johnson (1999).
- 6: Ortea, Valdés and García-Gómez (1996), Ocaña et al. (2000), Peñas et al. (in press).
- 7: Templado, Talavera and Murillo (1983, as *H. coelestis*), Templado et al. (2002), Ballesteros (1985, as *H. coelestis*), Ballesteros et al. (1986, as *H. coelestis*).
- 8: Ballesteros (1985, as *H. coelestis*), Ortea, Valdés and García-Gómez (1996).
- 9: Ballesteros, Álvarez and Mateo (1986, as *H. coelestis*), Gosliner and Johnson (1999), Wirtz and Debelius (2003).

***Hypselodoris fontandraui* (Pruvot-Fol, 1951) <sup>(83)</sup>**

- 1: Ortea (1977c, *Glossodoris*), Ávila Escartún (1993), Ortea, Valdés and García-Gómez (1996).
- 3: Calado et al. (2003).
- 5: García-Gómez (1983, as *H. messinensis*), García-Gómez, Medina and Coveñas (1991, as *H. cf. messinensis*), Ortea, Valdés and García-Gómez (1996), Gosliner and Johnson (1999).
- 6: Luque (1983, 1986, both as *H. messinensis*), Ortea, Valdés and García-Gómez (1996), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000).
- 7: Templado (1982b, 1983, 1984, all as *H. messinensis*).
- 8: Vicente (1964), Ros (1975, 1978), Ros and Altimira (1977), Altimira, Huelin and Ros

(1981), Huelin and Ros (1984). All records but the last one, as *Glossodoris*.

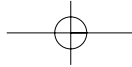
- 9: Ros (1981b, as *H. messinensis*, 1985b), Ros and Gili (1985).
- 10: Wirtz and Debelius (2003).
- 12: Wirtz (1995b, 1998), Ávila et al. (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Hypselodoris bilineata* (Pruvot-Fol, 1953)**

- 3: García-Gómez et al. (1991), Ortea, Valdés and García-Gómez (1996), Calado et al. (1999, 2003), Wirtz and Debelius (2003).
- 4: Cervera and García-Gómez (1986), García-Gómez, Medina and Coveñas (1991), Ortea, Valdés and García-Gómez (1996).
- 5: García-Gómez (1983), García-Gómez et al. (1989), García-Gómez, Medina and Coveñas (1991), Ortea, Valdés and García-Gómez (1996), Gosliner and Johnson (1999).
- 6: Luque (1983, 1986), Ávila Escartún (1993), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000), Peñas et al. (in press).
- 7: Ortea, Valdés and García-Gómez (1996), Templado et al. (2002).
- 8: Ávila Escartún (1993).
- 9: Ballesteros and Templado (1996).
- 10: Ortea, Valdés and García-Gómez (1996), Ortea et al. (2001, 2003), all as *H. bilineata viridis*, Malaquias and Calado (1997, as *H. bilineata bilineata*), Moro et al. (2003).
- 11: ?Ledoyer (1967, as *Glossodoris gracilis*), Ortea, Valdés and García-Gómez (1996), Wirtz (1999), Malaquias et al. (2001), Wirtz and Debelius (2003).

***Hypselodoris cantabrica* Bouchet and Ortea, 1980**

- 1: Bouchet and Ortea (1980), Ávila Escartún (1993), Fontana et al. (1993), Ortea, Valdés and García-Gómez (1996).
- 2: Bouchet and Ortea (1980).
- 3: García-Gómez et al. (1991), Calado et al. (1999, 2005), Malaquias and Morenito (2000), Wirtz and Debelius (2003).
- 4: García Gómez, Medina and Coveñas (1991), Ortea, Valdés and García-Gómez (1996).
- 5: García-Gómez (1983), García-Gómez et al. (1989), García-Gómez, Cimino and Medina (1990), Ortea, Valdés and García Gómez (1996), Gosliner and Johnson (1999).
- 6: Luque (1983, 1986), Ortea, Valdés and García Gómez (1996), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña et al. (2000).



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***Hypselodoris malacitana* Luque, 1986**

- 5: Sánchez-Santos (pers. comm.).  
6: Luque (1986), Ortea, Valdés and García-Gómez (1996), Ocaña *et al.* (2000), Peñas *et al.* (in press).

***Hypselodoris tricolor* (Cantraine, 1835) / *Hypselodoris midatlantica* Gosliner, 1990<sup>(84)</sup>**

- 1: Ávila Escartín (1993).  
2: Ortea (1977c, as *Glossodoris tricolor*), Ortea, Valdés and García-Gómez (1996).  
3: Calado *et al.* (1999, 2005), Muzavor and Morenito (1999), Malaquias and Morenito (2000).  
4: García Gómez, Medina and Coveñas (1991).  
5: García-Gómez (1983), García-Gómez *et al.* (1989), García Gómez, Medina and Coveñas (1991), Ortea, Valdés and García-Gómez (1996), Gosliner and Johnson (1999).  
6: Luque (1983, 1986), Salas and Luque (1986), Schick (1998), Ocaña *et al.* (2000), Peñas *et al.* (in press).  
7: Ortea, Valdés and García-Gómez (1996), Marín and Ros (1987), Templado *et al.* (2002).  
8: Ballesteros *et al.* (1986), Ortea, Valdés and García-Gómez (1996).  
9: Vicente (1964), Ros (1975, 1978b), Ros and Altimira (1977), Pereira (1980), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ballesteros (1985), Ballesteros and Templado (1996).  
10: Ballesteros (1981a), Ortea, Valdés and García-Gómez (1996), Ortea *et al.* (2001, 2003), Malaquias and Calado (1997), Moro *et al.* (2003).  
11: Ortea, Valdés and García-Gómez (1996), Wirtz (1999).  
12: Gosliner (1990), Ortea, Valdés and García-Gómez (1996), Wirtz (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

Genus *Chromodoris* Alder and Hancock, 1855***Chromodoris luteorosea* (Rapp, 1827)<sup>(85)</sup>**

- 1: Ros (1975), Ortea and Valdés (1991), Wirtz and Debelius (2003).  
2: Ortea (1977c, as *Glossodoris*).  
3: Calado *et al.* (1999, 2003), Wirtz and Debelius (2003).  
4: Cervera and García-Gómez (1986), García-Gómez *et al.* (1989).  
5: García-Gómez (1983), García-Gómez *et al.* (1989), García-Gómez, Medina and Coveñas (1991).

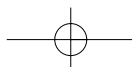
- 6: Templado *et al.* (1993b), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).  
7: Templado (1982b, 1983, 1984), Templado *et al.* (2002).  
8: Vicente (1964), Ros (1975, 1978b), Ros and Altimira (1977), Pereira (1980), Altimira, Huelin and Ros (1981) (all these records as *Glossodoris*), Huelin and Ros (1984), Ballesteros (1985).  
10: Pérez Sánchez and Moreno (1990), Ortea *et al.* (2001), Moro *et al.* (2003).

***Chromodoris purpurea* (Laurillard, 1831)<sup>(85)</sup>**

- 1: Ortea (1977c, as *Glossodoris*), Ortea and Peréz (1983), Ávila Escartín (1993).  
2: Ortea (1977c), Urgori and Besteiro (1983), Otero and Trigo (1987).  
3: De Oliveira (1895, as *C. albescens*), Nobre (1932, as *C. albescens*), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2005), Muzavor and Morenito (1999), Malaquias and Morenito (2000).  
4: Cervera and García-Gómez (1986).  
5: García-Gómez (1983), García-Gómez *et al.* (1989), García Gómez, Medina and Coveñas (1991).  
6: Luque (1983, 1986), Salas and Luque (1986), Templado, Luque and Moreno (1988), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).  
7: Templado (1982b, 1983, 1984), Ballesteros (1985), Ballesteros *et al.* (1986), Marín and Ros (1987), Templado *et al.* (2002).  
8: Altimira, Huelin and Ros (1981, as *Glossodoris*), Huelin and Ros (1984), Ballesteros (1985).  
9: Ros (1975, as *Glossodoris*, 1985b), Ros and Gili (1985), Dekker (1986).  
10: Pérez-Sánchez and Moreno (1990), Peréz-Sánchez *et al.* (1991), Malaquias (2000), Ortea *et al.* (2001, 2003).  
11: Wirtz (1994, 1999), Malaquias *et al.* (2001).  
12: Gosliner (1990), Wirtz (1994, 1995a, 1998), Morton *et al.* (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Chromodoris krohni* (Vérany, 1846)<sup>(85)</sup>**

- 1: Ros (1975, as *Glossodoris*), Ávila Escartín (1993).  
2: Ortea (1977c, as *Glossodoris*), Fernández-Ovies (1981, as *Glossodoris*), Urgori and Besteiro (1983).



- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003), Malaquias and Morenito (2000), Wirtz and Debelius (2003).
- 4: Cervera and García-Gómez (1986).
- 5: García-Gómez (1982), García-Gómez *et al.* (1989), García Gómez, Medina and Coveñas (1991).
- 6: Hergueta (1985), Luque (1986), Salas and Hergueta (1986), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).
- 7: Templado (1982b), Ballesteros *et al.* (1986), Marín and Ros (1987), Templado *et al.* (2002).
- 8: Ros (1975, 1978b, both as *Glossodoris*), Ros and Altimira (1977, as *Glossodoris*), Ballesteros (1985).
- 9: Ballesteros, Álvarez and Mateo (1986), Dekker (1986).
- 10: Ortea *et al.* (2001), Moro *et al.* (2003).
- 12: Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Chromodoris luteopunctata* (Gantès, 1962)<sup>(86)</sup>**

- 3: Malaquias and Morenito (2000).
- 4: Cervera, García-Gómez and Ortea (1989), García Gómez, Medina and Coveñas (1991).
- 5: García-Gómez *et al.* (1989).
- 6: Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Wirtz and Debelius (2003).
- 10: Ortea and Valdés (1991), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).  
All these records as *C. rodomaculata*.

***Chromodoris britoi* Ortea and Pérez, 1983<sup>(87)</sup>**

- 1: Ávila Escartín (1993).
- 5: García-Gómez (1987), García Gómez, Medina and Coveñas (1991).
- 6: Luque (1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).
- 7: Templado, Talavera and Murillo (1983), Templado *et al.* (2002), Ballesteros *et al.* (1986).
- 8: Cervera *et al.* (1988).
- 10: Ortea and Pérez (1983), Pérez Sánchez, Bacallado and Ortea (1991), Malaquias and Calado (1997), Malaquias (2000), Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: Ortea, Valdés and Espinosa (1994), Wirtz (1994, 1999).
- 12: Gosliner (1990, as *C. clenchi*), Ortea, Valdés and Espinosa (1994), Wirtz (1994, 1995a, 1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Chromodoris goslineri* Ortea and Valdés in Ortea, Valdés and García-Gómez, 1996**

- 12: Ortea, Valdés and García-Gómez (1996), Villena *et al.* (1997), Malaquias (2001).

Genus *Cadlina* Bergh, 1878<sup>(88)</sup>***Cadlina laevis* (Linnaeus, 1767)**

- 2: Ortea and Urgorri (1981a).
- 5: García-Gómez (1982).
- 7: Templado (1982b, 1983, 1984).
- 8: Ros (1975, 1978b, 1985a), Ros and Altimira (1977), Altimira, Huelin and Ros (1981), Vilella (1994, as *C. boscai* n. sp.).
- 9: Ballesteros and Templado (1996).

***Cadlina pellucida* (Risso, 1826)**

- 1: Ortea (1977c), Fernández-Ovies (1981).
- 2: Ortea (1977c).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 5: García-Gómez *et al.* (1989).
- 6: Moreno and Templado (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).
- 7: Templado (1982b, 1983, 1984).
- 9: Ballesteros and Templado (1996).
- 10: Ortea *et al.* (2001), Moro *et al.* (2003).

**Family Dorididae Rafinesque, 1815<sup>(89)</sup>**Genus *Doris* Linnaeus, 1758***Doris verrucosa* Linnaeus, 1758**

- 1: Nordsieck (1972), Ortea (1977c), Fernández-Ovies (1981), Ávila Escartín (1993).
- 2: Urgorri and Besteiro (1983, 1984), Rolán (1983), Trigo and Otero (1987).
- 3: De Oliveira (1895, as *Staurodoris*), Hidalgo (1916, as *Staurodoris*), Nobre (1932, as *Staurodoris*), Saldanha (1974), García-Gómez *et al.* (1991).
- 4: Megina (unpubl. data).
- 5: García-Gómez (1982, 2002).
- 6: Luque (1983, 1986), Hergueta and Salas (1987).
- 7: Fez (1974, as *Archidoris*).
- 8: Ros (1975, 1985a, b), Ros and Altimira (1977), Ballesteros (1978, 1985), Altimira, Huelin and Ros (1981), Huelin and Ros (1984).
- 9: Ros (1985b).

- 10: Ortea, Pérez Sánchez and Llera (1982), Pérez Sánchez and Moreno (1990), Pérez Sánchez, Bacallado and Ortea (1991), Ortea *et al.* (2001), Moro *et al.* (2003).

***Doris pseudoargus* Rapp, 1827<sup>(90)</sup>**

- 1: Ortea (1977c, as *Archidoris tuberculata*), Ávila Escartín (1993, as *A. tuberculata*).  
 2: Ortea (1977c, as *A. pseudoargus*), Urgorri and Besteiro (1983, 1984, both as *A. pseudoargus*), Rolán (1983, as *A. pseudoragus*), Valdés (2002a).  
 3: De Oliveira (1895, as *A. tuberculata*), Nobre (1932, as *A. tuberculata*), Calado *et al.* (1999, as *A. pseudoargus*, 2003).  
 5: García-Gómez (1983, as *A. tuberculata*, 2002, as *A. pseudoargus*), Rueda, Salas and Gofas (2000, as *A. pseudoargus*).  
 6: Luque (1983, 1986), Templado *et al.* (1993b) (all these records as *A. tuberculata*).  
 8: Ros (1975, as *A. tuberculata*), Ballesteros (1985, as *A. tuberculata*).  
 9: Altaba (1993, as *A. tuberculata*).

***Doris bertheloti* (D'Orbigny, 1839)**

- 10: D'Orbigny (1839, as *Doridigitata*), Ortea and Bacallado (1981), Ortea, Pérez Sánchez and Llera (1982), Pérez Sánchez, Bacallado and Ortea (1991), Ortea *et al.* (2001), Moro *et al.* (2003).  
 11: Wirtz (1999).

***Doris ocelligera* (Bergh, 1881)**

- 1: Ortea (1977c), Fernández-Ovies (1981).  
 2: Urgorri and Besteiro (1983, 1984), Rolán (1983).  
 3: García-Gómez *et al.* (1991), Calado *et al.* (1999).  
 5: García-Gómez *et al.* (1989).  
 6: Ballesteros *et al.* (1986).  
 7: Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Marín and Ros (1987a), Templado, Luque and Moreno (1988).  
 9: Templado (1982a).  
 12: Azevedo and Gofas (1990), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

***Doris sticta* (Iredale and O'Donoghue, 1923)<sup>(91)</sup>**

- 1: Cervera *et al.* (1988, as *D. maculata*).  
 3: Gavaia *et al.* (2004), Calado *et al.* (2003, as *D. cf. sticta*).  
 5: García-Gómez (1987, as *D. maculata*).  
 8: Ballesteros (1985, as *D. maculata*).  
 11: Malaquias (unpubl. data).

***Doris ? alboranica* Bouchet, 1977**

- 6: Bouchet (1977).

Genus *Aldisa* Bergh, 1878

***Aldisa zetlandica* (Alder and Hancock, 1854)**

- 3: Nobre (1896).  
 12: Bergh (1899), Nodsieck (1972), Picton and Morrow (1994), Malaquias (2001).

***Aldisa berghi* Vayssière, 1901**

- 1: Hidalgo (1916).

***Aldisa banyulensis* Pruvot-Fol, 1951<sup>(92)</sup>**

- 5: García-Gómez (1982), García *et al.* (1986), García-Gómez *et al.* (1989).  
 6: Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: Templado (1982b, 1983, 1984).  
 8: Ballesteros (1985).  
 9: Ballesteros and Templado (1996).

***Aldisa smaragdina* Ortea, Pérez and Llera, 1982<sup>(92)</sup>**

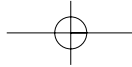
- 2: Ortea (1978a, as *A. banyulensis*).  
 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, as *A. binotata*), Calado *et al.* (2003).  
 5: García-Gómez (1983), García-Gómez *et al.* (1989).  
 6: Luque (1983, 1986), Templado *et al.* (1993b), Ocaña *et al.* (2000), Gavagnin *et al.* (2002).  
 7: Templado, Talavera and Murillo (1983), Ballesteros *et al.* (1986), Gavagnin *et al.* (2002).  
 9: Ballesteros and Templado (1996).  
 10: Ortea, Pérez Sánchez and Llera (1982), Pérez Sánchez and Moreno (1990), Pérez Sánchez, Bacallado and Ortea (1991), Malaquias and Calado (1997), Ortea *et al.* (2001, 2003), Moro *et al.* (2003), Wirtz and Debelius (2003).  
 11: Wirtz (1999), Malaquias *et al.* (2001).  
 12: Wirtz (1998), Ávila *et al.* (1998), Ávila (2000, as *A. binotata*), Malaquias (2001), Wirtz and Debelius (2003).

***Aldisa expleta* Ortea, Pérez and Llera, 1982<sup>(92)</sup>**

- 10: Ortea, Pérez Sánchez and Llera (1982), Ortea *et al.* (2001), Moro *et al.* (2003).

**Family Discodorididae Bergh, 1891<sup>(89)</sup>**

Genus *Jorunna* Bergh, 1876



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***Jorunna tomentosa* (Cuvier, 1804)**

- 1: Ortea (1977c).
- 2: Ortea (1977c), Urgorri and Besteiro (1983, 1984), Rolán (1983), Valdés and Gosliner (2001).
- 3: De Oliveira (1895, as *J. johnstoni*), Hidalgo (1916, as *J. johnstoni*), Nobre (1932, as *J. johnstoni*), García-Gómez *et al.* (1991), Machado and Fonseca (1997, as *J. johnstoni*), Calado *et al.* (1999, 2003), Malaquias and Morenito (2000).
- 4: Camacho and Gosliner (pers. comm.).
- 5: García-Gómez (1983).
- 6: Ocaña *et al.* (2000), Peñas *et al.* (in press).
- 7: Fez (1974), Marín and Ros (1987).
- 8: Ros (1975), Ballesteros (1984a, 1985).
- 10: Ortea *et al.* (2001), Moro *et al.* (2003).
- 12: Morton *et al.* (1998), Malaquias (2001).

***Jorunna onubensis* Cervera, García-Gómez and García, 1986**

- 3: Malaquias and Morenito (2000).
- 4: Cervera, García-Gómez and García (1986), Cervera (unpubl. data).
- 6: Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Wirtz and Debelius (2003).
- 10: Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).
- 11: Wirtz (1999).

Genus *Discodoris* Bergh, 1877***Discodoris maculosa* Bergh, 1884<sup>(93)</sup>**

- 1: Ortea (1977c).
- 5: Sánchez Santos (pers. comm.).
- 6: Sánchez Tocino, Ocaña and García (2000, as *D. fragilis*), Peñas *et al.* (in press).
- 7: Ballesteros, Llera and Ortea (1985, 1986), Marín and Ros (1987).
- 8: Ballesteros, Llera and Ortea (1985).

***Discodoris stellifera* (Vayssière, 1904)<sup>(94)</sup>**

- 1: Ávila Escartín (1993).
- 3: Calado *et al.* (1999).
- 5: García-Gómez (1983, as *D. planata*).
- 8: Ros (1975, as *Anisodoris*), Ballesteros (1985, as *D. planata*).

***Discodoris tristis* Bergh, 1892**

- 12: Bergh (1892), Malaquias (2001).

***Discodoris edwardsi* Vayssière, 1902**

- 3: Nordsieck (1972).

***Discodoris rubens* Vayssière, 1919**

- 8: Ballesteros (1985).

***Discodoris ? rosi* Ortea, 1979<sup>(95)</sup>**

- 1: Ortea (1979a), Ávila Escartín (1993).
- 2: Ortea (1979a), Ortea and Urgorri (1979c), Urgorri and Besteiro (1983), Rolán (1983).
- 3: García-Gómez *et al.* (1991), Malaquias and Morenito (2000), Calado *et al.* (1999, 2003).
- 5: García-Gómez (1983), García-Gómez *et al.* (1989).
- 6: Luque (1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).
- 8: Cervera *et al.* (1988).

***Discodoris confusa* Ballesteros, Llera and Ortea, 1985<sup>(93)</sup>**

- 10: Ortea, Pérez Sánchez and Bacallado (1981, as *D. fragilis*), Ballesteros, Llera and Ortea (1985), Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: Wirtz (1995b, as *D. fragilis*, 1999), Malaquias *et al.* (2001), Wirtz and Debelius (2003).

Genus *Thordisa* Bergh, 1877***Thordisa filix* Pruvot-Fol, 1951**

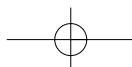
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999).
- 7: Templado, Luque and Moreno (1988).
- 8: Cervera *et al.* (1988).

***Thordisa azmanii* Cervera and García-Gómez, 1989<sup>(96)</sup>**

- 1: Ortea and Martínez (1990, as *T. diuda*).
- 3: García-Gómez *et al.* (1991), Calado and Urgorri (1999), Calado *et al.* (1999).
- 4: Cervera and García-Gómez (1989b), Templado *et al.* (1993a).

Genus *Platydoris* Bergh, 1877***Platydoris argo* (Linnaeus, 1767)**

- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932), García-Gómez *et al.* (1991), Calado *et al.* (1999).
- 4: Templado *et al.* (1993b).
- 5: Ros (1975), García-Gómez (1983), García, García-Gómez and Cervera (1988), García, García-Gómez and Medel-Soteras (1988).



- García and García-Gómez (1989, 1990b), García-Gómez *et al.* (1989), Megina (2000), Megina *et al.* (2002).
- 6: Luque (1983, 1986), Ballesteros *et al.* (1986), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Valdés and Ortea (2001), Peñas *et al.* (in press).
- 7: Templado (1982b), Ballesteros (1985), Ballesteros *et al.* (1986), Marín and Ros (1987), Dorgan, Valdés and Gosliner (2002), Templado *et al.* (2002).
- 8: Ros (1975, 1985b), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ballesteros (1985), Ávila Escartín (1993).
- 9: Ros (1981b, 1985b), Templado (1982a), Ros and Gili (1985).
- 10: D'Orbigny (1839, as *Doris canariensis*), Bergh (1877, 1892), Odhner (1931, as *Argus argo*), Nordsieck (1972), Altimira and Ros (1979, as *P. cf. argo cf. canariensis*), Ortea and Bacallado (1981), Ortea, Pérez Sánchez and Llera (1982), Pérez-Sánchez and Moreno (1990), Pérez Sánchez, Bacallado and Ortea (1991), Malaquias and Calado (1997), Ortea *et al.* (2001), Valdés and Gosliner (2001), Dorgan, Valdés and Gosliner (2002), Moro *et al.* (2003), Wirtz and Debelius (2003).
- 11: Wirtz (1994, 1999), Valdés and Gosliner (2001), Malaquias *et al.* (2001), Dorgan, Valdés and Gosliner (2002).
- 12: Bergh (1899), Wirtz and Martins (1993), Wirtz (1994, 1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Platydoris stomascuta* Bouchet, 1977** <sup>(97)</sup>

- 12: Bouchet (1977), Malaquias (2001).

Genus *Rostanga* Bergh, 1879***Rostanga rubra* (Risso, 1818)** <sup>(98)</sup>

- 1: Hidalgo (1916).
- 2: Vayssière (1913), Ortea (1977c), Fernández-Ovies (1981), Urgorri and Besteiro (1983, 1984), Rolán (1983), Valdés and Gosliner (2001).
- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 4: Cervera (1988).
- 5: García-Gómez (1982, 1986b, 2002).
- 6: Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).
- 7: Templado (1982b, 1983, 1984).

- 8: Ros (1975).
- 10: Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).
- 11: Wirtz (1999).

Genus *Peltodoris* Bergh, 1880 <sup>(99)</sup>***Peltodoris punctifera* (Abraham, 1877)**

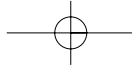
- 10: D'Orbigny (1839, as *Doris punctata*), Ortea and Bacallado (1981), Ballesteros, Llera and Ortea (1985), Pérez Sánchez, Bacallado and Ortea (1991), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).
- 11: Wirtz (1999, as *Discodoris*).

***Peltodoris atromaculata* Bergh, 1880**

- 1: Ros (1975).
- 3: Gavaia *et al.* (2004).
- 5: García-Gómez (1983), García-Gómez *et al.* (1989).
- 6: Luque (1986), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).
- 7: Templado (1982b), Ballesteros (1985), Ballesteros *et al.* (1986), Marín and Ros (1987), Ávila Escartín (1993), Valdés (2002a), Templado *et al.* (2002).
- 8: Vicente (1964), Ros (1975, 1978b, 1985 a, b), Ros and Altimira (1977), Pereira (1980, 1981), Altimira, Huelin and Ros (1981), Bibiloni (1981), Huelin and Ros (1984), Ballesteros (1985), Ávila Escartín (1993), Ávila (1996), Valdés (2002a).
- 9: Ros (1975, 1978b, 1981b, 1985b), Ballesteros *et al.* (1986), Dekker (1996), Altaba (1993), Ávila Escartín (1993).
- 10: Pérez-Sánchez and Moreno (1990), Pérez Sánchez, Bacallado and Ortea (1991), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).
- 11: Wirtz (1994, 1999), Malaquias *et al.* (2001).
- 12: Wirtz and Martins (1993), Wirtz (1994, 1995a, 1998), Morton *et al.* (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Valdés (2002a).

Genus *Paradoris* Bergh, 1884***Paradoris indecora* Bergh, 1881**

- 3: Wirtz and Debelius (2003).
- 4: Cervera (unpubl. data).
- 5: Ávila Escartín (1993).
- 6: Ávila Escartín (1993).



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Checklist of opisthobranchs from Spain and Portugal

7: Templado (1982b, as *Discodoris*, 1983, 1984), Ballesteros *et al.* (1986, as *Discodoris*), Marín and Ros (1987, as *Discodoris*), Marín *et al.* (1997), Valdés (2002a), Templado *et al.* (2002).

8: Ballesteros (unpubl. data).

9: Ballesteros and Templado (1996).

10: Ortea (1995), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).

***Paradoris ceneris* Ortea, 1995**

10: Ortea (1995), Templado, Villena and Fernández (1995), Ortea *et al.* (2001), Moro *et al.* (2003).

***Paradoris inversa* Ortea, 1995**

10: Ortea (1995), Templado, Villena and Fernández (1995), Ortea *et al.* (2001), Moro *et al.* (2003).

***Paradoris mollis* Ortea, 1995**

10: Ortea (1995), Templado, Villena and Fernández (1995), Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Baptodoris* Bergh, 1884

***Baptodoris cinnabarina* Bergh, 1884** <sup>(100)</sup>

1: Bouchet (1977, bathyal, as *Platydoris maculata*).

5: Sánchez-Santos (pers. comm.)

7: Valdés and Gosliner (2001), Templado *et al.* (2002).

9: Ballesteros and Valdés (1999).

10: Ballesteros and Valdés (1999).

***Baptodoris perezii* Llera and Ortea in Ortea, Pérez and Llera, 1982** <sup>(101)</sup>

4: Cervera *et al.* (1986).

6: Cervera *et al.* (1986).

10: Ortea, Pérez Sánchez and Llera (1982), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).

11: Wirtz (1999).

Genus *Geitodoris* Bergh, 1891 <sup>(102)</sup>

***Geitodoris planata* (Alder and Hancock, 1846)** <sup>(94)</sup>

1: Cervera *et al.* (1988), Ortea (1990).

3: De Oliveira (1895, as *Platydoris*), Nobre (1932, as *Platydoris*), Ferreira (1966, as *Archidoris planata*), García-Gómez *et al.* (1991), Calado *et al.* (1999), Macedo, Macedo and Borges (1999).

4: Cervera, García-Gómez and García (1985).

5: Sánchez-Santos (pers. comm.).

6: Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

8: Ballesteros (unpubl. data)

9: Ballesteros and Templado (1996).

10: Ortea (1990), Malaquias and Calado (1997), Ortea *et al.* (2001), Moro *et al.* (2003).

11: Wirtz (1999).

12: Azevedo and Gofas (1990, as *G. cf. planata*), Wirtz (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

***Geitodoris pusae* (Marcus, 1955)** <sup>(103)</sup>

10: Ortea, Luque and Templado (1988), Ortea *et al.* (2001), Ortea (1990), Moro *et al.* (2003).

11: Malaquias and Cervera (unpubl. data).

***Geitodoris portmanni* (Schmekel, 1972)**

6: Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

7: Marín and Ros (1987, as *Carryodoris*).

8: Cervera *et al.* (1988).

***Geitodoris bonosi* Ortea and Ballesteros, 1981**

1: Ortea and Ballesteros (1981).

2: Ortea and Ballesteros (1981), Ballesteros (1981a, 1985).

8: Ballesteros (unpubl. data)

***Geitodoris bacalladoi* Ortea, 1990**

10: Ortea (1990), Ortea *et al.* (2001), Moro *et al.* (2003).

***Geitodoris perfossa* Ortea, 1990**

10: Ortea (1990), Malaquias and Calado (1997, as *G. cf. perfossa*), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).

11: Wirtz (1995b, 1999).

Genus *Taringa* Marcus, 1955 <sup>(104)</sup>

***Taringa millegrana* (Alder and Hancock, 1854)** <sup>(105)</sup>

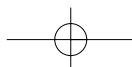
5: García-Gómez, Cervera and García-Martín (1993, as *T. tarifensis*).

10: Ortea and Martínez (1992b, as *T. fanabensis*), Ortea *et al.* (2001), Moro *et al.* (2003, as *T. fanabensis*).

11: Wirtz (1999, as *T. cf. fanabensis*), Malaquias *et al.* (2001, *T. cf. fanabensis*).

***Taringa oleica* Ortea, Pérez and Llera, 1982**

10: Ortea, Pérez Sánchez and Llera (1982), Ortea *et al.* (2001), Ortea and Martínez (1992b), Moro *et al.* (2003).



***Taringa ascitica* Ortea, Pérez and Llera, 1982**

10: Ortea, Pérez Sánchez and Llera (1982), Ortea *et al.* (2001), Ortea and Martínez (1992b), Moro *et al.* (2003).

***Taringa tritorquis* Ortea, Pérez and Llera, 1982**

10: Ortea, Pérez Sánchez and Llera (1982), Ortea *et al.* (2001), Ortea and Martínez (1992b), Moro *et al.* (2003).

***Taringa bacalladoi* Ortea, Pérez and Llera, 1982**

10: Ortea, Pérez Sánchez and Llera (1982), Ortea *et al.* (2001), Ortea and Martínez (1992b), Moro *et al.* (2003).

***Taringa faba* Ballesteros, Llera and Ortea, 1985**

8: Ballesteros, Llera and Ortea (1985), Cervera *et al.* (1988), Ortea and Martínez (1992b), Giribet and Peñas (1997).

Genus *Thorybopus* Bouchet, 1977

***Thorybopus lophatus* Bouchet, 1977**

12: Bouchet (1977), Malaquias (2001).

LABIOSTOMATA *incerta sedis*

Genus *Carminodoris* Bergh, 1889 <sup>(106)</sup>

***Carminodoris ? boucheti* Ortea, 1979 <sup>(106)</sup>**

2: Ortea (1979a), Ortea (1980a), Fernández-Ovies (1981).

5: Sánchez-Santos (pers. comm.).

8: Ballesteros and Ortea (1981), Ballesteros (1985), Cervera *et al.* (1988).

***Carminodoris ? spinobranchialis* Ortea and Martínez, 1992 <sup>(106)</sup>**

1: Ortea and Martínez (1992a), Villena *et al.* (1997).

POROSTOMATA Bergh, 1878

**Family Phyllidiidae Rafinesque, 1814**

Genus *Phyllidia* Cuvier, 1797

***Phyllidia flava* (Aradas, 1847) <sup>(107)</sup>**

8: Pruvot-Fol (1954), Ros (1980b, 1985b), Altimira, Huelin and Ros (1981), Huelin and Ros (1984).

9: Ros (1981b, 1985b), Ros and Gili (1985), Dekker (1986).

10: Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).

All records, except those from the region 10, as *P. rolandiae* (Pruvot-Fol, 1954) or *P. Pulitzeri* (Pruvot-Fol, 1954).

Genus *Phyllidiopsis* Bergh, 1875

***Phyllidiopsis berghi* (Vayssière, 1902)**

10: Valdés and Ortea (1996), Ortea *et al.* (2001), Moro *et al.* (2003).

12: Bouchet (1977, as *P. gynenopla*), Valdés and Ortea (1996), Malaquias (2001).

***Phyllidiopsis bayi* (Bouchet, 1983) <sup>(108)</sup>**

5: García-Gómez (1987, as *Fryeria bayi*).

6: Valdés and Gosliner (1999), Peñas *et al.* (in press).

7: Cervera *et al.* (1988).

9: Ballesteros and Templado (1996).

***Phyllidiopsis boucheti* Valdés and Ortea, 1996**

10: Valdés and Ortea (1996), Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Reticulidia* Brunckhorst, 1990

***Reticulidia gofasi* Valdés and Ortea, 1996**

12: Valdés and Ortea (1996), Malaquias (2001).

**Family Dendrodorididae O'Donoghue, 1924**

Genus *Dendrodoris* Ehrenberg, 1831

***Dendrodoris limbata* (Cuvier, 1804) <sup>(109)</sup> <sup>(110)</sup>**

3: De Oliveira (1895, as *Doriopsis*), Nobre (1932, as *Doriopsis*), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).

4: García-Gómez (1982), Cervera and García-Gómez (1986).

5: García-Gómez (1982), García-Gómez *et al.* (1989).

6: Luque (1983, 1986), Ballesteros *et al.* (1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Valdés *et al.* (1996).

7: De Fez (1974, as *Doriopsis*), Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Ávila Escartín (1993), Templado *et al.* (2002).

8: Ros (1975, 1985b), Ballesteros (1978, 1985), Pereira (1980), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ávila Escartín (1993), Valdés *et al.* (1996).

9: Ros (1985b), Ballesteros, Álvarez and Mateo (1986), Ávila Escartín (1993), Valdés *et al.* (1996).

***Dendrodoris grandiflora* (Rapp, 1827) <sup>(109)</sup> <sup>(110)</sup>**

3: De Oliveira (1895, as *Doriopsis*), Nobre (1932, as

- Doriopsis*), García-Gómez *et al.* (1991), Valdés *et al.* (1996), Calado *et al.* (1999), Muzavor and Morenito (1999), Malaquias and Morenito (2000), Wirtz and Debelius (2003).
- 4: García-Gómez (1982), Cervera (1988, unpubl. data).
- 5: García-Gómez (1983), García-Gómez *et al.* (1989), Valdés *et al.* (1996).
- 6: Luque (1983, 1986), Ocaña *et al.* (2000), Valdés *et al.* (1996).
- 7: Templado (1982b, 1983, 1984), Marín and Ros (1987), Valdés *et al.* (1996).
- 8: Ros (1975), Pereira (1980), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ballesteros (1985), Valdés *et al.* (1996).
- 9: Ballesteros (1981a, 1985), Ros (1985b), Ros and Gili (1985), Ballesteros, Álvarez and Mateo (1986), Valdés *et al.* (1996).
- 10: Pérez-Sánchez and Moreno (1990, as *D. limbata*), Pérez Sánchez, Bacallado and Ortea (1991, as *D. limbata*), Valdés *et al.* (1996), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).
- 11: Malaquias (unpubl. data).

***Dendrodoris herytra* Valdés and Ortea in Valdés, Ortea, Ávila and Ballesteros, 1996** <sup>(110)</sup>

- 1: Ávila Escartín (1993, as *D. grandiflora*).
- 2: Ortea (1977c, as *D. limbata* and *D. grandiflora*), Rolán, Otero and Rolán-Álvarez (1989, as *D. grandiflora*), Valdés *et al.* (1996).
- 3: Gavaia *et al.* (2004), Calado *et al.* (2003).
- 4: Valdés *et al.* (1996), Cervera (unpubl. data).
- 5: García-Gómez (1984a, as *Dendrodoris* sp., 2002).
- 6: Valdés *et al.* (1996).
- 10: Valdés *et al.* (1996), Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: Valdés *et al.* (1996), Wirtz (1999).
- 12: ? Bergh (1892, as *Doriopsis limbata*), Odhner (1931, as *Dendrodoris grandiflora*), Valdés *et al.* (1996), Villena *et al.* (1997), Wirtz (1995a, as *Dendrodoris* n. sp., 1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

Genus *Doriopsilla* Bergh, 1880

***Doriopsilla areolata* Bergh, 1880** <sup>(111)</sup>

- 1: Hidalgo (1916), Ballesteros and Ortea (1980), Ávila Escartín (1993), Valdés and Ortea (1997).
- 2: Ballesteros and Ortea (1980), Urgorri and Besteiro (1983), Valdés and Ortea (1997).

- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932), García-Gómez *et al.* (1991), Valdés and Ortea (1997), Calado *et al.* (1999, 2003), Muzavor and Morenito (1999), Malaquias and Morenito (2000), Wirtz and Debelius (2003).
- 4: Cervera and García-Gómez (1986), Templado *et al.* (1993b).
- 5: García-Gómez (1982), García, García-Gómez and Cervera (1986a), García-Gómez *et al.* (1989), Valdés and Ortea (1997).
- 6: Luque (1983, 1986), Hergueta (1985), Salas and Hergueta (1986), Templado *et al.* (1986, 1993b), Valdés and Ortea (1997), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).
- 7: Templado, Talavera and Murillo (1987).
- 8: Ros (1975, as *D. pusilla*), Ballesteros and Ortea (1980, as *D. evanae*), Ballesteros (1985, as *D. evanae*), Valdés and Ortea (1997).
- 9: Ballesteros and Ortea (1980, as *D. evanae*), Ballesteros (1981a, 1985, both as *D. evanae*), Templado (1982a, as *D. evanae*), Valdés and Ortea (1997), Villena *et al.* (1997).
- 10: Valdés and Ortea (1997), Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).

***Doriopsilla pelseneeri* Oliveira, 1895** <sup>(112)</sup>

- 1: Ballesteros and Ortea (1980).
- 2: Ortea and Urgorri (1979c, as *Dendrodoris racemosa*), Ballesteros and Ortea (1980), Urgorri and Besteiro (1983, 1984).
- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932), García-Gómez *et al.* (1991), Valdés and Ortea (1997), Calado *et al.* (1999, 2003).
- 4: Templado *et al.* (1993b).
- 5: García-Gómez *et al.* (1989).
- 6: Templado *et al.* (1993b), Valdés and Ortea (1997), Schick (1998).
- 8: Pruvot-Fol (1954, as *Dendrodoris minima*), Cervera *et al.* (1988).

DEXIARCHIA Schrödl, Wägele and Willan, 2001 <sup>(113)</sup>  
**Suborder CLADOBRANCHIA Willan and Morton, 1984** <sup>(114)</sup>

**“DENDRONOTINA” Sars, 1878**

**Family Tritoniidae Lamarck, 1809**

Genus *Tritonia* Cuvier, 1803

***Tritonia hombergi* Cuvier, 1803**

- 2: Rolán, Rolán-Álvarez and Ortea (1991).

- 5: García-Gómez (1982).  
7: Hidalgo (1916).  
8: Ros (1975).

***Tritonia plebeia* Johnston, 1828**

- 2: Urgorri and Besteiro (1983), Rolán (1983).  
3: Nobre (1938-40, as *Candiella plebeia*), Calado *et al.* (1999).  
8: Ros (1975).

***Tritonia manicata* Deshayes, 1853<sup>(115)</sup>**

- 1: Ortea (1977a,b), Fernández-Ovies (1981). All as *Duvaucelia*.  
2: Ortea (1977a,b), Fernández-Ovies (1981), Urgorri and Besteiro (1983).  
3: De Oliveira (1895), Hidalgo (1916), Nobre (1932) (all these as *T. moesta*), García-Gómez *et al.* (1991a), Calado *et al.* (1999, 2003).  
4: Cervera and García (1986).  
5: García-Gómez (1983), García-Gómez *et al.* (1989).  
6: Luque (1983, 1986, as *Duvaucelia*), Ballesteros *et al.* (1986, as *Duvaucelia*), Hergueta and Salas (1987, as *Duvaucelia*), Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a).  
7: Templado (1982b, 1983, 1984), Ballesteros (1985), Ballesteros *et al.* (1986) (all of them as *Duvaucelia*), Marín and Ros (1987), Templado *et al.* (2002).  
8: Ros (1975, 1978b, 1985b), Ros and Altamira (1977), Altamira *et al.* (1981), Huelin and Ros (1984), Ballesteros (1985). All of them as *Duvaucelia*.  
9: Templado (1982a), Ballesteros, Álvarez and Mateo (1986). Both records as *Duvaucelia*.

***Tritonia (Tritonidoxa) griegi* Odhner, 1922**

- 12: Bouchet (1977), Malaquias (2001).

***Tritonia striata* (Haefelfinger, 1963)**

- 1: Ávila Escartín (1993).  
5: Sánchez Santos (unpubl. data).  
6: Moreno and Templado (1998), Sánchez Tocino, Ocaña and García (2000a).  
7: Templado, Talavera and Murillo (1987), Templado *et al.* (2002).  
8: Ros (1975), Pereira (1981), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ballesteros (1985).  
9: Wirtz and Debelius (2003), Ballesteros and Templado (unpubl. data).  
Records before 1985 as *Duvaucelia*.

***Tritonia nilsodhneri* Marcus, 1983<sup>(116)</sup>**

- 1: Ortea and Urgorri (1981a), Ávila Escartín (1993).  
2: Ortea and Urgorri (1981a), Urgorri and Besteiro (1983, 1984), Rolán (1983).  
3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).  
5: García-Gómez (1983), García-Gómez *et al.* (1989).  
6: Sánchez Tocino, Ocaña and García (2000a).  
7: Templado, Talavera and Murillo (1983), Templado *et al.* (2002).  
8: Ballesteros (1987).

Almost all records as *Duvaucelia* or *Tritonia odhneri*.

Genus *Marionia* Vayssière, 1877

***Marionia blainvillea* (Risso, 1818)**

- 1: Ávila Escartín (1993).  
3: De Oliveira (1895), Hidalgo (1916), Nobre (1932) (all these records as *M. quadrilatera*), Calado and Urgorri (1999), Calado *et al.* (1999), Wirtz and Debelius (2003).  
4: Vayssière (1913), Hidalgo (1916).  
5: García-Gómez (1982), García-Gómez *et al.* (1989), Templado *et al.* (1993b).  
6: Templado *et al.* (1986), Sánchez Tocino, Ocaña and García (2000a), Peñas *et al.* (in press).  
7: Templado, Talavera and Murillo (1983), Templado *et al.* (2002), Ballesteros *et al.* (1986).  
8: Ros (1975).  
9: Ballesteros, Álvarez and Mateo (1986).  
10: Ortea *et al.* (2001, 2003), Moro *et al.* (2003), Wirtz and Debelius (2003).  
11: Wirtz (1995a,b, 1999).  
12: Wirtz (1995b, 1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

Genus *Tritoniopsis* Eliot, 1905

***Tritoniopsis cincta* (Pruvot-Fol, 1937)**

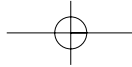
- 7: Templado, Luque and Moreno (1988).

**Family Scyllaeidae Fischer, 1883**

Genus *Scyllaea* Linnaeus, 1758

***Scyllaea pelagica* Linnaeus, 1758**

- 1: Hidalgo (1916).  
3: Hidalgo (1916).  
12: Simroth (1888), Morton *et al.* (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).



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Checklist of opisthobranchs from Spain and Portugal

**Family Hancockiidae MacFarland, 1923**Genus *Hancockia* Gosse, 1877***Hancockia uncinata* (Hesse, 1872)**

- 1: Fernández-Ovies (1981).
- 2: Ortea and Urgorri (1979b), Urgorri and Besteiro (1983, 1984).
- 3: Gavaia *et al.* (2004), Calado *et al.* (2003).
- 5: García-Gómez *et al.* (1989).
- 6: Moreno and Templado (1998), Sánchez Tocino, Ocaña and García (2000a).
- 7: Templado, Talavera and Murillo (1987).
- 8: Ballesteros (1985).
- 9: Ballesteros (unpubl. data).
- 10: Ortea *et al.* (2001, 2003), Moro *et al.* (2003).

**Family Lomanotidae Bergh, 1892**Genus *Lomanotus* Vérany, 1844***Lomanotus marmoratus* (Alder and Hancock, 1845)**

- 2: Urgorri and Besteiro (1983, 1984, 1986).
- 8: Ballesteros (unpubl. data).

***Lomanotus barlettai* García-Gómez, López González and García, 1990**

- 4: García-Gómez, López-González and García (1990).
- 6: Templado *et al.* (1993b).

**Family Tethyidae Alder and Hancock, 1855**Genus *Tethys* Linnaeus, 1767***Tethys fimbria* Linnaeus, 1767**

- 1: Ávila Escartín (1993).
- 3: Nobre (1932, as *T. leporina*), García-Gómez *et al.* (1991, as *T. cf. fimbria*).
- 4: Templado *et al.* (1993b).
- 6: Luque (1983, 1986, as *Fimbria*), Sánchez Tocino, Ocaña and García (2000a).
- 7: Templado, Talavera and Murillo (1983), Ballesteros (1985) (both as *Fimbria*).
- 8: Pruvot (1897, 1901), Maluquer (1907), Maluquer (1906-1909), Ros (1975, as *Fimbria*).
- 9: Hidalgo (1916), Templado (1982a, as *Fimbria*), Wirtz and Debelius (2003).
- 10: McAndrew (1852, as *Fimbria*), Ortea *et al.* (2001), Moro *et al.* (2003).

**Family Phylliroidae Férussac, 1821**Genus *Phylliroe* Péron and Lesueur, 1810***Phylliroe atlantica* Bergh, 1871**

- 10: Odhner (1931), Ortea *et al.* (2001), Moro *et al.* (2003).
- 11: Bergh (1899).
- 12: Wirtz (1998), Malaquias (2001), Wirtz and Debelius (2003).

***Phylliroe bucephala* Péron and Lesueur, 1810**

- 10: Hernández and Giménez (1996), Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Cephalopyge* Hanel, 1905***Cephalopyge trematoides* (Chun, 1889)**

- 10: Odhner (1931), Ortea *et al.* (2001), Moro *et al.* (2003).

**Family Dendronotidae Sars, 1878**Genus *Dendronotus* Alder and Hancock, 1845***Dendronotus frondosus* (Ascanius, 1774)**

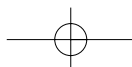
- 1: Hidalgo (1916, as *D. arborescens*).

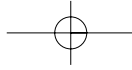
**Family Dotoidae Gray, 1853**Genus *Doto* Oken, 1815***Doto coronata* (Gmelin, 1791)**

- 1: Hidalgo (1916), Ortea (1977c), Fernández-Ovies (1981), Fernández-Ovies and Ortea (1981).
- 2: Ortea (1977c), Urgorri and Besteiro (1983, 1984).
- 3: Hidalgo (1916), Nobre (1932), Calado *et al.* (1999).
- 5: García-Gómez (1983), García-Gómez *et al.* (1989).
- 7: Templado (1982b, 1983, 1984), Marín and Ros (1987).
- 8: Ballesteros (1985).

***Doto pimatifida* (Montagu, 1804)**

- 2: Ortea and Urgorri (1978), Fernández-Ovies (1981), Fernández-Ovies and Ortea (1981), Urgorri and Besteiro (1983, 1984), Wirtz and Debelius (2003).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 5: García-Gómez (1983), García-Gómez *et al.* (1989).





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***Doto fragilis* (Forbes, 1838)**

- 1: Hidalgo (1916), Ortea and Urgorri (1978).
- 2: Ortea and Urgorri (1978), Fernández-Ovies (1981), Urgorri and Besteiro (1983, 1984).

***Doto pygmaea* Bergh, 1871**

- 10: Ortea, Moro and Espinosa (1997a), Ortea et al. (2001), Moro et al. (2003).

***Doto rosea* Trinchese, 1881**

- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1832), García-Gómez et al. (1991), Calado et al. (1999, 2003).
- 4: Cervera (unpubl. data).
- 5: García-Gómez (1987), García-Gómez et al. (1989).
- 6: Templado, Luque and Moreno (1988).
- 7: Marín and Ros (1991).

***Doto paulinae* Trinchese, 1881**

- 7: Marín and Ros (1991).
- 8: Ballesteros (1985, as *D. cf. paulinae*).

***Doto cinerea* Trinchese, 1881**

- 6: Ballesteros et al. (1986).
- 7: Templado, Talavera and Murillo (1983).
- 9: Templado (1982a, as *Doto* sp.).

***Doto floridicola* Simroth, 1888**

- 3: Calado et al. (1999, 2003), García-Gómez et al. (1991).
- 5: García-Gómez (1983), García-Gómez et al. (1989).
- 6: Templado, Luque and Moreno (1988).
- 7: Templado (1982b).
- 8: Ballesteros (1985).
- 9: Ballesteros and Templado (1996).
- 10: Ortea et al. (2003), Ortea, Caballer and Moro (2003).
- 11: Ortea, Caballer and Moro (2003).
- 12: Simroth (1888), Wirtz (1998), Ávila et al. (1998), Ávila (2000), Malaquias (2001).

***Doto pita* Marcus, 1955**

- 10: Ortea, Moro and Espinosa (1999), Ortea et al. (2001, 2003), Moro et al. (2003).

***Doto doerga* Marcus and Marcus, 1963**

- 7: Marín and Ros (1991).

***Doto dunnei* Lemche, 1976**

- 1: Ortea and Urgorri (1978).

- 2: Urgorri and Besteiro (1983, 1984).

- 3: Calado et al. (1999, 2003).

- 5: García-Gómez (1983).

***Doto millbayana* Lemche, 1976**

- 1: Ortea and Urgorri (1978), Fernández-Ovies (1981), Fernández-Ovies and Ortea (1981).

- 3: Gavaia et al. (2004).

- 4: Cervera and García (1986).

- 5: García-Gómez et al. (1989).

***Doto koenckeri* Lemche, 1976**

- 1: Ortea and Urgorri (1978), Fernández-Ovies (1981).

- 2: Ortea and Urgorri (1978), Fernández-Ovies (1981), Fernández-Ovies and Ortea (1981), Urgorri and Besteiro (1983, 1984).

- 3: García-Gómez et al. (1991), Calado et al. (1999, 2003).

- 6: Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a).

- 8: Ballesteros (1984a, 1985).

- 12: Calado (2002).

***Doto eireana* Lemche, 1976**

- 1: Ortea and Urgorri (1978), Fernández-Ovies (1981), Fernández-Ovies and Ortea (1981).

- 2: Urgorri and Besteiro (1983, 1984).

- 3: Calado et al. (2003).

***Doto tuberculata* Lemche, 1976**

- 2: Ortea and Urgorri (1978), Fernández-Ovies (1981), Fernández-Ovies and Ortea (1981), Urgorri and Besteiro (1983, 1984).

- 10: Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez, Bacallado and Ortea (1991).

***Doto acuta* Schmekel and Kress, 1977**

- 7: Marín and Ros (1990).

***Doto arteoi* Ortea, 1978**

- 1: Ortea (1978b).

- 2: Ortea (1978b).

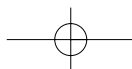
- 3: García-Gómez et al. (1991).

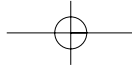
***Doto lemchei* Ortea and Urgorri, 1978**

- 1: Ortea and Urgorri (1978).

- 2: Ortea and Urgorri (1978), Fernández-Ovies (1981), Fernández-Ovies and Ortea (1981), Urgorri and Besteiro (1983, 1984).

- 3: Calado et al. (1999).





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***Doto oblicua* Ortea and Urgorri, 1978**

- 1: Ortea and Urgorri (1978), Fernández-Ovies (1981).
- 2: Urgorri and Besteiro (1983, 1984).

***Doto veridicoides* Ortea and Urgorri, 1978**

- 1: Ortea and Urgorri (1978), Fernández-Ovies (1981), Fernández-Ovies and Ortea (1981).
- 2: Urgorri (1983), Urgorri and Besteiro (1983, 1984).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).

***Doto fluctifraga* Ortea and Pérez, 1982**

- 10: Ortea and Pérez (1982), Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez, Bacallado and Ortea (1991), Ortea *et al.* (2001), Moro *et al.* (2003).

***Doto furva* García-Gómez and Ortea, 1983**

- 6: García-Gómez and Ortea (1983), García-Gómez *et al.* (1989), García-Gómez, López de la Cuadra and Balbuena Marcilla (1989).
- 12: Calado (2002), Wirtz and Debelius (2003, as *D. fluctifraga*).

***Doto unguis* Ortea and Rodríguez, 1989**

- 6: Ortea and Rodríguez (1989), Templado *et al.* (1993a,b).

***Doto escatulari* Ortea, Moro and Espinosa, 1997**

- 10: Ortea, Moro and Espinosa (1997a), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).

***Doto sotilloi* Ortea, Moro and Espinosa, 1997**

- 10: Ortea, Moro and Espinosa (1997a), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).

**“ARMININA” Odhner, 1934 <sup>(117)</sup>****Family Arminidae Iredale and O’Donoghue, 1923**Genus *Armina* Rafinesque, 1814***Armina maculata* Rafinesque, 1814**

- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1938-40). All records as *Pleurophyllidia pustulosa*.
- 4: Cervera (unpubl. data).
- 5: García-Gómez (1982), García and García-Gómez (1988, 1990a,c).
- 6: Luque (1983, 1986), Sánchez Tocino, Ocaña and García (2000a).

- 8: Ballesteros (1981b, 1985), Ávila Escartín (1993).

- 9: Altaba and Traveset (1993), Ávila Escartín (1993).

- 11: Wirtz (unpubl. data).

***Armina tigrina* Rafinesque, 1814**

- 3: De Oliveira (1895), Nobre (1938-40). Both records as *Pleurophyllidia undulata*.

- 6: Ocaña *et al.* (2000), Wirtz and Debelius (2003).

- 7: Templado *et al.* (2002).

- 8: Ballesteros (1983).

***Armina neapolitana* (Delle Chiaje, 1824)**

- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932). All records as *Pleurophyllidia undulata*.

- 8: Ballesteros (1987).

***Armina loveni* (Bergh, 1860)**

- 3: Ferreira (1966, as *A. lineata*).

- 10: Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Heterodoris* Verrill and Emerton in Verrill, 1882***Heterodoris robusta* Verrill and Emerton in Verrill, 1882**

- 1: Bouchet (1977, bathyal).

**Family Madrellidae Preston, 1911**Genus *Madrella* Alder and Hancock, 1864***Madrella aurantiaca* Vayssiére, 1902**

- 9: Ballesteros and Templado (1996).

**Family Proctonotidae Gray, 1853 <sup>(118)</sup>**Genus *Janolus* Bergh, 1884 <sup>(119)</sup>***Janolus cristatus* (Delle Chiaje, 1841)**

- 1: Hidalgo (1916), Fernández-Ovies (1981, as *Antiopella cristata*).

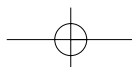
- 2: Urgorri and Besteiro (1983, 1984, both records as *Antiopella*).

- 3: Nobre (1932, as *Antiopa cristata*), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).

- 4: Cervera and García (1986).

- 5: García-Gómez (1983), García-Gómez *et al.* (1989).

- 6: Luque (1983, 1986, as *Antiopella*), Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).



7: Fez (1974, as *Janus cristatus*), Templado, Talavera and Murillo (1987).

8: Theodor (1964), Ballesteros (1985).

10: Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).

11: Wirtz (1995a, 1999).

***Janolus hyalinus* (Alder and Hancock, 1854)**

1: Ortea (1978a).

2: Ortea (1978a), Urgorri and Besteiro (1983, 1984).

3: Calado *et al.* (2003).

5: García-Gómez *et al.* (1989).

7: Templado (1982b, 1983, 1984).

***Janolus faustoi* Ortea and Llera, 1988**

10: Ortea and Llera (1988), Ortea *et al.* (2001, 2003), Moro *et al.* (2003).

11: Malaquias (unpubl. data).

**“AEOLIDINA” Odhner, 1934**

**Family Flabellinidae Bergh, 1889**

Genus *Flabellina* Voigt, 1834 <sup>(120)</sup>

***Flabellina affinis* (Gmelin, 1791)**

3: García-Gómez *et al.* (1991), Calado and Urgorri (1999), Calado *et al.* (1999).

4: García-Gómez (1984a), Cervera and García-Gómez (1986), Wirtz and Debelius (2003).

5: García-Gómez (1982, 1986a, 2002), Schulze and Wägele (1998), García-Gómez *et al.* (1989).

6: Luque (1983, 1986), Ballesteros *et al.* (1986), Cervera, López-González and García-Gómez (1998), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).

7: Fez (1974), Templado (1982b), Ballesteros (1983), Ballesteros *et al.* (1986), Marín and Ros (1987), Templado *et al.* (2002).

8: Vicente (1964), Ros (1975, 1978b, 1985a,b), Ros and Altimira (1977), Pereira (1980, 1981), Altimira, Huelin and Ros (1981), Bibiloni (1981), Huelin and Ros (1984), Ballesteros (1985).

9: Ros (1975, 1978b, 1981), Ballesteros (1981b, 1985), Ballesteros, Llera and Ortea (1985).

10: Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez, Bacallado and Ortea (1991), Moro *et al.* (1995, 2003), Ortea and Espinosa (1998), Ortea *et al.* (2001), Wirtz and Debelius (2003).

***Flabellina pedata* (Montagu, 1815) <sup>(120)</sup>**

1: Hidalgo (1916), Ros (1975), Ortea (1977c).

2: Ortea (1977c), Urgorri and Besteiro (1983, 1984), Rolán (1983).

3: De Oliveira (1895), Hidalgo (1916), Nobre (1932), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003), Muzavor and Morenito (1999), Malaquias and Morenito (2000).

4: García-Gómez (1984a), Cervera and García-Gómez (1986).

5: García-Gómez (1982, as *Coryphella* sp., 1983, 2002), García-Gómez *et al.* (1989), Sánchez-Moyano *et al.* (2000), Wirtz and Debelius (2003).

6: Luque (1983, 1986), Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).

7: Fez (1974), Templado (1982b, 1983, 1984), Ballesteros (1985), Ballesteros *et al.* (1986).

8: Vicente (1964), Ros (1975, 1978b, 1985a), Ros and Altimira (1977), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ballesteros (1985).

9: Ros (1978), Ballesteros (1981a), Templado (1982a), Ballesteros, Álvarez and Mateo (1986), Dekker (1986), Wirtz and Debelius (2003).

12: Gosliner (1994a), Wirtz (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

Many of all these records are referred as *Coryphella pedata*, except Nobre (1932) that refers as *C. landsburgii*.

***Flabellina pellucida* (Alder and Hancock, 1843) <sup>(120)</sup> <sup>(121)</sup>**

8: Ros (1975, 1985a), Ros and Altimira (1977).

All records referred as *Coryphella*.

***Flabellina gracilis* (Alder and Hancock, 1844) <sup>(120)</sup>**

1: Hidalgo (1916, as *Coryphella*).

***Flabellina lineata* (Lovén, 1848) <sup>(120)</sup>**

3: Calado and Urgorri (1999), Calado *et al.* (1999).

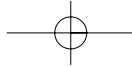
5: García-Gómez (1982, 2002), García-Gómez *et al.* (1989), Wirtz and Debelius (2003).

7: Fez (1974), Marín and Ros (1987), Templado, Luque and Moreno (1988).

8: Ros (1975), Ballesteros (1985).

9: Ballesteros (1981a).

All records before 1988 and that of Calado *et al.* refer to *Coryphella*.



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***Flabellina dushia* (Ev. Marcus and Er. Marcus, 1963)**  
10: Ortea, Caballer and Moro (2004, as *Coryphella*).

***Flabellina babai* Schmekel, 1972**

- 3: García-Gómez *et al.* (1991), Calado and Urgorri (1999), Calado *et al.* (1999, 2003), Wirtz and Debelius (2003).  
4: Megina (unpubl. data).  
5: García-Gómez (1984a, 1986a, 2002).  
6: Luque (1986), Templado, Talavera and Murillo (1987), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
8: Wirtz and Debelius (2003), Ballesteros (unpubl. data).

***Flabellina baetica* García-Gómez, 1984**

- 4: Megina (unpubl. data).  
5: García-Gómez (1984b, 1986a, 2002), García-Gómez *et al.* (1989), Megina (unpubl. data).

***Flabellina insolita* García-Gómez and Cervera, 1989**

- 3: Ortea and Espinosa (1998).  
5: García-Gómez and Cervera (1989), Templado *et al.* (1993a).

***Flabellina ischitana* Hirano and Thompson, 1990**

- 3: Ortea and Espinosa (1998), Calado *et al.* (1999, 2005), Wirtz and Debelius (2003).  
4: Cervera, López-González and García-Gómez (1998).  
5: Cervera, López-González and García-Gómez (1998).  
6: Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
8: Ballesteros (unpubl. data).

Genus *Calmella* Eliot, 1906

***Calmella cavolini* (Vérany, 1846)**

- 6: Ballesteros *et al.* (1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Wirtz and Debelius (2003).  
7: De Fez (1974), Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Marín and Ros (1987).  
8: Ros (1975, 1978b), Ballesteros (1978, 1985), Altimira, Huelin and Ros (1981), Huelin and Ros (1984).  
9: Ballesteros (1981a, 1985), Ballesteros, Álvarez and Mateo (1986), Dekker (1986).

**Family Piseinotecidae Edmunds, 1970**

Genus *Piseinotecus* Marcus, 1955

***Piseinotecus sphaeriferus* (Schmekel, 1965)**

- 10: Ortea *et al.* (2003).

***Piseinotecus gabinierei* (Vicente, 1975)**

- 6: Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

***Piseinotecus gaditanus* Cervera, García-Gómez and García, 1987**

- 3: García-Gómez *et al.* (1991), Calado *et al.* (2003).  
4: Cervera and García-Gómez (1986, as *Calmella* sp.), Cervera, García-Gómez and García (1987), Templado *et al.* (1993a).  
10: Ortea *et al.* (2003).

**Family Facelinidae Bergh, 1889**

Genus *Favorinus* Gray, 1850

***Favorinus branchialis* (Rathke, 1806)**

- 1: Ortea (1977c), Fernández-Ovies (1981).  
2: Urgorri and Besteiro (1983, 1984), Rolán (1983).  
3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2005).  
4: Cervera (unpubl. data).  
5: García-Gómez (1983, 2002), García-Gómez *et al.* (1989), Sánchez-Moyano *et al.* (2000).  
6: Ballesteros *et al.* (1986), Ocaña *et al.* (2000).  
7: De Fez (1974), Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Marín and Ros (1987).  
8: Ros (1975), Ballesteros (1985).  
10: Ortea (1982), Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez and Moreno (1990), Pérez Sánchez, Bacallado and Ortea (1991), Moro *et al.* (1995, 2003), Ortea *et al.* (2001).  
11: Wirtz (unpubl. data).  
12: Calado (2002).

***Favorinus ghanensis* Edmunds, 1968**

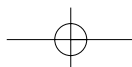
- 10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001).

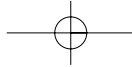
***Favorinus blianus* Lemche and Thompson, 1974**

- 2: Ortea and Urgorri (1981), Urgorri and Besteiro (1983).  
3: Gavaia *et al.* (2004).

***Favorinus vitreus* Ortea, 1982**

- 7: Templado (1982b).  
8: Giribet and Peñas (1997), Ortea *et al.* (2001, 2003).





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Checklist of opisthobranchs from Spain and Portugal

10: Ortea (1982), Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez, Bacallado and Ortea (1991), Moro *et al.* (1995, 2003), Ortea *et al.* (2001, 2003).

Genus *Facelina* Alder and Hancock, 1855

***Facelina annulicornis* (Chamisso and Eisenhart, 1821)** <sup>(122)</sup>

- 1: Ortea (1977c, as *F. punctata*).
- 2: Ortea (1977c), Fernández-Ovies (1981, as *F. punctata*), Urgorri and Besteiro (1983), Rolán (1983).
- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932) (all these records as *F. punctata*), Calado *et al.* (1999, 2003).
- 5: García-Gómez (1983, 2002), García-Gómez *et al.* (1989).
- 6: Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).
- 7: De Fez (1974), Templado (1982b, 1983, 1984).
- 8: Ballesteros (1985).
- 9: Templado (1982a).
- 10: Pérez-Sánchez and Moreno (1990), Moro *et al.* (1995, 2003), Ortea *et al.* (2001, 2003).
- 11: Wirtz (1999).
- 12: Calado (2002).

***Facelina bostoniensis* (Couthouy, 1838)** <sup>(123)</sup>

- 1: Ortea (1977c, as *F. drummondii*).
- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932) (all records as *F. drummondii*), García-Gómez *et al.* (1991).
- 7: Templado (1982b, as *F. drummondii*).
- 8: Ros (1975, 1985a, as *F. drummondii*), Ros and Altimira (1977, as *F. drummondii*), Pereira (1980a, as *F. drummondii*), Ballesteros (1984b, 1985, as *F. drummondii*).

***Facelina coronata* (Forbes and Goodsir, 1839)** <sup>(123)</sup>

- 1: Ortea (1977c), Lastra *et al.* (1988, as *F. auriculata*).
- 2: Ortea (1977c), Urgorri and Besteiro (1983, 1984), Rolán (1983).
- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 4: Cervera and García (1986, as *F. auriculata*).
- 5: García-Gómez (1983, 2002), García-Gómez *et al.* (1989).
- 6: Templado, Luque and Moreno (1988, as *F. auriculata*), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

- 7: Fez (1974), Templado (1982b, 1983, 1984), Marín and Ros (1987, as *F. auriculata*).
- 10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001), Wirtz and Debelius (2003, as *F. auriculata*).

***Facelina rubrovittata* (A. Costa, 1866)**

- 4: Cervera and García (1986).
- 5: García-Gómez *et al.* (1989).
- 6: Luque (1983, 1986), Ballesteros *et al.* (1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000), Peñas *et al.* (in press).
- 7: Templado (1982b, 1983, as *Acanthopsole*), Marín and Ros (1987).
- 8: Ballesteros (1985, as *Acanthopsole*).
- 9: Ballesteros (1981a, 1985, as *Acanthopsole*).

***Facelina quatrefagesi* (Vayssière, 1888)**

- 2: Ortea (1977c).

***Facelina variegata* De Oliveira, 1895**

- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932).

***Facelina schwobi* (Labbé, 1923)**

- 2: Villena *et al.* (1997).
- 8: Ballesteros *et al.* (1993).

***Facelina dubia* Pruvot-Fol, 1948)**

- 8: Ballesteros *et al.* (1993).

***Facelina fusca* Schmekel, 1966**

- 8: Ros (1975, as *F. cf. fusca*).

Genus *Phidiana* Gray, 1850

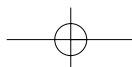
***Phidiana lynceus* Bergh, 1867**

- 10: Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Cratena* Bergh, 1864

***Cratena peregrina* (Gmelin, 1791)**

- 3: Calado *et al.* (1999, 2003).
- 4: García-Gómez (1984a, 2002), Cervera and García (1986).
- 5: García-Gómez *et al.* (1989).
- 6: Ballesteros *et al.* (1986), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).
- 7: Templado (1982b), Ballesteros (1985), Ballesteros *et al.* (1986), Marín and Ros (1987), Aguado Giménez (2000), Templado *et al.* (2002).



8: Vicente (1964), Ros (1975, 1978b), Ros and Altimira (1977), Ballesteros (1978, 1985), Pereira (1980, 1981), Altimira, Huelin and Ros (1981), Huelin and Ros (1984).

9: Ballesteros (1981a), Ballesteros, Álvarez and Mateo (1986), Wirtz and Debelius (2003).

10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001).

Most of the records before 1986 as *Hervia costai*.

Genus *Caloria* Trinchese, 1888 <sup>(124)</sup>

***Caloria elegans* (Alder and Hancock, 1845)**

3: Calado and Urgorri (1999), Calado *et al.* (1999, 2003).

5: García-Gómez (1983, 2002), García-Gómez *et al.* (1989).

6: Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

7: Fez (1974, as *C. maculata*), Templado (1982b, 1983, as *C. maculata*), Templado (1984), Ballesteros *et al.* (1986), Marín and Ros (1987), Templado *et al.* (2002).

8: Ros (1975, 1978b), Ros and Altimira (1977), Altimira, Huelin and Ros (1981), Huelin and Ros (1984), Ballesteros (1985) (all records as *C. maculata*, except that of Ballesteros (1985)).

9: Ballesteros (1981a, as *C. maculata*), Ballesteros, Álvarez and Mateo (1986), Dekker (1986).

10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001), Wirtz and Debelius (2003).

11: Moro *et al.* (1995), Wirtz (1998, 1999).

12: Moro *et al.* (1995), Wirtz (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001), Wirtz and Debelius (2003).

Genus *Learchis* Bergh, 1896 <sup>(124)</sup>

***Learchis poica* Marcus and Marcus, 1960**

11: Cervera and Malaquias (unpubl. data).

12: Moro (com. pers.).

Genus *Facelinopsis* Pruvot-Fol, 1954

***Facelinopsis marioni* (Vayssière, 1888)**

4: Megina (unpubl. data).

5: García-Gómez (1983, 2002), García-Gómez *et al.* (1989).

6: Luque (1983, 1986), Ocaña *et al.* (2000).

8: Ros (1975), Pereira (1980), Ballesteros (1985).

Genus *Dondice* Marcus, 1958 <sup>(125)</sup>

***Dondice occidentalis* (Engel, 1925)**

10: Ortea *et al.* (2001), Moro *et al.* (2003).

***Dondice banyulensis* Portman and Sandmeier, 1960 <sup>(125)</sup>**

3: García-Gómez *et al.* (1991), Malaquias and Morenito (2000), Calado and Urgorri (1999), Calado *et al.* (1999, 2003), Muzavor and Morenito (1999), Wirtz and Debelius (2003).

5: García-Gómez (1982, 2002), García-Gómez and García (1984a, as *Godiva*), García and García-Gómez (1985, as *Godiva*), García-Gómez *et al.* (1989).

6: Luque (1983, 1986), Templado, Luque and Moreno (1988), Schick (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

7: Templado (1982b, 1983, 1984), Templado, Luque and Moreno (1988), Templado *et al.* (2002).

8: Vicente (1964), Ros (1975, 1985b), Altimira, Huelin and Ros (1981), Pereira (1981), Huelin and Ros (1984), Ballesteros (1985, as *Godiva*).

9: Ballesteros (1985, as *Godiva*), Wirtz and Debelius (2003).

Genus *Antonietta* Schmekel, 1966

***Antonietta luteorufa* Schmekel, 1966**

7: Marín and Ros (1987, 1990).

Genus *Dicata* Schmekel, 1967

***Dicata odhneri* Schmekel, 1967**

3: García-Gómez *et al.* (1991), Calado and Urgorri (1999), Calado *et al.* (1999), Wirtz and Debelius (2003).

6: Templado and Moreno (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

8: Ballesteros (unpubl. data).

12: Gosliner (pers. comm.).

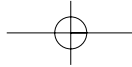
Genus *Pruvotfolia* Tardy, 1969 <sup>(126)</sup>

***Pruvotfolia pselliotes* (Labbé, 1923) <sup>(126)</sup>**

2: Ortea (1977c), Ortea and Urgorri (1981b), Urgorri and Besteiro (1983).

3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).

4: Cervera and García (1986).



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Checklist of opisthobranchs from Spain and Portugal

- 5: García-Gómez (1983, 2002).
- 6: Sánchez Tocino, Ocaña and García (2000a).
- 7: Templado *et al.* (2002).
- 8: Pruvot-Fol (1954, as *Rolandia hispanica*).
- 10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001).

Genus *Babakina* Roller, 1972***Babakina anadoni* (Ortea, 1979) <sup>(127)</sup>**

- 1: Ortea (1979c, as *Rioselleolis*).
- 2: Rolán, Rolán-Álvarez and Ortea (1991).
- 3: Calado (unpubl. data).
- 4: Megina (unpubl. data).
- 5: García-Gómez (1987).
- 10: Fernández-Ovies, Ortea and Pérez (1984, as *Rioselleolis*), Pérez Sánchez and Moreno (1990), Moro *et al.* (1995, 2003), Ortea *et al.* (2001, 2003).

Genus *Algarvia* García-Gómez and Cervera, 1989***Algarvia alba* García-Gómez and Cervera, 1989**

- 3: García-Gómez and Cervera (1989).

**Family Aeolidiidae D'Orbigny, 1834**Genus *Aeolidia* Cuvier, 1798***Aeolidia papillosa* (Linnaeus, 1761)**

- 1: Hidalgo (1916), Ortea (1977c, 1980b).
- 2: Ortea (1977c, 1980b), Urgorri and Besteiro (1983, 1986).
- 3: Nobre (1932), Almaça (1960), Calado *et al.* (1999).

Genus *Spurilla* Bergh, 1864 <sup>(128)</sup>***Spurilla neapolitana* (Delle Chiaje, 1823) <sup>(129)</sup>**

- 1: Ros (1975), Ortea (1977c), Fernández-Ovies (1981).
- 2: Ortea (1977c), Urgorri and Besteiro (1983, 1984), Rolán (1983).
- 3: García-Gómez *et al.* (1991), Malaquias and Morenito (2000), Calado *et al.* (1999, 2003), Muzavor and Morenito (1999, as *S. vayssierei*).
- 4: García-Gómez and Cervera (1985), Cervera and García (1986).
- 5: García-Gómez (1983, 2002).
- 6: Luque (1983, 1986), Ballesteros *et al.* (1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).

- 7: Fez (1974), Templado, Talavera and Murillo (1983), Ballesteros *et al.* (1986), Marín and Ros (1987, 1991).

- 8: Vilella (1968), Ros (1975, 1978b, 1985a), Ros and Altimira (1977), Ballesteros (1977, 1978, 1985).

- 9: Ballesteros, Álvarez and Mateo (1986).

- 10: Odhner (1931), Nordsieck (1972), Altimira and Ros (1979), Pérez Sánchez and Moreno (1990), Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez, Bacallado and Ortea (1991), Moro *et al.* (1995, 2003), Malaquias (2000), Ortea *et al.* (2001, 2003), Wirtz and Debelius (2003).

- 11: Wirtz (1999).

- 12: Simroth (1888), Wirtz (1998) (both records as *S. sargassicola*), Malaquias (2001).

Genus *Aeolidiella* Bergh, 1867***Aeolidiella alderi* (Cocks, 1852)**

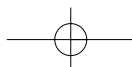
- 1: Ortea (1977c), Ballesteros (1980a).
- 2: Ortea (1977c), Urgorri and Besteiro (1983, 1984), Rolán (1983).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 4: Cervera and García (1986).
- 5: García-Gómez (1982, 2002), García-Gómez *et al.* (1989).
- 6: Sánchez Tocino, Ocaña and García (2000a).
- 7: Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Marín and Ros (1987, 1991).
- 8: Ros (1975, 1978b), Ballesteros (1985).
- 9: Ballesteros (1981a, 1985), Ros (1981b), Ballesteros, Álvarez and Mateo (1986).
- 10: Odhner (1931), Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez and Moreno (1990), Pérez Sánchez, Bacallado and Ortea (1991), Moro *et al.* (1995, 2003), Ortea *et al.* (2001).  
Some records after 1992 as *A. soemmeringii*.

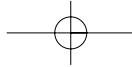
***Aeolidiella glauca* (Alder and Hancock, 1845)**

- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003), Wirtz and Debelius (2003).
- 5: García-Gómez (1983, 2002).
- 7: Fez (1974).

***Aeolidiella sanguinea* (Normann, 1877)**

- 2: Urgorri and Besteiro (1983, 1986).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).





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- 5: García-Gómez *et al.* (1989).  
 11: Wirtz (1998, 1999), Wirtz and Debelius (2003).  
 12: Morton *et al.* (1998), Ávila (2000), Malaquias (2001).

***Aeolidiella indica* Bergh, 1888** <sup>(130)</sup>

- 5: García-Gómez (2002).  
 10: Pérez-Sánchez and Moreno (1990), Moro *et al.* (1995, 2003), Ortea *et al.* (2001).

Genus *Cerberilla* Bergh, 1873***Cerberilla bernadettae* Tardy, 1965**

- 2: Urgorri (pers. comm.).  
 4: Cervera (unpubl. data).  
 10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001).

Genus *Berghia* Trinchese, 1877 <sup>(128)</sup>***Berghia caerulescens* (Laurillard, 1830)**

- 1: Ros (1975).  
 3: Calado *et al.* (1999, as *Spurilla*).  
 5: García Gómez (1983, 2002, as *Spurilla*), García-Gómez and Thompson (1990, as *Spurilla*).  
 6: Hergueta (1985), Salas and Hergueta (1986), Hergueta and Salas (1987), Templado and Moreno (1998), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: Templado, Talavera and Murillo (1987), Marín and Ros (1991).  
 8: Ballesteros (1985).  
 10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001), Wirtz and Debelius (2003).

***Berghia verrucicornis* (Costa, 1867)**

- 1: Fernández-Ovies (1981).  
 3: García-Gómez *et al.* (1991, as *Spurilla*).  
 4: Cervera and García-Gómez (1986, as *S. verrucicornis*), García-Gómez and Thompson (1990, as *Spurilla*).  
 5: García-Gómez (1983, 2002, as *Spurilla*), García-Gómez and Thompson (1990, as *Spurilla*).  
 6: Ballesteros *et al.* (1986), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: Fez (1974, as *Berghia caerulescens*), Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Marín and Ros (1991).  
 8: Ros (1975, 1978b, 1985a), Ros and Altimira (1977), Ballesteros (1977, 1978, 1985).  
 10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001).

***Berghia columbina* (García-Gómez and Thompson, 1990)**

- 3: Calado *et al.* (1999).  
 4: García-Gómez and Thompson (1990), Templado *et al.* (1993a) (both records as *S. columbina*).  
 6: Templado and Moreno (1998).  
 10: Ortea *et al.* (2001), Moro *et al.* (2003).

Genus *Limenandra* Haefelfinger and Stamm, 1958***Limenandra nodosa* Haefelfinger and Stamm, 1958** <sup>(131)</sup>

- 7: Templado (1982c), Templado (1982b, 1983, 1984, as *Baeolidia*), Templado, Talavera and Murillo (1983, as *Baeolidia*).  
 9: Ballesteros and Templado (1996).  
 10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001).  
 All records from this area as *Baeolidia*.

**Family Eubranchidae Odhner, 1934**Genus *Eubranchus* Forbes, 1838***Eubranchus tricolor* Forbes, 1838** <sup>(132)</sup>

- 2: Urgorri and Besteiro (1983).

***Eubranchus pallidus* (Alder and Hancock, 1842)**

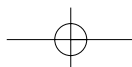
- 2: Urgorri and Besteiro (1983, 1984).

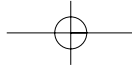
***Eubranchus vittatus* (Alder and Hancock, 1842)** <sup>(133)</sup>

- 2: Urgorri and Besteiro (1983).  
 8: Ballesteros (1985, as *E. cf. vittatus*).

***Eubranchus farrani* (Alder and Hancock, 1844)**

- 2: Urgorri and Besteiro (1983, 1984), Rolán (1983).  
 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).  
 4: Cervera and García-Gómez (1986).  
 5: García-Gómez *et al.* (1989).  
 6: Templado, Talavera and Murillo (1987), Templado, Luque and Moreno (1988), Sánchez Tocino, Ocaña and García (2000a), Ocaña *et al.* (2000).  
 7: Templado (1982b, 1983, 1984).  
 8: Ros (1975, 1978b, as *E. cf. farrani*), Ballesteros (1984a, 1985).  
 10: Ortea *et al.* (2001), Moro *et al.* (2003), Wirtz and Debelius (2003).  
 12: Fontes, Tempera and Wirtz (2001).



***Eubranhus cingulatus* (Alder and Hancock, 1847) <sup>(133)</sup>**

- 1: Ortea (1978a), Fernández-Ovies (1981).
- 2: Urgorri and Besteiro (1983, 1984).
- 3: García-Gómez *et al.* (1991).
- 5: García-Gómez *et al.* (1989).
- 7: Templado, Talavera and Murillo (1983), Marín and Ros (1987).

***Eubranhus exiguus* (Alder and Hancock, 1848)**

- 1: Ortea (1975-76).
- 2: Urgorri and Besteiro (1983, 1984).
- 3: Calado *et al.* (1999, 2005).
- 5: García-Gómez (1983, 2002).
- 8: Ballesteros (1985).

***Eubranhus doriae* (Trinchese, 1874) <sup>(133)</sup>**

- 3: Gavaia *et al.* (2004), Calado *et al.* (2003).

***Eubranhus arci* Ortea, 1979-80**

- 10: Ortea (1979-80), Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez, Bacallado and Ortea (1991), Moro *et al.* (1995, 2003), Ortea *et al.* (2001, 2003).

***Eubranhus prietoi* Llera and Ortea, 1981**

- 1: Llera and Ortea (1981).
- 5: García-Gómez (1987).

***Eubranhus linensis* García-Gómez, Cervera and García, 1990 <sup>(133)</sup>**

- 2: Urgorri (pers. comm.).
- 3: García-Gómez, Cervera and García (1990), García-Gómez *et al.* (1991), Calado and Urgorri (1999), Calado *et al.* (1999).
- 5: García-Gómez (1987, as *E. tricolor*), García-Gómez, Cervera and García (1990).

***Eubranhus leopoldoi* Caballer, Ortea and Espinosa, 2001**

- 10: Ortea, Caballer and Moro (2002a), Moro *et al.* (2003).

***Eubranhus telesforoi* Ortea, Caballer and Bacallado, 2002**

- 10: Ortea *et al.* (2002).

***Eubranhus vascoi* Ortea, Caballer and Moro, 2002**

- 12: Ortea *et al.* (2002).

**Family Pseudovermidae Thiele, 1931**

Genus *Pseudovermis* Périaslavzeff, 1891

***Pseudovermis artabrensis* Urgorri, Cobo and Besteiro, 1991**

- 2: Urgorri (1981, as *P. papillifera*), Urgorri, Cobo and Besteiro (1991).

**Family Calmidae Iredale and O'Donoghue, 1923**

Genus *Calma* Alder and Hancock, 1855

***Calma glaucoides* (Alder and Hancock, 1854) <sup>(134)</sup>**

- 2: Ortea (1977c), Fernández-Ovies (1981), Calado (2001), Calado and Urgorri (2002).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999), Calado (2001), Calado and Urgorri (2002).
- 4: Cervera (unpubl. data).
- 8: Ballesteros (unpubl. data).
- 10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001).

***Calma gobioophaga* Calado and Urgorri, 2002 <sup>(134)</sup>**

- 2: Urgorri and Besteiro (1983, 1984, both as *C. glaucoides*), Calado and Urgorri (2002).
- 3: Calado and Urgorri (2002).
- 7: Templado, Talavera and Murillo (1987, as *C. glaucoides*).

**Family Glaucidae Menke, 1828**

Genus *Glaucus* Forster, 1777

***Glaucus atlanticus* Forster, 1777**

- 9: Hidalgo (1916), Bofill and Aguilar-Amat (1924).
- 10: D'Orbigny (1839), Pérez *et al.* (1990), Pérez Sánchez, Bacallado and Ortea (1991), Moro *et al.* (1995, 2003), Ortea *et al.* (2001).
- 11: Bergh (1899).
- 12: Simroth (1888), Bergh (1899), Wirtz (1998), Malaquias (2001), Wirtz and Debelius (2003).

**Family Tergipedidae Thiele, 1931 <sup>(135)</sup>**

Genus *Tergipes* Cuvier, 1805

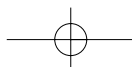
***Tergipes tergipes* (Forsk., 1775)**

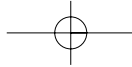
- 2: Ortea and Urgorri (1981a), Fernández-Ovies (1981), Urgorri and Besteiro (1983, 1984).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999).
- 4: Cervera (unpubl. data).
- 6: Luque (1983, 1986).
- 7: Marín and Ros (1987).
- 8: Ballesteros (1985).

Genus *Cuthona* Alder and Hancock, 1855 <sup>(136)</sup>

***Cuthona caerulea* (Montagu, 1804)**

- 2: Urgorri and Besteiro (1983, 1984), Rolán (1983).





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- 3: De Oliveira (1895), Hidalgo (1916), Nobre (1932) (all the above records as *Amphorina*), García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 5: García-Gómez (1983, 2002), García-Gómez *et al.* (1989).
- 7: De Fez (1974, as *Amphorina*), Templado (1982b, 1983, 1984), Marín and Ros (1987, 1991).
- 8: Ros (1975, 1978b, 1985a, all records as *Trinchesia aurantia*), Ros and Altimira (1977), Altimira, Huelin and Ros (1981), Pereira (1981), Huelin and Ros (1984), Ballesteros (1985).
- 9: Wirtz and Debelius (2003), Ballesteros and Templado (1996).
- 10: Moro *et al.* (1995, 2003), Ortea *et al.* (2001, 2003), Wirtz and Debelius (2003).
- 12: Calado (2002).
- Many records before 1985 as *Trinchesia caerulea*.

***Cuthona foliata* (Forbes and Goodsir, 1838)**

- 1: Ortea (1977c, as *Trinchesia*).
- 2: Urgorri and Besteiro (1983, 1984), Rolán (1983).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999, 2003).
- 5: García-Gómez (1984a, 2002, both as *C. cf. foliata*), García-Gómez *et al.* (1989).
- 8: Ballesteros (unpubl. data).
- 12: Calado (2002).

***Cuthona amoena* (Alder and Hancock, 1845)**

- 1: Ortea (1977c, as *Cratenopsis*).
- 2: Urgorri and Besteiro (1983), Rolán (1983).
- 3: Calado *et al.* (2003).
- 5: García-Gómez (1983, 2002).
- 8: Ballesteros (1985).

***Cuthona pallida* (Eliot, 1906)**

- 7: Marín and Ros (1987a, as *C. miniostrata*).
- 8: Ros (1975, as *Trinchesia cf. miniostrata*).
- 10: Ortea, Moro and Caballer (2002), Moro *et al.* (2003).

***Cuthona genovae* (O'Donoghue, 1929)**

- 1: Ortea (unpubl. data).
- 3: García-Gómez *et al.* (1991), Calado *et al.* (1999).
- 4: Cervera and García (1986).
- 5: García-Gómez (1983, 2002).
- 6: Ballesteros *et al.* (1986), Sánchez Tocino, Ocaña and García (2000a).

- 7: Templado (1982b, 1983, 1984), Ballesteros *et al.* (1986), Marín and Ros (1990).
- 8: Ros (1975, as *Trinchesia foliata*), Ros (1978b, 1985a, as *Trinchesia genovae*), Ros and Altimira (1977, as *Trinchesia*), Ballesteros (1985).
- 9: Ballesteros, Álvarez and Mateo (1986).
- 10: Malaquias and Calado (1997, as *C. cf. genovae*), Moro *et al.* (1995, 2003), Ortea *et al.* (2001, 2003).

***Cuthona ocellata* (Schmekel, 1966)**

- 3: García-Gómez *et al.* (1991), Calado and Urgorri (1999), Calado *et al.* (1999, 2003).
- 5: García-Gómez *et al.* (1989).
- 7: Templado (1982b, 1983, 1984).
- 8: Ballesteros (1985, 1986).

***Cuthona granosa* (Schmekel, 1966)**

- 7: Marín and Ros (1991).

***Cuthona ilonae* (Schmekel, 1968)**

- 1: Fernández-Ovies (1981, as *Trinchesia*).
- 2: Urgorri and Besteiro (1983, 1984, 1986).
- 3: García-Gómez *et al.* (1991).
- 7: Templado (1982b, 1983, 1984).

***Cuthona miniostrata* (Schmekel, 1968)**

- 7: Marín and Ros (1987).
- 8: Ros (1975, as *Trinchesia cf. miniostrata*).

***Cuthona albopunctata* (Schmekel, 1968)**

- 8: Ros (1975, as *Trinchesia cf. albopunctata*).

***Cuthona thompsoni* García, López-González and García-Gómez, 1991**

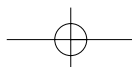
- 3: Calado *et al.* (2003).
- 4: García, López-González and García-Gómez (1991), Templado *et al.* (1993a).
- 7: Wirtz and Debelius (2003).

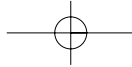
***Cuthona willani* Cervera, López-González and García-Gómez, 1992**

- 3: Cervera, García-Gómez and López-González (1992).
- 4: Cervera, García-Gómez and López-González (1992).

***Cuthona fidenciae* (Ortea, Moro and Espinosa, 1999)**

- 10: Ortea, Moro and Espinosa (1999), Ortea, Caballer and Moro (2002a,c), Ortea, Caballer and Moro (2003), Ortea *et al.* (2001).
- 12: Ortea, Caballer and Moro (2002c).



***Cuthona correai* Ortea, Moro and Caballer, 2002**

10: Moro *et al.* (1995, as *C. willani*, 2003), Ortea *et al.* (2001, as *C. willani*), Ortea, Caballer and Moro (2002c).

Genus *Catriona* Winckworth, 1941 <sup>(136)</sup>

***Catriona gymnota* (Couthouy, 1838)**

1: Ortea (1977c), Fernández-Ovies (1981, as *Trinchesia aurantia*).

2: Urgorri and Besteiro (1983, 1984, both as *Cuthona gymnota*).

3: García-Gómez *et al.* (1991).

4: Cervera and García (1986).

5: García-Gómez (1987).

***Catriona maua* (Marcus and Marcus, 1960)**

4: Cervera (unpubl. data).

7: Marín and Ros (1987, 1990, 1991).

10: Ortea, Caballer and Moro (2002b), Moro *et al.* (2003).

Genus *Tenellia* A. Costa, 1866

***Tenellia adspersa* (Nordmann, 1845)**

2: Urgorri and Besteiro (1983, 1984, 1986).

4: Cervera (unpubl. data).

7: Marín and Ros (1987, as *Tenellia pallida*).

**Family Fionidae Alder and Hancock, 1855**

Genus *Fiona* Alder and Hancock, 1851

***Fiona pinnata* (Eschscholtz, 1831)**

6: Templado, Luque and Moreno (1988).

7: Templado, Talavera and Murillo (1983), Templado *et al.* (2002).

8: Ros (1975).

10: Odhner (1931), Pérez Sánchez, Ortea and Bacallado (1990), Pérez Sánchez, Bacallado and Ortea (1991), Moro *et al.* (1995, 2003), Ortea *et al.* (2001).

11: Wirtz (1999), Wirtz and Debelius (2003).

12: Bergh (1892, as *Fiona marina*), Wirtz (1998), Morton *et al.* (1998), Ávila *et al.* (1998), Ávila (2000), Malaquias (2001).

**Family Embletoniidae Schmekel, 1970 <sup>(137)</sup>**

Genus *Embletonia* Alder and Hancock, 1851 <sup>(137)</sup>

***Embletonia pulchra* Alder and Hancock, 1851**

2: Urgorri and Besteiro (1983, 1984).

3: Nobre (1938-40), García-Gómez *et al.* (1991), Malaquias and Morenito (2000), Calado *et al.* (1999, 2003).

5: García-Gómez *et al.* (1989).

7: Templado, Talavera and Murillo (1987, as *E. pulchra faurei*), Marín and Ros (1987a, as *E. pulchra faurei*).

8: Ballesteros (1985, as *E. pulchra faurei*).

**REMARKS**

(1) According to Malaquias, Martínez and Abreu (2002), the family Ringiculidae is poorly known, since most of the systematic work has been focused on shells only, which are very similar among species. As a result, the taxonomy of the northeast Atlantic species is confusing, and therefore it is very difficult to confidently recognise the different species. A revision of the Atlantic Ringiculidae is required, and since it is not yet available, we decided to keep all the names included in the previous catalogue (Cervera *et al.*, 1988).

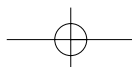
(2) Ciccone and Savona (1982) pointed out that *Ringicula nitida* and *Ringicula leptocheila* are both valid species, the former inhabiting the Atlantic Ocean and the latter the Mediterranean Sea. Therefore, the reference to *R. leptocheila* off the Portuguese coasts by Nobre (1936) must be regarded as a misidentification of *R. nitida*. We also considered the species *R. pulchella* Morelet, 1880 as a synonym of *R. nitida*, based on the opinion of Bouchet, as noted in Platts (1985).

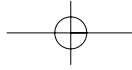
(3) Ciccone and Savona (1982) highlighted the possibility that *Ringicula minutula* could be a synonym of *Ringicula conformis*.

(4) The presence of *Japonacteon pusillus* in Azores was quoted by Bouchet (1975) with uncertainty. The subsequent references by Mikkelsen (1995) and Malaquias (2001) were based on Bouchet (1975). This species was referred to in the previous catalogue as *Japonacteon pusillus* (Forbes, 1944).

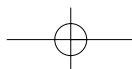
(5) *Callostracon meeki* was described by Dall (1889) under the genus name *Ovulacteon*.

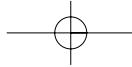
(6) In the previous catalogue (Cervera *et al.*, 1988), this family was under the name Hydatinidae Pilsbry, 1893, which is a synonym of Amplustridae Gray, 1847.



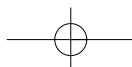


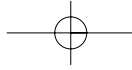
- (7) Although *Hydatina physis* (Gmelin, 1794) is considered by some authors a synonym of *Hydatina vesicaria* (Solander, 1786), we decided to maintain the former name. This name is more widely used, and until a revision of the family Amplusridae is available, no conclusive statements can be made. In many other groups of cephalaspideans, the majority of the systematic work has been concentrated only on the shells, which are very much similar between different species. Wirtz (1995b) shows an image of a live specimen of *H. physis* from the Canary Islands. The reference to the Madeira archipelago is made on the basis of a shell housed in the collections of the Museu Municipal do Funchal (História Natural).
- (8) As pointed out in the previous remark, considerable confusion surrounds the genus *Hydatina*. Since no systematic revision is yet available, we decided to maintain all names listed in the previous catalogue (Cervera et al., 1988).
- (9) *Diaphana globosa* was recorded in the previous catalogue (Cervera et al., 1988) under the name *Diaphana hiemalis* (Couthouy, 1839).
- (10) Nordsieck (1972) considered *Retusa pellucida* a form of *R. truncatula*.
- (11) Nordsieck (1972) described the new genus *Mamilloretusa* to include the species *Retusa mmillata*. However, this genus is not well supported, and several authors (e.g. Lemche, 1948) have even considered this species a synonym of *Retusa truncatula*.
- (12) *Retusa obesa* is a problematic taxon, requiring further study to clarify its taxonomic status.
- (13) *Retusa multiquadrata* is a problematic species, requiring further study to clarify its taxonomic status.
- (14) In the past, *Cylichnina umbilicata* has often been cited in the literature under the name *Cylichnina subcylindrica* (Brown, 1827). Cervera et al. (1988) recorded it as *Retusa umbilicata* (Montagu, 1803) in agreement with Aartsen, Menkhorst and Gittenberger (1984). The valid name in current use is *Cylichnina umbilicata* (Montagu, 1803), and it is therefore adopted here.
- (15) Nordsieck (1972) described the genus *Mamillocylichna* to include both species *Cylichna richardi* and *Cylichna mirabilis*. However, no justification was given to create this new genus, and therefore this generic designation is not used in the present catalogue.
- (16) In the previous catalogue (Cervera et al., 1988), *Roxania pinguicola* and *Bulla pinguicola* were considered two different species, and *Bulla subrotunda* Jeffreys, 1873, together with *Bulla abyssicola* Dall, 1887, were listed as synonyms of the latter. Although the taxonomic status of these species and their synonymy still needs to be fully assessed, we follow the current trend that includes *B. pinguicola* in the genus *Roxania*.
- (17) Nordsieck (1972) assigned *Philine monterosatoi* to a new genus, *Phillingwynia*. However, no anatomical data were provided to support the change, and further studies are required to assess whether or not this genus is valid.
- (18) *Chelidonura africana* was originally described based on specimens belonging to at least two different species, which has caused enormous confusion and controversy over the years. In the earlier catalogue (Cervera et al., 1988), this species was designated under the name *Chelidonura italica* Sordi, 1981 and a comprehensive remark concerning the taxonomic and nomenclatural problematic of the western Mediterranean species of the genus *Chelidonura* was included. Recently, Martínez, Malaquias and Cervera (2002) proposed the designation of a neotype for *C. africana*, and considered *C. italica* as a junior synonym of this species.
- (19) Ortea, Moro and Espinosa (1996) attributed this species to the genus *Chelidonura* on the basis of its external anatomy only. Some years later, these same authors (Ortea, Moro and Espinosa, 2003) transferred this species to the genus *Odontoaglaja* Rudman, 1978 based on the presence of a radula. Nevertheless, Gosliner (pers. comm.) suggests that a re-assessment of the phylogenetic relationships between both genera should be carried out, considering the presence of radula in another undescribed *Chelidonura* from Southern Africa (Gosliner, 1987, p. 43, fig. 13; 1994b, p. 280, fig. 18).
- (20) Gosliner (1980) transferred the species *Aglaja depicta* to the genus *Philinopsis* due to the fact that the body form, shell, penis, pharynx, mucous gland and gonoduct are identical to those described for members of the genus *Philinopsis*.
- (21) *Doridium laurentianum* is an *incertae sedis* taxon. This species was originally described based on four dredged shells, of which two were lost (Watson, 1897). The remaining two are untraceable, and the species was never illustrated by the author (Malaquias, 2004).
- (22) As Schmekel and Cappellato (2002) stated, the taxonomic history of *Runcina coronata* and its name is complex, mainly due to the existence of several dark *Runcina* species in the Eastern Atlantic and Mediterranean Sea that are very similar to each other. These are the case of *Runcina ornata* Quatrefages, 1844, *Runcina calaritana* Colosi, 1915, *Runcina aurata* García, López, Luque and Cervera, 1986, *Runcina avellana* Schmekel and Cappellato, 2001 and *Runcina rotunda* Schmekel and Cappellato, 2002.
- (23) The descriptions of *R. ornata* and *Runcina macrodenticulata* included in Cervera, García-Gómez and García (1991) are based on the specimens described in García et al. (1986) and García, García-Gómez and López de la Cuadra (1990), respectively.



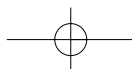


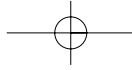
- (24) The occurrence of *Runcina capreensis* on the Iberian Peninsula is doubtful. According to Schmekel and Cappellato (2002), *R. capreensis* (from Capri, Italy) was never found again after its original description. However, several records of this species on the Iberian coast can be found in the literature. These references are either names included on faunistic lists, or the result of identifications based on external morphology only, which is meaningless to discriminate confidently amongst many of the *Runcina* species.
- (25) We believe that the name *Runcina adriatica* has been used in the eastern Atlantic to name specimens belonging indeed to more than one species. For example, Malaquias and Calado (1997) cited several specimens from the Selvagens Islands as *Runcina adriatica* Thompson, 1980. However, a subsequent review of this material shows that this could have been a misidentification, and the specimens might belong indeed to a different species.
- (26) Much confusion surrounds the family Bullidae, and the identity of most of the species remains doubtful. A revision in order to clarify the systematics of this family in the Atlantic is required. Since no studies are yet available, we decided to keep all but one (*B. pinguicola* transferred in this catalogue to the genus *Roxania* – see remark 16) the species quoted in the previous catalogue.
- (27) Hidalgo (1917) cited the species *Bulla roperiana* Pilsbry, 1893 in the same localities as *Bulla striata* Bruguière, 1792. This is probably the result of a misidentification, and here we consider *B. roperiana* as a synonym of *B. striata*. The same criterion has already been followed by Cervera *et al.* (1988). Notable differences were observed between different populations of *B. striata* in the Mediterranean Sea, and several species have been reported in this area.
- (28) According to Bouchet (1975), anatomical studies are required to clarify the generic status of this species.
- (29) Hidalgo (1917) cited *Haminoea hydatis* along the Iberian coast and Balearic Islands, and considered *Haminoea navicula* a synonym of the former species. Both species are valid (Talavera, Murillo and Templado, 1987), and it is not possible to determine which one Hidalgo was dealing with (maybe even both). Therefore, the citations by Hidalgo (1917) are not included in this catalogue. Misidentifications between both species are common in the literature. Monterosato (1923: 1317, fig. 16) has described the species *H. hydatis* cf. *cymoelium* based on a single shell collected in Bengasi, Libya, Mediterranean Sea. Nordsieck (1972) elevated this form to the status of subspecies, and Piani (1980) later included it on the checklist of valid mediterranean species. However, Oliverio and Tringali (2001), after a reevaluation of the type specimens described by Monterosato, pointed out that the holotype of *H. cymoelium* may be, in fact, a shell of *H. hydatis* (see Oliverio and Tringali, 2001, p. 30, fig. 45 for an illustration of the holotype). More details are given in Malaquias and Cervera (in press).
- (30) Hidalgo (1917) has considered *H. navicula* a synonym of *H. hydatis*. Since both species are valid (Talavera, Murillo and Templado, 1987) and it is impossible to know which one Hidalgo was dealing with (maybe even both), we decide to exclude Hidalgo's records from this catalogue. The confusion in the literature as a result of misidentifications between both species is often common and we recommend caution in the use of such references. More details are given in Malaquias and Cervera (in press).
- (31) Several references report the presence of *Haminoea elegans* in the East Atlantic, from Gabon to Mauritania, the Canary Islands, Portugal, the British Isles and the Mediterranean Sea (Leach, 1852; Nobre, 1938-40; Nicklès, 1947; Nicklès, 1950; Marche-Marchad, 1958; Nordsieck and García-Talavera, 1979; Bernard, 1984; Sabelli, Gianuzzi-Sabelli and Bedulli, 1990). Nevertheless, all of these reports must be regarded as doubtful, since they were based only on shells. Martínez and Ortea (1997), after studying live specimens from Congo and São Tomé and Príncipe, concluded that they belong to *H. elegans*, and emphasise that this species should be at least present in the equatorial belt. However, the type locality of this species is the south of the British Isles, and the specimens studied by Martínez and Ortea (1997) are likely to be something different. The true *H. elegans* may probably be a synonym of either *H. navicula* or *H. hydatis*. Further studies are required to clarify the status of this species.
- (32) Several authors had included the genus *Cylichnium* in the family Atyidae (e.g. Thiele, 1931; Nordsieck, 1972). Bouchet (1975) based on anatomical features, transferred this genus to Scaphandridae, where it was included by Cervera *et al.* (1988). Presently, the genus *Cylichnium* Dall, 1908 is considered part of the family Haminoeidae Pilsbry, 1895 as adopted in the Checklist of European Marine Molluscs (CLEMAM); <http://www.somali.asso.fr/clemam/biotaxis.php>
- (33) *Weinkauffia semistriata* is an *incertae sedis* taxon in need of reassessment.
- (34) The family Akeridae was formerly considered within the cephalaspideans, mainly due to the shell shape. However, it is currently included within Anaspidea, according to the features of its pharynx, reproductive system, nervous system and pallial cavity, and associated organs (e.g. Morton and Holme, 1955; Morton, 1972; Willan and Morton, 1984; Gosliner, 1987, 1994b; Cervera *et al.*, 1988; Martínez Cueto-Felgueroso, 1995; Mikkelsen, 1996, 2002). Phylogenetic analyses based on morphological and molecular data support this hypothesis (Medina and Walsh, 2000; Mikkelsen, 2002; Wägele, Vonnemann and Wägele, 2003; Vonnemann *et al.*, in press).



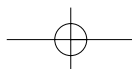


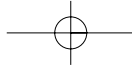
- (35) *Aplysia parvula* is a species of small size which can be misidentified with young specimens of *Aplysia punctata*. Perhaps this is the reason why the first references from the second half of the 1980s were misidentifications (Ballesteros *et al.*, 1986; Ballesteros and Templado, 1987).
- (36) Gosliner (pers. comm.) considers that Atlantic specimens of so-called *Petalifera ramosa* belong to a different species from those cited in the Pacific Ocean.
- (37) According to Rampal (2002), *Cavolinia flava* and *Cavolinia gibbosa* are different species, the former distributed in temperate Atlantic waters, and the later restricted to the South Atlantic.
- (38) The records of *Diacria trispinosa* may be interpreted with caution after the review of Bontes and Van der Spoel (1998).
- (39) Rampal (2002) considers *Creseis conica* a different species from *Creseis virgula*. The latter is mainly distributed in the Indo-Pacific, whereas all records from the North Atlantic belong to the former.
- (40) All previous records of *Cavolinia longirostris* should be reconsidered after the review of Van der Spoel, Bleeker and Kobayasi (1993).
- (41) Jensen (1992b) discussed the use of Ascoglossa versus Sacoglossa, arguing for the use of the latter name rather than the former.
- (42) According to Gosliner (pers. comm.), this species could be *Oxynoe antillarum* Mörch, 1863.
- (43) Phylogenetic analyses conducted by Gosliner (1995), Jensen (1996), and Mikkelsen (1998) show the genus *Elysia* to be a paraphyletic clade. For this reason, as suggested by Gosliner (1995), *Elysiella*, *Pattyclaya*, *Tridachia* and *Tridachiella* should be united with *Elysia* to maintain generic monophyly.
- (44) *Elysia translucens* was considered a junior synonym of *Elysia viridis* until Bouchet (1984) confirmed its validity; this is probably why there is a scarcity of records of this common species.
- (45) Bouchet (1984) considers that, if the description of *Elysia fezi* is correct, it should be considered as valid, even though it has not been collected again. If so, it would be the largest Mediterranean species of *Elysia* (44 mm), characterised by having radular teeth with a tricuspid anterior edge. After its description, this species has not been collected, although the opisthobranch populations of its type locality, Cubellas, have been very frequently sampled by several local experts during more than twenty years, one of them (Ballesteros) co-author of the present checklist.
- (46) Several authors have synonymised *Elysia margaritae* with other species of *Elysia*. Thus, Thompson and Jaklin (1988) considered it as a junior synonym of *Elysia timida*, without any justification, whereas Bouchet (1984) considered it a junior synonym of *E. viridis*, also providing no arguments. However, Ortea *et al.* (1998), discussing Canary Islands *E. timida* specimens, considered *E. margaritae* a valid species; moreover, they proposed that *Elysia gordanae* should be considered a junior synonym. Regarding this last statement, we have to point out that *E. gordanae* has a serrated edge to its radular teeth, and rounded edges of the parapodia, with small white protuberances, which have not been mentioned for *E. margaritae*. This leads us to consider both species to be different. Our conclusion is that *E. margaritae* is a valid species, because of its unique colour pattern, large size, and smooth radular teeth. Nevertheless, the lack of additional specimens with this morphology collected since its original description in 1962, even though the eastern Iberian coasts have been intensively studied over the last three decades by several authors, and the lack of data about the size of the radular teeth, suggests that some doubts about its true taxonomic identity still exist.
- (47) Some authors considered the genus *Thuridilla* as a junior synonym of *Elysia* (Thompson, 1981; Gascoigne, 1985; Thompson and Jaklin, 1988). However, recent phylogenetic analyses of the genus (Gosliner, 1995) and of Sacoglossa (Jensen, 1996, 1998; Mikkelsen, 1998) have eliminated any doubts regarding its validity.
- (48) According to Gosliner (pers. comm.), this species does not belong to *Bosellia*, but *Elysia*. This author states that it highly resembles *E. pusilla* (Bergh, 1872).
- (49) The monophyly of Polybranchiidae currently has weak support (Jensen, 1996; Mikkelsen, 1998). Nevertheless, Jensen (1996) proposed retaining it, considering the fact that most genera are poorly described anatomically, and also that monophyly could be 'forced' without seriously disrupting the other monophyletic groups.
- (50) Thompson (1988a) considered *Hermaea* to be a member of the family Stiligeridae, and considered *Placida* as a subgenus of the former. However, recent phylogenetic analyses by Jensen (1996, 1997) and Mikkelsen (1998) have validated the family Hermaeidae, in which *Hermaea* is included, and concluded that Stiligeridae Iredale and O'Donoghue, 1923 is a junior synonym of Limapontiidae Gray, 1847.
- (51) Jensen (1996, 1997) discussed the validity of the genus *Hermaeopsis* with regard to the genus *Hermaea*. Furthermore, this author indicated that it has to be considered within the family Hermaeidae. The phylogenetic analysis of Mikkelsen (1998) supports this view.
- (52) Jensen (1996) noted the probable non-monophyly of *Ercolania* and indicated that it may have to be split. Nevertheless, she retains the genus as *Ercolania*, and we follow this approach here.



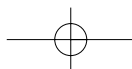


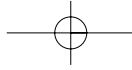
- (53) Cervera *et al.* (1988) and Cervera, García-Gómez and Ortea (1991) mistakenly stated that *Placida* was dated in 1877-1879. These authors follow the statement by Trinchese (1893) indicating that this name was used for the first time in the monograph *Aeolidiidae e famiglie affini del Porto di Genova* (1877-1879) to replace *Laura* Trinchese, 1873, since this name was predated by *Laura* Lacaze-Duthiers, 1865 (type-species: *Laura gerardiae* Lacaze-Duthiers, 1865, *Comptes rendus hebdomadaires des séances de l'Académie des Sciences*, 61: 838-841). Nevertheless, the proposal for this change appears on p. 84 of *Rendiconto delle Sessioni della Reale Accademia delle Scienze dell'Istituto di Bologna* of 1876. Therefore, *Placida* would have to be dated in 1876.
- (54) *Placida tardyi* Trinchese, 1873 and *Placida viridis* Trinchese, 1873 were considered synonyms on the basis of the paper by Gascoigne and Sordi (1980). However, Cervera *et al.* (1988) provided arguments to retain both names as separate species. On the Iberian coast, *P. viridis* has been recorded both for the Mediterranean (Ros and Altamira, 1977; Ros, 1978b, 1985a; Templado, Talavera and Murillo, 1987; Marín and Ros, 1987, 1990), and the Atlantic (Ortea, 1977a, quoted as *Hermaea viridis*). However, most of these references only provide the name of the species without any kind of additional information which would make possible a comparison with the original description or any other references. Ortea (1977a) gives a few anatomical and colour pattern characteristics, although the figure referred to this species cited by this author (illus. 3, fig. 5) is based on the original figure by *P. tardyi* (Trinchese, 1877-79; tab. XV, fig. 1). On the other hand, the description by Marín and Ros (1987) of a single specimen does not match the description by Trinchese (1873). For this reason, we prefer to omit the Iberian records of *P. viridis* from the present catalogue until more detailed records can confirm the existence of this species on Iberian coasts.
- (55) García-Gómez (1987), Cervera *et al.* (1988), Sánchez Tocino, Ocaña and García (2000a), and Sánchez-Moyano *et al.* (2000) spelt incorrectly the name of this species as *Placida verticillata*, rather than *Placida verticilata*.
- (56) Willan and Burn (2003) invoke the ICZN (1999, Article 23.9.2) to maintain *Umbraculoidea* Dall, 1889 as a *nomen protectum* instead of *Tylodinoidea* Gray, 1847.
- (57) Schmekel (1985) states that all characters defining Notaspidea are plesiomorphies, and *Tylodinoidea* as well as *Pleurobrancoidea* are so divergent in their morphology that they do not seem to share a common ancestor. Wägele and Willan (2000) provide an exhaustive phylogenetic analysis of the Nudibranchia, and one of their main conclusions is that *Pleurobrancoidea* is its sister group. These authors introduce the taxon *Nudipleura*, including both *Nudibranchia* and *Pleurobrancoidea*. This new taxon has been confirmed by subsequent phylogenetic analyses based on morphological (Wägele and Klussmann-Kolb, 2005) and molecular data (Wollscheid-Lengeling *et al.*, 2001; Wägele, Vonnemann and Wägele, 2003; Grande *et al.*, 2004a,b; Vonnemann *et al.*, in press). Obviously, *Notaspidea* therefore becomes a non-monophyletic taxon.
- (58) Valdés (2001) and Willan and Burn (2003) give detailed accounts of the publication date, authorship and type species of *Umbraculum* and *Tylodina*.
- (59) Willan (1987a) discussed the taxonomic identity of the genus *Tylodinella* Mazzarelli, 1898, rendering it not valid. He proposed the new name *Anidolyta* to include the species *Anidolyta duebenii* Lovén, 1846 and *A. spongotheras* (Bertsch, 1980). Nevertheless, Warén and Di Paco (1997) suggested three hypotheses regarding the taxonomic identity of *Tylodinella*, without favouring any of them. In one of these hypotheses, *Tylodinella* would be a senior synonym of *Anidolyta*. Platts (1985) pointed out that the species name of *A. duebenii* has to be spelt with a double 'i' at the end, even though in most references it appears with only one.
- (60) Many authors have considered this genus to be monotypic (Burn, 1959; Rehder, 1980; Boss, 1982; Willan, 1987a, 1998), although some others, such as Thompson (1970), considered it bitypic. Valdés and Lozouet (2000), although leaving this controversy open, consider it difficult to accept the current existence of a single circumtropical species based on palaeo-ontological data. Nevertheless, they use the name of *Umbraculum umbraculum*, which is that of the monotypic hypothesis. Willan and Burn (2003) also leave this issue open. In the present paper, we have followed the former of these hypotheses.
- (62) *Berthella aurantiaca* has been misidentified as a species of *Berthellina* Gardiner, 1936 due to its similar coloration (see Lacaze-Duthiers, 1859; Thompson, 1977; Templado, 1982c, 1984; Ballesteros *et al.*, 1986). For this reason, many of its records having no internal anatomical data should be reviewed. Some conspicuous internal differences (size and placement of the shell, jaw elements, radular teeth, midgut gland development and penial gland) between *Berthella aurantiaca* and *Berthellina* species avoid a potential misidentification.
- (62) Six species of *Berthellina* are currently considered valid (Burn, 1962; Willan, 1987a). However, investigation started by Cervera (1988) on this genus revealed the need for an extensive review. Such a review is currently being conducted by Cervera, Gosliner and García-Gómez (in preparation). Our data lead us to confirm that the specimens of *Berthellina* recorded within the geographical context of the present paper do not belong to *Berthellina cit-*



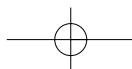


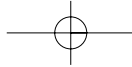
- rina* (Rüppell and Leuckart, 1828). Vayssière (1897) described only the shell of a single specimen of *Berthellina edwardsii* (earlier known as *Berthella edwardsii*) from the Azores. One year later, this author provided a more detailed description of the species (Vayssière, 1898) in his monograph on pleurobranchids, including one additional specimen from the Cape Verde Islands. The latter description, although detailed, overlooks some important elements useful for comparisons with other species. Nevertheless, our data on the internal anatomy of specimens from the Iberian coast, as well as the Canary, Madeira and Azores archipelagos, match those of *B. edwardsii* and those described in the Lacaze-Duthiers' (1859) monograph (as *Pleurobranchus aurantiacus*). Thus, we consider all the above specimens to belong to *B. edwardsii*, provisionally. To elucidate whether *B. edwardsii* and *Berthellina engeli* Gardiner, 1936 are conspecific is still an unresolved issue. Some authors, such as Edmunds and Thompson (1972), Thompson (1976, 1988b) and Cattaneo-Vietti (1986), assume that *B. citrina* and *B. engeli* are synonyms; others (Willan, 1983, 1984) do not agree. Our data support the latter point of view.
- (63) Marcus and Gosliner (1984) described two new species of *Pleurobranchaea* from the Mediterranean, *Pleurobranchaea notmec* and *Pleurobranchaea vayssierei*, which are considered junior synonyms of *Pleurobranchaea meckelii*, according to the criteria of Cervera and García-Gómez (1988). Bergh (1892) describes *Pleurobranchaea morosa*, but Marcus and Gosliner (1984) do not include this species in their review of the subfamily, since it is 'insufficiently described'.
- (64) The monophyly of Nudibranchia is controversial (Wägele, Vonnemann and Wägele, 2003). Although it is supported by recent morphological and molecular phylogenetic analyses (Wägele and Willan, 2000; Wollscheid and Wägele, 1999; Wollscheid-Lengeling *et al.*, 2001; Vonnemann *et al.*, 2005), it is rejected by others (Minichev, 1970; Schmekel, 1985; Thöllessen, 1999b; Grande *et al.*, 2004a,b). Despite strong evidence of the paraphyly of Nudibranchia as presented by Grande *et al.* (2004a,b), we prefer to retain this taxon until a stable classification of Opisthobranchia is accepted.
- (65) Recent studies support the non-monophyly of Phanerobranchia (Thöllessen, 1999a; Wollscheid and Wägele, 1999; Wollscheid-Lengeling *et al.*, 2001; Valdés, 2002; Wägele, Vonnemann and Wägele, 2003; Grande *et al.*, 2004a,b; Fahey and Gosliner, 2004), although an in-depth phylogenetic analysis of this taxon is still lacking.
- (66) This record is considered doubtful.
- (67) According to ICZN article 32.5.2.1, the correct specific name of this species should be *cervinoi* instead of *cervinoi*.
- (68) The record of *Acanthodoris pilosa* from the Straits of Gibraltar needs to be confirmed. Sánchez Santos (unpubl. data) has collected two specimens similar in external appearance to that collected by García Gómez (1987, 2002), but they do not fit the original description of this species. No data on the internal anatomy of the specimens from southern Iberian Peninsula are known.
- (69) Valdés and Ortea (1995) consider *Okenia aspersa* a junior synonym of *Okenia quadricornis* (Montagu, 1815). However, ICZN opinion 1.014 (1974) has invalidated this last name in favour of *O. aspersa*.
- (70) Figure captions of *Trapania ortei* and *Trapania hispalensis* are switched erroneously in García-Gómez (2002).
- (71) At present, there is not agreement on the genera that should be included in this family, since the internal phylogenetic relationships are still not clearly understood (Rudman, 1998). Many authors now restrict the Polyceridae to a few allied genera (Odhner, 1941), and thus consider Notodorididae, Triophidae, Nembrothidae, and Gymnodorididae to be distinct families. Burn (1967) suggested that the family should comprise the four subfamilies Kalinginae, Triophinae, Polycerinae, and Nembrothinae, and that notodorids and gymnodorids should be placed in separate subfamilies. This view is also adopted by Rudman (1998) and followed in the present paper. Recent phylogenetic analysis regarding this issue has been inconclusive (Thöllessen, 1999a; Wägele and Willan, 2000; Wollscheid and Wägele, 1999; Wägele, Vonnemann and Wägele, 2003). Recently, the phylogenetic analysis carried out by Fahey and Gosliner (2004) led to *Notodoris* Bergh, 1875 being considered a junior synonym of *Aegires* Lovén, 1844; consequently, Notodorididae is now considered a synonym of Aegiridae (see remark 74 for the correct spelling of the family name). Given such analysis, the only polycerid included (*Polycera*) does not fit within the Aegiridae, nor appear as a sister group. Because this situation has yet to be fully clarified, no splitting subfamilies have been considered in the present paper.
- (72) Rudman (2003b) point out the possibility that *Polycera aurantiomarginata* is a junior synonym of *Polycera chilluna* Marcus, 1961 from North Carolina, a species that was overlooked by García-Gómez and Bobo (1984), on the basis of a photo of a living specimen of *Polycera* attributed to the species by Marcus (1961). However, the description of this species is based on a single preserved specimen. Therefore, and until a detailed study can solve this question, we prefer to retain *P. aurantiomarginata* as a valid species from the eastern Atlantic.
- (73) The genus *Kaloplocamus* Bergh, 1880 is poorly known. All species were described between 1835 and 1955, except *Kaloplocamus filiosus* (Cattaneo-Vietti and Sordi, 1988). Most of these species have only been reported when origi-



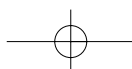


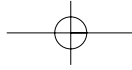
- nally described and not reported again since. Because several generic names have been attributed to this genus, a review is still needed (Vallés, 2002). Vallés, Valdés and Ortea (2000) considered *Kaloplocamus atlanticus* (Bergh, 1893) a separate species from *Kaloplocamus ramosus*. However, these authors stated that the two studied specimens of *Kaloplocamus* from the Azores fit exactly with the external description of *K. ramosus* by Cantraine (1835), and considered both species to be synonyms. However, we believe that Vallés, Valdés and Ortea (2000) do not give strong arguments to support this point of view, and therefore we prefer to retain both names separately as valid.
- (74) Willan (2000) discussed in detail the correct spelling of the family name, Aegiridae.
- (75) Fahey and Gosliner (2004) have discussed the possible co-specificity of *Aegires punctilucens* and *Aegires leuckartii*. Data on the internal anatomy of the original material is lacking, and these authors had no access to this material. Therefore, following the proposal of Schmekel and Portman (1982) to separate subspecies, they propose maintaining *A. punctilucens* from the Mediterranean Sea as a separate species from *A. leuckartii* and *Aegires albopunctatus* MacFarland, 1905.
- (76) Fahey and Gosliner (2004) point out the possibility that *Aegires palensis* might be a junior synonym of *A. leuckartii*. However, they retain this species until additional comparative material for both taxa can be collected and examined.
- (77) Valdés (2002a) carried out a phylogenetic analysis and a systematic review of the cryptobranch dorids, and introduced the taxon Labiostomata for the radula-bearing cryptobranch dorids. The genera included in this taxon have buccal armature, as well.
- (78) Rudman (2003a) considers *Glossodoris edmundsi* as a junior synonym of *Glossodoris ghanensis* Edmunds, 1968, although he does not exclude the possibility of a case of mimicry.
- (79) Ortea, Valdés and García-Gómez (1996) carried out a review of the Atlantic blue chromodorids. These authors gave the list of synonyms for each species, and introduced several new specific and subspecific taxa.
- (80) Until the first half of the 1980s, *Hypselodoris villafranca* was recorded in many papers as *Hypselodoris gracilis*. In some older papers, it was also attributed to the genera *Chromodoris* or *Glossodoris*.
- (81) In the past, *Hypselodoris picta* has often been attributed to the genera *Chromodoris* and *Glossodoris*. On the other hand, before the paper by Ortea, Valdés and García-Gómez (1996), this species was usually attributed specific names such as *valenciennesi*, *elegans* or *webbi*, even *villafranca*, as in Fez (1974). Ortea, Valdés and García-Gómez (1996) established several subspecies within this species, some of them distributed in one or several of the areas considered in the present paper (*H. picta picta*, *H. picta webbi*, *H. picta azorica*). However, these subspecies are based on colour differences only, and to date no genetic or molecular studies have been conducted to confirm or reject them. Bertsch (1997) presents strong criticism, advising caution regarding these subspecies and some of the new species proposed by the above authors.
- (82) Before Ortea, Valdés and García-Gómez (1996), this species was usually recorded as *Hypselodoris coelestis*.
- (83) *Hypselodoris fontandraui* has been also called *Hypselodoris messinensis*, and has sometimes been attributed to the genus *Glossodoris*.
- (84) *Hypselodoris midatlantica* was attributed to the genus *Glossodoris* in the past. The specific name of the species (*midatlantica* vs. *tricolor*) remains controversial today. For more details, see Gosliner (1990), Ortea, Valdés and García-Gómez (1996), Bertsch (1997), and Gosliner and Johnson (1999). In the present paper, we use both names, pending a definitive decision.
- (85) In the past, this species has been frequently attributed to the genus *Glossodoris*.
- (86) *Chromodoris luteopunctata* was described from specimens collected at Temara (Moroccan coast) by Gantès (1962). We consider *Chromodoris rododermata* Ortea and Valdés, 1991 to be a junior synonym of *C. luteopunctata*, since the colour differences used to establish the former are very weak. In fact, Valdés currently agrees with our view (pers. comm.).
- (87) Gosliner (1990) considered *Chromodoris britoi* a junior synonym of *Chromodoris clenchi* (Russell, 1935). Later, Ortea, Valdés and Espinosa (1994) reviewed the species included in the *C. clenchi* colour group, and determined that *C. clenchi*, *Chromodoris neona* (Marcus, 1955), *Chromodoris binza* Marcus and Marcus, 1963 and *Chromodoris britoi* Ortea and Pérez, 1983 are different species. However, Valdés (2000) presented a different view, one considering *C. binza* and *C. britoi* to be probably conspecific. A molecular study of specimens from both sides of the Atlantic is needed to resolve this issue.
- (88) The genus *Cadlina* was considered a member of the family Cadlinidae. Rudman (1984), after his review of the Indo-Pacific Chromodorididae genera, stated that *Cadlina* is a basal genus within this family. However, recent phylogenetic analyses based on nuclear (Thöllessen, 2000) and mitochondrial (Grande *et al.*, 2004a,b) genes provide evidence to exclude *Cadlina* from Chromodorididae. A recent paper presenting phylogenetic analysis based on



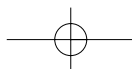


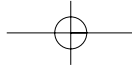
- the 16S rDNA gene (Wilson and Lee, in press) supports a very close relationship with *Chromodoris*. However, only *Actinocyclus*, *Cadlinella*, *Cadlina* and *Chromodoris* were considered in this study, which therefore does not provide strong evidence regarding the inclusion (or not) of *Cadlina* within Chromodorididae.
- (89) In the phylogenetic analysis of the cryptobranch dorids carried out by Valdés (2002a), the author established the synonymy at family level within this group. Thus, Archidorididae Bergh, 1891 and Aldisidae Odhner, 1939 are now considered junior synonyms of Dorididae Rafinesque, 1815. On the other hand, Kentrodorididae Bergh, 1891, Platydorididae Bergh, 1891, Baptdorididae Odhner, 1926, Rostangidae Pruvot-Fol, 1951, Geitodorididae Odhner, 1968 and Taringidae Odhner, 1968 (among others) would be junior synonyms of Discodorididae Bergh, 1891.
- (90) Valdés (2002a) concludes that the genus *Archidoris* Bergh, 1878 is a junior synonym of *Doris*.
- (91) Valdés (2002a) points out that *Doris sticta* is probably a synonym of *Doris eubalia* P. Fischer, 1872. Moreover, Valdés and Fahey (in press) recently concluded that the overlooked name *Glossodoris dorbignyi* J. E. Gray in M. E. Gray, 1850 is a senior synonym of *D. sticta*. However, these authors retain this name as valid in applying article 23.9.2. of the ICZN.
- (92) Ortea, Pérez Sánchez and Llera (1982) described two new species of *Aldisa* from the Canary Islands, *Aldisa smaragdina* and *Aldisa expleta*. The former has been subsequently recorded in different areas around the Iberian Peninsula (Atlantic and Mediterranean), as well as off Madeira and the Azores. However, Millen and Gosliner (1985) considered *A. smaragdina* to be a synonym of *Aldisa binotata* Pruvot-Fol, 1953, and *A. expleta* to be a synonym of *Aldisa banyulensis* Pruvot-Fol, 1951. García *et al.* (1986) presented a detailed comparison of all these species, confirming their validity.
- (93) According to Valdés (pers. comm.), *Discodoris confusa* could be a junior synonym of *Discodoris maculosa*, but this should be confirmed. For this reason, we prefer to retain both names as valid in the present paper.
- (94) Cervera, García-Gómez and García (1985) and Ortea (1990) redescribed *Geitodoris planata* based on specimens collected from southern mainland Spain and the Canary Islands. These authors considered this species to be different from *Archidoris stellifera* Vayssière, 1904 because of differences in their radular morphology. Cervera, García-Gómez and García (1985) indicated that the confusion existing in the literature up to 1985 should lead to a revision of the records for both species. Perrone (1987) redescribed *A. stellifera* from Italy (as *Discodoris*) and confirmed the absence of jaws, the presence of hooked radular teeth, and also of caryophyllidia. With this information in hand, Valdés (2002a) states that *A. stellifera* should be placed in a genus of caryophyllidia-bearing dorids, and that it is different from *G. planata*. *A. stellifera* has often been assigned to *Discodoris* over the past two decades.
- (95) After the phylogenetic and systematic revision of the cryptobranch dorids by Valdés (2002a), it is obvious that *Discodoris rosi* should be removed from the genus *Discodoris*. Dayrat and Gosliner (2005) transfer this species to the genus *Rostanga*, stating that the clade *Rostanga* + '*D.*' *rosi* is supported by having elongate, slender lateral teeth (all radular teeth or only part). However, these authors overlooked the phylogenetic analysis of *Rostanga* carried out by Garovoy, Valdés and Gosliner (2001). These authors build a data matrix based on 15 characters, 9 of these involving the radular teeth. According to their analysis, this genus is supported by three synapomorphies, although two of them appear in other cryptobranch genera. However, only the *Rostanga* species have the cusp of innermost lateral teeth of the radula characteristically folded inwards relative to the base of the teeth. This last feature is not present in '*D.*' *rosi* and is not considered in the phylogenetic analysis by Dayrat and Gosliner (in press). On the other hand, these authors consider '*D.*' *rosi* to have labial armature, and that the presence of this feature is an apomorphic condition. However, we consider that the presence of labial armature is a plesiomorphic condition (see also Garovoy, Valdés and Gosliner, 2001, and Valdés, 2002b), and specimens from different localities around the Iberian Peninsula (coasts from Granada, Straits of Gibraltar and southern Portugal) lack labial armature. For this reason, we prefer not to re-allocate this species into another known genus before re-analysing the case again.
- (96) Ortea and Martínez (1990) and Ortea and Cabrera (1999) considered *Thordisa azmanii* a junior synonym of *Thordis diuda* Marcus, 1955. This last species was described from a single specimen from Brazil, and has not been recorded again since. According to the above authors, it would be an amphiatlantic species. However, Chan and Gosliner (in press) and Chan (in press) review the species of this genus, as well as their phylogenetic relationships, and confirm the validity of *T. azmanii*.
- (97) Dorgan, Valdés and Gosliner (2002) comment that the reproductive system of *Platydoris stomascuta* is similar to other species of *Baptdoris*, and therefore it must be included in this genus. However, Fischer and Cervera (in press) point out that Bouchet (1977) does not describe radular teeth with denticles in this species, and they do not consider it as a true *Baptdoris*. As Fischer and Cervera (2005) state, a redescription of this species would be necessary before removing it from *Platydoris*, and we follow this criterion in the present paper.



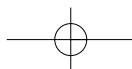


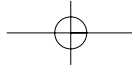
- (98) Although García (1986b) retained *Rostanga perspicillata* Bergh, 1881 as a valid name, Schmekel and Portmann (1982), Thompson and Brown (1984), Rudman and Avern (1989), Valdés and Gosliner (2001), and Garovoy, Valdés and Gosliner (2001) agree in considering this name to be a junior synonym of *Rostanga rubra* (Risso, 1818).
- (99) Thompson (1975) synonymised *Peltodoris* with *Discodoris*, and few authors followed Thompson's authority during some years, including some of the authors of the present paper. However, after the recent phylogenetic analyses of the cryptobranch dorids genera by Valdés (2002a), it is now clear that both genera are valid and belong to two different clades.
- (100) Dorgan, Valdés and Gosliner (2002) reviewed the genus *Platydoris* as well as its phylogenetic relationships, and concluded that *Platydoris maculata* Bouchet, 1977 is a junior synonym of *Baptodoris cinnabarina* Bergh, 1884.
- (101) Ballesteros and Valdés (1999) stated that the generic status of *Baptodoris perezii* is unclear. According to the description of this species, these authors indicated that it probably belongs to a different genus of the Discodorididae.
- (102) Valdés (2002a) has given a detailed discussion on the taxonomic status of *Carryodoris* Vayssière, 1919 and *Verrillia* Ortea and Ballesteros, 1981, concluding that both should be considered junior synonyms of *Geitodoris*.
- (103) Ortea, Luque and Templado (1988) transferred this species from the genus *Discodoris* to *Geitodoris* based on its radula and buccal armature. This was confirmed by Ortea (1990).
- (104) Valdés and Gosliner (2001), after providing an historical account of the genera *Aporodoris* Ihering, 1886 and *Taringa* Marcus, 1955, conclude that both are synonyms. Although the former is the older name, these authors prefer to displace the name *Aporodoris* (*nomen oblitum*) for its junior synonym *Taringa* (*nomen protectum*), under the provisions of article 23.9.2 of the new version of the Code (ICZN, 1999).
- (105) Valdés and Gosliner (2001) examined the type material of *Doris millegrana* Alder and Hancock, 1854 and compared it with the descriptions of *Taringa fanabensis* Ortea and Martínez, 1992 and *Taringa tarifaensis* García-Gómez, Cervera and García-Martín, 1993. They conclude that the three names are synonyms. These authors attribute this species to the genus *Taringa*.
- (106) Thompson (1975) and Gosliner and Behrens (1998) maintained that *Carminodoris* Bergh, 1889 should be considered a junior synonym of *Hoplodoris* Bergh, 1880. However, Valdés (2002a) stated that most of the Indo-Pacific species assigned to *Carminodoris* should probably be transferred to *Hoplodoris*, whereas the Atlantic species *Carminodoris boucheti* Ortea, 1979 and *Carminodoris spinobranchialis* Ortea and Martínez, 1992 fit the original description of the genus *Carminodoris*. This author also pointed out that the main problem involved in determining the phylogenetic relationships of *Carminodoris* is the true identity of its type species, i.e. *Carminodoris mauritiana* Bergh, 1889, not collected after the original description. Thus, all the diagnostic features of the genus, except the penial hooks and the denticulate outermost lateral teeth, are present in the type species of *Discodoris*. According to Valdés, these differences can be attributed to specific variations, but further detailed study, including anatomical investigations of *C. mauritiana*, is needed before a definitive synonymy can be proposed. Fahey and Gosliner (2003) then provided a detailed study on the identity of both genera and, after a phylogenetic analysis, concluded that *Carminodoris* and *Hoplodoris* are synonyms. They consider *C. mauritiana* and *Hoplodoris desmoparypha* Bergh, 1880 (type species of *Hoplodoris*), as well as *Carminodoris grandiflora* (Pease, 1860), to be conspecific. However, Dayrat and Gosliner (in press) subsequently disagreed with this view, based on anatomical data regarding the accessory vestibular spine, and therefore they retain both genera as separate. Nevertheless, Fahey and Gosliner (2003) and Dayrat and Gosliner (in press) do not include *C. boucheti* or *C. spinobranchialis* in their discussions on *Carminodoris* versus *Hoplodoris*, since these authors do not consider either species to be a member of either of these genera, regardless of whether they are synonyms (Gosliner, pers. comm.). Thus, other genus/genera should be found to accommodate both species.
- (107) Brunckhorst and Willan (1989) synonymised *Phyllidia pulizeri* Pruvot-Fol, 1951 and *Phyllidia rolandiae* Pruvot-Fol, 1951 with *Phyllidia flava* (Aradas, 1847). Some years later, Brunckhorst (1993) includes the two former names within the list of synonyms of *P. flava*.
- (108) *Phyllidiopsis bayi* was originally placed in the genus *Fryeria* (Bouchet, 1983; Brunckhorst, 1993). However, Valdés and Gosliner (1999) pointed out that the external and internal features of this species fit with that of the genus *Phyllidiopsis*. On the other hand, Yonow (1986) considered the genus *Fryeria* to be a junior synonym of *Phyllidia*, and proposed the new genus *Reyfria* for those species having the anus placed ventrally. However, Gosliner and Behrens (1988) did not agree with this proposal, since they found some intraspecific variability in this character. Valdés and Gosliner (1999) set forth the possibility that members of the genus *Phyllidia* with a ventral anus could form a monophyletic subclade, adding that only a phylogenetic study of this genus could shed additional light



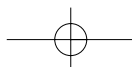


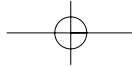
- on this matter. Nevertheless, according to these authors, little taxonomic importance can be attributed to a feature that has changed so many times over the course of dorid evolution, and which can be variable within the same species, as shown by Gosliner and Behrens (1988). Thus, Valdés and Gosliner (1999) consider *Fryeria* and *Reyfria* to be junior synonyms of *Phyllidia*.
- (109) Valdés *et al.* (1996) considered *Dendrodoris languida* Pruvot-Fol, 1951 a junior synonym of *Dendrodoris limbata*, as well as *Dendrodoris longula* Pruvot-Fol, 1951 and *Dendrodoris pseudorubra* Pruvot-Fol, 1951, to be *nomina dubia*. According to Valdés (pers. comm.), *Dendrodoris inornata* could be either *D. limbata* or *Dendrodoris grandiflora*, although it resembles the latter more.
- (110) Valdés *et al.* (1996) pointed out that all records from northern Spain under the names *D. limbata* and *D. grandiflora* must be referred to as *D. herytra*. According to these authors, the record from the Cíes Islands (northwestern Spain) under the name *D. grandiflora* (Rolán, Otero and Rolán-Álvarez, 1989) also appears to belong to *D. herytra*. Following Valdés *et al.* (1996), we cannot confirm whether the *D. limbata* record by Bergh (1892) from the Azores belongs to *D. herytra*.
- (111) Valdés and Ortea (1997) considered *Doriopsilla pusilla* Pruvot-Fol, 1951 and *Doriopsilla evanae* Ballesteros and Ortea, 1980 to be junior synonyms of *Doriopsilla areolata*. These authors also proposed the existence of three subspecies within *D. areolata*. In the geographic area covered by the present paper, only the subspecies *D. areolata areolata* is found.
- (112) Valdés *et al.* (1996) pointed out that *Dendrodoris racemosa* Pruvot-Fol, 1951 and *Dendrodoris minima* Pruvot-Fol, 1951 should be considered junior synonyms of *Doriopsilla pelseneeri* De Oliveira, 1895.
- (113) Schrödl, Wägele and Willan (2001) proposed that the taxon Dexiarchia join the Dorioxidae and the Cladobranchia in a higher level grouping. The presence of aliform jaws is a confirmed autapomorphy, whereas some other potential autapomorphies have yet to be confirmed by future cladistic analysis.
- (114) The taxon Cladobranchia (containing Dendronotina plus Aeolidina and 'Arminina') was proposed by Willan and Morton (1984). Recent phylogenetic analyses based on morphological and molecular data (Wägele and Willan, 2000; Schrödl, Wägele and Willan, 2001; Wägele, Vonnemann and Wägele, 2003; Grande *et al.*, 2004a,b; Vonneman *et al.*, in press) where some autapomorphies are highlighted, strongly support this grouping.
- (115) Luque (1983, 1986) and Templado, Talavera and Murillo (1987) pointed out that under the name *Tritonia manicata* there are two clearly distinct forms, one Atlantic and the other Mediterranean. Both forms can be sympatric in some regions of southeastern Spain. A further detailed study on these populations could lead to the conclusion that they are separate species. If that were the case, the Mediterranean species should be named *Tritonia moesta* (Bergh, 1884).
- (116) The name *Tritonia odhneri* (Tardy, 1963) had already been used to designate *Tritonia odhneri* Marcus, 1959, a species from the Chilean coast. Marcus (1983) assigns the new denomination *Tritonia nilsodhneri* to the species described by Tardy.
- (117) Phylogenetic analysis by Wägele and Willan (2000) has shown that Arminoidea represents an amalgam of heterogeneous families. No synapomorphy is known to unite all the families attributed to 'Arminoidea'. This idea is backed up by some molecular analyses (Thölleson, 1999b; Wägele, Vonnemann and Wägele, 2003).
- (118) Miller and Willan (1986) have extensively reviewed the nomenclatural history of this family. Up to six different names have been attributed to it, and they concluded that the correct family name should be Zephyrinidae Iredale and O'Donoghue, 1923, and not Janolidae, a denomination more commonly used in recent European literature. However, according to the law of priority, the correct name for the family is Proctonotidae Gray, 1853.
- (119) Because of the difficulty in clearly defining the genera *Janolus* and *Antiopella*, Gosliner (1981) synonymised them, with the former name prevailing.
- (120) Gosliner and Griffiths (1981) pointed out the occurrence of species including characteristics of both *Flabellina* and *Coryphella*. Therefore, no such generic division is necessary, and the generic name *Coryphella* Gray, 1850 is considered a junior synonym of *Flabellina* Voigt, 1834. This proposal was confirmed by phylogenetic analyses by Gosliner and Kuzirian (1990) and Gosliner and Willan (1991). Nevertheless, some authors do not agree with this view, and prefer to retain *Coryphella* (e.g. Ortea, Caballer and Moro, 2004).
- (121) *Flabellina pellucida* is a coldwater Atlantic species, whose presence in the Mediterranean has yet to be confirmed.
- (122) Thompson and Brown (1984) argued that *Facelina punctata* is a junior synonym of *Facelina annulicornis*.
- (123) *Eolis drummondi* (Thompson, 1843) has been traditionally considered a junior synonym of *Eolis curta* Alder and Hancock, 1843 (Thompson and Brown, 1984). More recently, the latter name has been called a synonym of *Facelina bostoniensis* (but see Brown, 1981; Thompson and Brown, 1984). According to Thompson and Brown, (1984), the description of *Eolis auricularia* Müller, 1776 could correspond to *Eolis coronata*, *E. curta*, or both. The doubt will





- remain, since type material of these taxa is presumably lost, and both *E. coronata* and *E. curta* are found in the type locality of *E. auricularia*. These authors also point out that Forbes and Goodsir (1839) were the ones who first applied a valid specific name (*coronata*) to specimens attributed to this species, which is similar to, but different from, *E. curta*.
- (124) Burn and Narayanan (1970) and Gosliner (1979) considered *Learchis* to be a junior synonym of *Caloria*, since they saw no clear distinction between the two genera. However, we prefer to retain both names, pending a phylogenetic analysis including both genera.
- (125) *Dondice banyulensis* was transferred to the genus *Godiva* by Edmunds (1964), considering the generic diagnosis included in the original description by Macnae (1954). Later, Willan (1987b) confined the genus *Godiva* to those species having penial spines. Eight species are then excluded, *Godiva banyulensis* among them. The generic name *Dondice* is readopted in the present paper.
- (126) Ortea and Moro (1997) suggested that the generic name *Rolandia* Pruvot-Fol, 1951 should be replaced by *Pruvotfolia* Tardy, 1969, since the former is preceded by *Rolandia* Lacaze-Duthiers, 1890, an octocorallian genus.
- (127) According to Gosliner (1990), *Rioselleolis anadoni* Ortea, 1979 is likely to be a junior synonym of *Babakina festiva* (Roller, 1972), since the former was described from a single specimen and its known morphology is strikingly similar to the latter. However, later records from the northern and southern Iberian Peninsula, as well as the Canary Islands, have led us to retain this species pending a review of the genus.
- (128) According to Rudman (1982), the genus *Berghia* Trinchese, 1877 should be regarded as a junior synonym of *Spurilla* Bergh, 1864. This criterion was followed in the previous catalogue (Cervera *et al.*, 1988) and in a subsequent publication (García-Gómez and Thompson, 1990), in which *Berghia columbina* was described (as *Spurilla*). Nevertheless, other authors continue to accept both genera as valid. A detailed phylogenetic study of the Aeolididae is thus needed in order to untangle this situation. Until then, we prefer to continue using both names.
- (129) Although some authors still consider *Spurilla sargassicola* Bergh, 1861 to be valid (e.g. Ortea *et al.*, 2001; Moro *et al.*, 2003), most now consider it a junior synonym of *Spurilla neapolitana*. On the other hand, García and Cervera (1985) established *Spurilla vaysierei* on the basis of its denticulate masticarory jaws. However, we consider that a review of the genus in the Atlantic Ocean is needed to confirm the validity of these names.
- (130) Miller (2001) established the genus *Antaeolidiella* to accommodate *Aeolidiella indica*, since its cerata arrangement and the shape of the oral glands are not consistent with *Aeolidiella*, nor with any other aeolid genera. A phylogenetic analysis of the genera of Aeolididae, including this species, is needed to confirm the validity of Miller's proposal. In the meantime, we prefer to consider this species within *Aeolidiella*.
- (131) Gosliner (1979) considered the genus *Limenandra* Haelfinger and Stamm, 1958 to be a junior synonym of *Baeolidia*. This opinion has been accepted by most authors, although Schmekel and Portmann (1982) continued to use the former name. In a recent review of the family Aeolidae from New Zealand, Miller (2001) argues that the genus *Limenandra* should be retained. Therefore, we decided to maintain both names until a phylogenetic study of this family can resolve the matter.
- (132) The specimen recorded from the Straits of Gibraltar under the name *Eubranchus tricolor* by García-Gómez (1987) corresponds to one of the two specimens from a species later described as *Eubranchus linensis* (García-Gómez, Cervera and García, 1990).
- (133) Picton (in Platts, 1985) suggested that *Eubranchus vittatus* may not be a valid species, and may be synonymous with *Eubranchus cingulatus*. On the other hand, according to Wilson and Picton (1983), the illustrations presented by Edmunds and Kress (1969) and Schmekel and Portmann (1982) for *E. cingulatus* belong to another species, *Eubranchus doriae*. If this is the case, *E. cingulatus* would be a strictly Atlantic species, and specimens recorded by Templado, Talavera and Murillo (1983) from Cabo de Palos (southeastern Spain) would belong to *E. doriae*. Nevertheless, a large specimen (13 mm) was collected at Cape Gata (southeastern Spain) (Templado, unpubl. data), which matches the illustration by Lemche (in Just and Edmunds, 1985, pl. 46) of what these authors consider the true *E. cingulatus*. However, Picton and Morrow (1994) and Picton (2002) consider that the so-called *E. cingulatus* in the United Kingdom is a junior synonym of *E. vittatus*, according to the law of the priority. Moreover, Picton and Morrow (1994) included an undescribed species of this genus (*Eubranchus* sp. 'A'), formerly identified as *E. vittatus*, which could match up with the so-called *E. cingulatus* of Just and Edmunds (1985). Further studies on internal anatomy, as well as molecular research, should be carried out on Iberian and other European specimens before a conclusive decision is made.
- (134) Until very recently, the genus *Calma* had only one representative, *Calma glaucooides*. In their review, Calado and Urgorri (2002) consider the sympatric existence of two sibling species, which have different ecological niches in the adult phase. Their analysis of previously published data leads to the attribution of some former records to the new species, *Calma gobioophaga*.





- (135) There is no agreement on which should be the valid name attributed to this family. Some authors use Cuthonidae Odhner, 1934 whilst others use Tergipedidae Bergh, 1889. For more details, see discussions by Edmunds and Just (1983) and Platts (1985). In the present paper, we use the second name, but in an uncritical way, as it is used, for example, by Thompson and Brown (1984) and Gosliner (1987), among others, or on the site of the Checklist of European Marine Molluscs (CLEMAM); <http://www.somali.asso.fr/clemam/biotaxis.php>
- (136) Some authors consider *Catriona* Winckworth, 1941 to be a junior synonym of *Cuthona*, whereas others keep them as separate genera. In the present paper, we follow the former option, according to the criteria of Brown (1980) and Thompson and Brown (1984). The latter generic name is also used on the Checklist of European Marine Molluscs (CLEMAM); <http://www.somali.asso.fr/clemam/biotaxis.php>. However, a detailed phylogenetic analysis is still needed to resolve this controversy.
- (137) According to Miller and Willan (1991), the family Embletonidae should belong to Dendronotoidea, due to the presence of an oral veil, lack of oral tentacles, three-lobed oral gland, and the structure of the apical region of the cerata. In *Embletonia gracilis* Risbec, 1928, an Indo-Pacific species, there is also a divided apex. This statement has been not widely accepted, and a phylogenetic study of this family could help to resolve this matter.

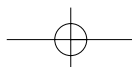
## CONCLUSIONS

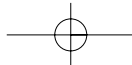
As a result of the bibliographical compilation carried out for the elaboration of this new checklist, we have found 523 species of opisthobranchs recorded for the study area, 23 belonging to Architectibranchia, 111 to Cephalaspidea ss., 14 to Anaspidea, 4 to Acochliomorpha, 37 to Thecosomata, 7 to Gymnosomata, 43 to Sacoglossa, 3 to Umbraculoidea, 16 to Pleurobranchoidea, and 265 to Nudibranchia (127 Doridina, 42 Dendronotina, 9 Arminina, and 87 Aeolidina). This means a large increase (134 species more) compared with the previous checklist by Cervera *et al.* (1988, included 389 species) (see table I), due, in part, to the extension of the study area to the Azores, Madeira and Selvagens archipelagos. It is also noteworthy that 644 bibliographic references are mentioned throughout the text, most of them containing data on the opisthobranch fauna of the areas covered by the present checklist. The others are papers focused on different taxonomic, systematic, or phylogenetic aspects, which have been used to elaborate the present list. About 275 of these references are subsequent to the previous checklist (published 1989 - 2005).

The European Register of Marine Species (ERMS) (Costello, Emblow and White, 2001), which includes all the living marine organisms recorded in the Mediterranean and Black Seas and off the Atlantic and African coasts from the North Pole to the parallel 26° N, encompasses 664 opisthobranch species. Therefore, the 523 opisthobranchs recorded in our study area repre-

sent 78.9 % of the known European and North African species. This shows, on one hand, the high degree of biodiversity existing in this area and, on the other hand, the noteworthy level of knowledge regarding its opisthobranch fauna. The comparison of the number of species by higher taxa between the current checklist and that from Costello, Emblow and White (2001) (see table I) is indicative of the existing level of knowledge for each of them in study area: very high in almost all them, but still having some gaps, such as those concerning Gymnosomata and Acochliomorpha. This indicates, clearly, the scarcity of studies on the opisthobranch fauna of the planktonic and interstitial habitats, indicating that such research should be intensified in the near future. For Pleurobranchoidea, the explanation of why there are more species on our checklist than that of the ERMS, which includes our study area, is that the latest version does not include two species recently described or recorded for the Canary, Selvagens and Madeira archipelagos: *Pleurobranchus garciagomezi* Cervera, Cattaneo-Vietti and Edmunds, 1996 and *Berthella canariensis* Cervera, Gosliner, García-Gómez and Ortea, 2000.

Also remarkable is the high number of new species described since 1975 in our study area, 117 (nearly 20% of the whole), of which 53 are from the Canary Islands. Some of these species are currently considered junior synonyms of other taxa after several global taxonomic revisions of different groups (see the Remarks section). These specific taxa described as new and



Table I. Numerical comparison between the species recorded on the present checklist (bold) and those recorded on the previous checklists by Ros (1976a) and Cervera *et al.* (1988), and on the European Register Marine Species (Costello *et al.*, 2001)

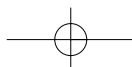
Higher taxa	Ros (1976a)	Cervera <i>et al.</i> (1988)	<b>Present checklist</b>	EMRS (2001)
<b>ARCHITECTIBRANCHIA</b>	13	19	<b>23</b>	31
<b>CEPHALASPIDEA</b>	70	76	<b>111</b>	123
<b>ANASPIDEA</b>	10	9	<b>14</b>	15
<b>ACOCHLIDIOMORPHA</b>	-	-	<b>4</b>	16
<b>THECOSOMATA</b>	28	28	<b>37</b>	39
<b>GYMNOSOMATA</b>	5	4	<b>7</b>	18
<b>RHODOPEMORPHA</b>	-	-	-	2
<b>SACOGLOSSA</b>	16	33	<b>43</b>	47
<b>UMBRACULACEA</b>	3	3	<b>3</b>	4
<b>PLEUROBRANCHACEA</b>	9	8	<b>16</b>	15
<b>NUDIBRANCHIA</b>	104	209	<b>265</b>	354
Doridina	52		<b>127</b>	178
Dendronotina	16	33	<b>42</b>	58
Arminina	3	6	<b>9</b>	18
Aeolidina	33	63	<b>87</b>	117
Total	258	389	<b>523</b>	664

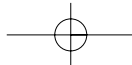
synonymised later include: *Runcina aurata* García-Gómez, López, Luque and Cervera, 1986 (synonym of *R. coronata* (Quatrefages, 1844)), *Platydorid maculata* Bouchet, 1977 (synonym of *Baptodorid cinnabarina* (Bergh, 1884)), *Chromodorid rodomaculata* Ortea and Valdés, 1991 (synonym of *C. luteopunctata* (Gantès, 1962)), *Taringa fanabensis* Ortea and Martínez, 1992 and *T. tarifaensis* García-Gómez, Cervera and García-Martín, 1993 (synonyms of *T. millegrana* (Alder and Hancock, 1854)), and *Doriopsilla evanae* Ballesteros and Ortea, 1980 (synonym of *Doriopsilla areolata* Bergh, 1880). Although it has been suggested that other species are also synonyms, these cases are not generally accepted, and the study of additional material is needed. Thus, *Chromodorid britoi* Ortea and Pérez, 1983 could be a junior synonym of *Chromodorid binza* Marcus and Marcus, 1963; *Polycera aurantiomarginata* García-Gómez and Bobo, 1984 could be a junior synonym of *Polycera chilluna* Marcus, 1961; *Discodorid confusa* Ballesteros, Llera and Ortea, 1985 could be a junior synonym of *Discodorid maculosa* Bergh, 1884; *Glossodorid edmundsi* Cervera, García-Gómez and Ortea, 1989 could be a junior synonym of *Glossodorid ghanensis* Edmunds, 1968; and *Oxynoe benchijigua* Ortea, Moro and Espinosa, 1999 could be a junior synonym of *Oxynoe antillarum* Mörch, 1863. Moreover, we consider the three new species described by Vilella (1994) (*Palio espagno-*

*li*, *Cadlina boscai* and *Dendrodoris kessneri*) to be probable synonyms of *Polycera dubia* (Sars, 1829), *Cadlina laevis* (Linnaeus, 1767), and *Dendrodoris limbata* (Cuvier, 1804), respectively. In all three of these cases, the species descriptions are based on a single specimen, the museum or institution where the specimens are housed are not specified, a comparison with close species of the same region is not given, and some important references are overlooked. Furthermore, several species of cephalaspids (about 20) are only known from old literature, and their true identity should be reviewed.

From the 523 species recorded, 49 of them are planktonic and 474 are benthonic, of which 441 are littoral species and only 33 are bathyal species (most of them studied by Bouchet, 1975, 1997, more than thirty years ago). Therefore, whilst the littoral opisthobranchs have been intensively studied in the geographic area covered in the present paper, the deep-sea species remain poorly known. Study of the opisthobranchs from the bathyal bottoms throughout this geographic area should be also intensified in the near future.

Concerning geographical distribution, the number of species recorded in each of the 12 areas or regions considered is presented in table II. These numbers may be considered as indicative of the diversity of species in each of the regions, but they are also influenced by the level of available





knowledge, which is obviously not the same for all areas. For example, there is a remarkably high number of species registered in certain regions, such as the Canary Islands (252 species), Portuguese mainland (213 species), and the Straits of Gibraltar, eastern Andalusia, Spanish Levant and Catalonia (more than 170 species each of them). Table III includes the complete list of the species recorded, indicating the distribution of each one over the 12 different geographical areas, in order to give a general picture of their geographic distribution range.

As explained above, the criteria used to define these areas have been more or less arbitrary. In order to explore the true biogeographical relationships between these areas, a cluster analysis was performed using each area as an OTU (Operational Taxonomic Unit) and all the species ( $n = 511$ , excluding the doubtful records) were included in the data matrix using simply presence/absence (1/0) in the 12 areas. Jaccard's index (Sneath and Sokal, 1973) was used to build the triangular distance matrix. The data were subsequently amalgamated using Ward's method (Ward, 1963). The hierarchical tree obtained is shown in figure 2. The same procedure was used for a smaller data matrix where species that occurred in only one area (poorly known, recently described, etc.) were removed ( $n = 349$ ). The tree obtained (not shown) is very similar.

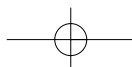
The cluster analysis clearly distinguishes three separate groups (figure 2): Atlantic coast, Mediterranean coast, and the Atlantic islands. The

first two groups are more closely related to each other than to the third one, probably due to the presence in the latter of many amphiatlantic and Mauritanian species. Nevertheless, care should be exercised in this interpretation, due to the scarcity of data available from the African coast. Despite slightly different approaches, the same general pattern of division was obtained in analyses involving other marine invertebrate groups, such as sponges (Carballo, Naranjo and García-Gómez, 1997), tunicates (Naranjo, Carballo and García-Gómez, 1998), and cheilostomate bryozoans (López de la Cuadra and García-Gómez, 1994). In our case, the area corresponding to the Straits of Gibraltar (area 5) clearly appears grouped together with the Mediterranean cluster. The same pattern is observed in tunicates (Naranjo, Carballo and García-Gómez, 1998). Nevertheless, data from sponges (Carballo, Naranjo and García-Gómez, 1997) reveal more affinities of the Straits' poriferan fauna with the Mauritanian region, which in our case is represented by the Canary and Selvagens Islands (area 10) and the Madeira archipelago (area 11), whereas a balanced affinity between Atlantic and Mediterranean fauna is obtained for this area in bryozoans (López de la Cuadra and García-Gómez, 1994).

On the other hand, the record of *Bursatella leachi* in the Balearic Islands constitutes the first known lessepsian mollusc that has reached the westernmost area of the Mediterranean. To date, this species was only known from the eastern and central Mediterranean (Zenetos *et al.*, 2003).

Table II. Detail of the number of recorded species of each one of the different opisthobranch orders from each geographical area

Higher taxa	Geographical areas											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>ARCHITECTIBRANCHIA</b>	8	7	9	5	3	5	4	9	5	9	6	15
<b>CEPHALASPIDEA</b>	31	28	38	13	24	28	29	27	20	50	28	37
<b>ANASPIDEA</b>	5	5	6	3	4	6	6	7	7	13	8	6
<b>ACOCHLIDIOMORPHA</b>	-	4	1	-	-	1	3	-	-	-	1	-
<b>THECOSOMATA</b>	5	10	13	1	8	21	10	10	8	30	1	3
<b>GYMNOSOMATA</b>	-	2	1	-	-	-	1	3	2	1	-	2
<b>SACOGLOSSA</b>	8	8	11	10	14	13	22	11	12	27	12	8
<b>UMBRACULOIDEA</b>	-	-	3	1	2	3	2	2	2	2	2	2
<b>PLEUROBRANCHOIDEA</b>	7	2	5	6	6	8	6	5	8	10	10	8
<b>NUDIBRANCHIA</b>	90	93	126	72	112	98	100	112	57	110	44	52
Doridina	49	42	56	37	63	58	42	55	34	58	31	29
Dendronotina	18	17	18	6	11	12	15	12	7	12	3	8
Arminina	3	2	6	2	3	3	3	4	2	3	2	1
Aeolidina	20	32	46	27	36	25	39	41	14	37	8	14
Total	154	159	213	112	174	183	183	186	121	252	112	133



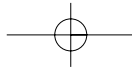
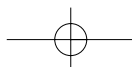


Table III. Known distribution of the recorded species throughout the different geographical areas

	1	2	3	4	5	6	7	8	9	10	11	12
<b>Order ARCHITECTIBRANCHIA</b>												
<b>Family Ringiculoidae</b>												
<i>Ringicula auriculata</i>	+	+	+	+	+	+	+	+	+	+	+	
<i>Ringicula buccinea</i>	+	+	+					+				
<i>Ringicula nitida</i>	+	+	+	+								
<i>Ringicula conformis</i>	+	+	+	+	+	+	+	+	+	+	+	
<i>Ringicula someri</i>										+	+	
<i>Ringicula minutula</i>								+	+			
<i>Ringicula blanchardi</i>	+	+	+									+
<i>Ringicula semistriata</i>												+
<b>Family Acteonidae</b>												
<i>Acteon tornatilis</i>	+	+	+	+	+	+	+	+	+	+		+
<i>Acteon monterosatoi</i>			+			+		+				+
<i>Acteon incisus</i>												+
<i>Crenilabrum exilis</i>	+	+				+			+			+
<i>Pseudacteon luteofasciatus</i>								+				
<i>Japonacteon pusillus</i>	+		+	+				+		+	+	+
<i>Liocarenus globulinus</i>								+				+
<i>Callostracon amabile</i>										+	+	+
<i>Callostracon meeki</i>												+
<i>Acteonina chariis</i>												+
<i>Tomlinula turrata</i>												+
<i>Inopinodon azoricus</i>												+
<b>Family Amplustridae</b>												
<i>Hydatina physis</i>			+							+	+	+
<i>Hydatina velum</i>							+			+		
<i>Micromelo undatus</i>										+		+
<b>Order CEPHALASPIDEA s. s.</b>												
<b>Family Diaphanidae</b>												
<i>Diaphana minuta</i>		+						+		+	+	
<i>Diaphana globosa</i>	+											
<i>Diaphana expansa</i>	+		+									
<i>Diaphana seguenzae</i>												+
<i>Diaphana flava</i>											+	
<i>Colobocephalus striatulus</i>	+							+				
<i>Colpodaspis pusilla</i>						+		+				
<i>Rhinodiaphana ventricosa</i>						+						
<b>Family Retusidae</b>												
<i>Retusa truncatula</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Retusa obtusa</i>	+		+				+	+	+			
<i>Retusa leptoneilema</i>									+	+	+	
<i>Retusa pellucida</i>		+				+						
<i>Retusa piriformis</i>									+			
<i>Retusa mammillata</i>	+	+	+		+	+	+	+	+	+	+	
<i>Retusa obesa</i>			+									
<i>Retusa tornata</i>		+								+	+	
<i>Retusa mariae</i>										+		
<i>Retusa leuca</i>												+
<i>Retusa multiquadrata</i>												+
<i>Cylichnina umbilicata</i>	+	+	+		+	+	+	+	+		+	+
<i>Cylichnina nitidula</i>	+	+					+			+	+	
<i>Cylichnina robagliana</i>	+		+									
<i>Cylichnina crebrisculpta</i>	+											



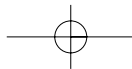
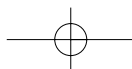


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<i>Cylichnina canariensis</i>										+		
<i>Cylichnina tenerifensis</i>										+		
<i>Volvulella acuminata</i>	+	+	+		+	+	+	+				
<i>Pyrrunculus ovatus</i>	+	+	+									+
<i>Pyrrunculus hoernesii</i>						+						
<i>Pyrrunculus spretus</i>											+	
<i>Relichma simplex</i>												+
<b>Family Cylichnidae</b>												
<i>Acteocina protracta</i>												+
<i>Acteocina pusillina</i>	+											
<i>Cylichna cylindracea</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Cylichna alba</i>	+		+						+			+
<i>Cylichna crossei</i>								+	+			
<i>Cylichna richardi</i>			+									+
<i>Cylichna propocylindracea</i>										+		
<i>Cylichna piettei</i>												+
<i>Cylichna chevreuxi</i>												+
<i>Scaphander lignarius</i>	+	+	+	+	+	+	+	+	+	+	+	
<i>Scaphander punctostriatus</i>	+		+					+		+		+
<i>Scaphander gracilis</i>												+
<i>Scaphander nobilis</i>												+
<i>Meloscapander imperceptus</i>												+
<i>Roxania utriculus</i>	+	+	+			+	+	+	+	+	+	
<i>Roxania pingucicola</i>	+		+									+
<i>Roxania monterosatoi</i>												+
<b>Family Philinidae</b>												
<i>Philine aperta</i>	+	+	+	+	+	+	+	+	+	+	+	
<i>Philine scabra</i>	+	+	+		+	+		+		+	+	
<i>Philine punctata</i>		+	+		+	+		+				
<i>Philine catena</i>	+	+	+		+	+	+	+	+	+	+	
<i>Philine lima</i>		+										+
<i>Philine quadrata</i>	+	+	+									+
<i>Philine angulata</i>						+				+		
<i>Philine intricata</i>			+			+				+		+
<i>Philine monterosatoi</i>	+		+					+			+	
<i>Philine approximans</i>												+
<i>Philine azorica</i>												+
<i>Philine monilifera</i>												+
<i>Philine rugulosa</i>												+
<i>Philine calva</i>										+		+
<i>Philine condensa</i>										+		+
<i>Philine complanata</i>											+	
<i>Philine desmotis</i>											+	
<i>Philine trachyostraca</i>											+	
<i>Philine iris</i>					+	+	+			+		
<i>Laona pruinosa</i>			+									
<b>Family Philinoglossidae</b>												
<i>Philinoglossa helgolandica</i>		+										
<b>Family Gastropteridae</b>												
<i>Gastropteron meckeli</i>	+	+	+	+		+	+	+	+			
<b>Family Aglajidae</b>												
<i>Aglaja tricolorata</i>				+		+	+			+		
<i>Chelidonura africana</i>			+		+	+	+			+	+	
<i>Chelidonura leopoldi</i>										+		



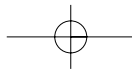
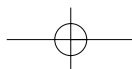


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<i>Odontoaglaja sabadiega</i>										+	+	
<i>Melanochlamys maderense</i>										+	+	
<i>Melanochlamys wildpreti</i>										+		
<i>Philinopsis depicta</i>			+	+		+	+	+		+		
<i>Doridium laurentianum</i>										+		
<b>Family Runcinidae</b>												
<i>Runcina coronata</i>	+	+	+	+	+	+	+					+
<i>Runcina ornata</i>					+					+		
<i>Runcina capreensis</i>						+	+	+				
<i>Runcina africana</i>					+					+		
<i>Runcina ferruginea</i>	+	+	+		+		+					
<i>Runcina adriatica</i>										+		+
<i>Runcina falciforme</i>										+		
<i>Runcina paupera</i>										+		
<i>Runcina macrodenticulata</i>					+							
<i>Runcina bahiensis</i>					+							
<i>Runcina genciana</i>										+		
<i>Runcina hidalgoensis</i>										+		+
<i>Runcina medanensis</i>										+		
<i>Runcina palominoi</i>										+		
<b>Family Bullidae</b>												
<i>Bulla striata</i>		+	+	+	+	+	+	+	+	+	+	+
<i>Bulla amygdala</i>			+							+		
<i>Bulla semilaevis</i>			+									+
<i>Bulla mabiliei</i>										+	+	
<i>Bulla millepunctata</i>	+		+									
<b>Family Haminoeidae</b>												
<i>Haminoea hydatis</i>		+	+	+	+	+	+	+	+	+	+	+
<i>Haminoea navicula</i>	+	+	+				+	+				
<i>Haminoea orbignyana</i>		+	+	+		+	+	+	+	+		
<i>Haminoea elegans</i>										+		
<i>Haminoea ortei</i>						+	+			+		+
<i>Haminoea callidegenita</i>	+	+		+	+							
<i>Haminoea templadoi</i>				+								
<i>Haminoea exigua</i>					+		+					
<i>Atys blainvilliana</i>							+	+	+			
<i>Atys jeffreysi</i>					+		+	+	+	+	+	
<i>Atys macandrewi</i>										+	+	+
<i>Weinkauffia turgidula</i>			+			+	+			+	+	
<i>Cylichnium africanum</i>	+											
<i>Cylichnium oliviformae</i>		+										+
<i>Weinkauffia (?) semistriata</i>			+				+		+	+		
<b>Order ANASPIDEA</b>												
<b>Family Akeridae</b>												
<i>Akera bullata</i>	+	+	+			+	+	+	+	+	+	+
<b>Family Aplysiidae</b>												
<i>Aplysia depilans</i>	+	+	+		+	+	+	+	+	+	+	+
<i>Aplysia fasciata</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Aplysia punctata</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Aplysia dactylomela</i>										+	+	
<i>Aplysia juliana</i>										+		
<i>Aplysia morio</i>										+		



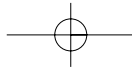
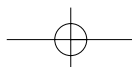


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<i>Aplysia parvula</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Bursatella leachi</i>									+			
<b>Family Dolabriferidae</b>												
<i>Petalifera petalifera</i>			+			+	+	+	+	+	+	
<i>Petalifera ramosa</i>										+		
<i>Dolabrifera dolabrifera</i>										+	+	
<b>Family Notarchidae</b>												
<i>Notarchus punctatus</i>								+		+		
<i>Stylocheilus striatus</i>										+	+	+
<b>Order ACOCHLIDIOMORPHA</b>												
<b>Family Hedylopsidae</b>												
<i>Hedylopsis spiculifera</i>		+	+				+				+	
<b>Family Asperinidae</b>												
<i>Asperina loricata</i>		+										
<b>Family Microhedylidae</b>												
<i>Unela glandulifera</i>		+					+					
<i>Pontohedyle milaschewitchii</i>		+				+	+					
<b>Order THECOSOMATA</b>												
<b>Suborder EUTHECOSOMATA</b>												
<b>Family Cavoliniidae</b>												
<i>Cavolinia tridentata</i>			+			+	+	+	+	+		
<i>Cavolinia inflexa</i>	+	+	+			+	+	+	+	+		
<i>Cavolinia uncinata</i>								+		+		
<i>Cavolinia flava</i>					+	+		+		+	+	
<i>Cavolinia globulosa</i>										+		
<i>Diacria quadridentata</i>						+				+		
<i>Diacria trispinosa</i>		+	+		+	+	+			+		
<i>Diacria atlantica</i>												+
<i>Diacria rubecula</i>										+		+
<i>Clio pyramidata</i>		+	+		+	+		+	+	+		
<i>Clio cuspidata</i>			+		+	+	+			+		
<i>Clio recurva</i>	+											
<i>Clio polita</i>										+		
<i>Creseis acicula</i>		+			+	+	+	+	+	+		+
<i>Creseis conica</i>		+				+			+	+		
<i>Hyalocylis striata</i>						+				+		
<i>Styliola subula</i>			+			+	+	+	+	+		
<i>Cuvierina columnella</i>			+			+				+		
<i>Cuvierina spoeli</i>			+				+					
<i>Dicavolinia limbata</i>						+		+		+		
<i>Dicavolinia constricta</i>										+		
<i>Dicavolinia deshayesi</i>										+		
<i>Dicavolinia atlantica</i>												
<b>Family Limacinidae</b>												
<i>Limacina helicina</i>	+	+	+									
<i>Limacina retroversa</i>		+								+		
<i>Limacina bulimoides</i>		+	+							+		
<i>Limacina inflata</i>		+		+	+	+	+	+	+	+		
<i>Limacina lesueurii</i>	+					+				+		
<i>Limacina trochiformis</i>						+	+		+	+		



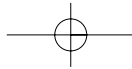
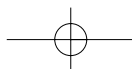


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<b>Suborder PSEUDOTHECOSOMATA</b>												
<b>Family Cymbuliidae</b>												
<i>Cymbulia peroni</i>	+	+				+	+	+		+		
<i>Cymbulia parvidentata</i>						+						
<i>Corolla ovata</i>										+		
<b>Family Desmopteridae</b>												
<i>Desmopterus cirroptera</i>			+							+		
<i>Desmopterus papilio</i>										+		
<b>Family Peraclidae</b>												
<i>Peraclis reticulata</i>			+		+	+				+		
<i>Peraclis bispinosa</i>			+			+						
<i>Peraclis triacantha</i>					+	+						
<b>Order GYMNOSOMATA</b>												
<b>Family Pneumodermatidae</b>												
<i>Pneumoderma mediterraneum</i>								+				
<i>Pneumoderma violaceum</i>		+					+	+	+	+		
<b>Family Clionidae</b>												
<i>Clione limacina</i>			+					+				
<i>Paraclione longicaudata</i>									+			
<b>Family Notobranchaeidae</b>												
<i>Notobranchaea hjorti</i>		+										
<i>Notobranchaea bleekerae</i>												+
<i>Schleschia tetrabarnchiata</i>												+
<b>Order SACOGLOSSA</b>												
<b>Suborder OXYNOACEA</b>												
<b>Family Volvatellidae</b>												
<i>Ascobulla fragilis</i>	+					+	+			+	+	
<b>Family Oxynoidae</b>												
<i>Oxynoe olivacea</i>			+		+		+		+	+		
<i>Oxynoe benchijigua</i>										+		
<i>Lobiger serradifalci</i>					+		+	+	+	+		
<b>Suborder PLAKOBRANCHACEA</b>												
<b>Family Plakobranchiidae</b>												
<i>Elysia viridis</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Elysia timida</i>					+	+	+	+	+			
<i>Elysia ornata</i>										+	+	+
<i>Elysia flava</i>							+	+		+	+	
<i>Elysia papillosa</i>										+	+	
<i>Elysia subornata</i>										+	+	
<i>Elysia translucens</i>						+	+		+			
<i>Elysia fezi</i>								+				
<i>Elysia margaritae</i>							+					
<i>Elysia gordanae</i>				+		+				+		+
<i>Thuridilla hopei</i>				+	+	+	+	+	+			
<i>Thuridilla picta</i>										+	+	
<b>Family Bosellidae</b>												
<i>Bosellia mimetica</i>						+	+	+	+			
<i>Bosellia leve</i>										+		



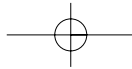
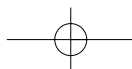


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<b>Familiy Polybranchiidae</b>												
<i>Polybranchia viridis</i>										+		
<i>Polybranchia borgnini</i>										+		
<i>Calyphylla mediterranea</i>					+	+	+			+		
<i>Cyerce antillensis</i>											+	+
<b>Family Hermaeidae</b>												
<i>Aplysiopsis elegans</i>									+	+		
<i>Aplysiopsis formosa</i>				+						+		+
<i>Hermaea bifida</i>		+	+	+	+		+	+				
<i>Hermaea cruciata</i>										+		
<i>Hermaea paucicirra</i>	+	+	+	+		+	+	+		+		
<i>Hermaeopsis variopicta</i>	+	+	+	+	+	+	+		+	+		
<b>Family Limapontiidae</b>												
<i>Stiliger llerai</i>										+		
<i>Limapontia capitata</i>	+	+	+		+		+					
<i>Limapontia senestra</i>	+	+										
<i>Calliopaea bellula</i>		+	+				+			+		
<i>Ercolania viridis</i>					+		+					
<i>Ercolania funerea</i>							+					
<i>Ercolania siotti</i>											+	
<i>Ercolania coerulea</i>							+			+	+	+
<i>Ercolania lozanoi</i>				+	+				+	+		
<i>Placida dendritica</i>	+	+	+			+	+	+	+		+	
<i>Placida tardyi</i>			+	+								
<i>Placida brevecornis</i>					+							
<i>Placida cremoniana</i>			+	+	+	+	+	+	+	+		+
<i>Placida verticilata</i>	+		+		+	+	+		+	+	+	+
<i>Costasiella virescens</i>										+		
<b>Order UMBRACULACEA</b>												
<b>Family Tylodinidae</b>												
<i>Tyrodina perversa</i>			+		+	+	+	+	+	+	+	+
<i>Anidolyta duebenii</i>			+			+						
<b>Family Umbraculidae</b>												
<i>Umbraculum umbraculum</i>			+	+	+	+	+	+	+	+	+	+
<b>Superorder NUDIPLURA</b>												
<b>Order PLEUROBRANCHACEA</b>												
<b>Family Pleurobranchidae</b>												
<i>Pleurobranchus membranaceus</i>	+		+		+	+		+	+		+	
<i>Pleurobranchus testudinarius</i>				+		+	+	+	+	+	+	+
<i>Pleurobranchus aerolatus</i>										+	+	
<i>Pleurobranchus lowei</i>											+	
<i>Pleurobranchus garciagomezi</i>										+	+	+
<i>Berthella plumula</i>	+	+	+	+		+	+		+	+	+	+
<i>Berthella aurantiaca</i>	+				+	+	+	+	+			+
<i>Berthella stellata</i>	+	+	+	+	+	+	+		+	+	+	+
<i>Berthella ocellata</i>				+	+	+		+	+	+		
<i>Berthella sideralis</i>	+							+	+			
<i>Berthella dautzenbergi</i>											+	
<i>Berthella africana</i>										+		
<i>Berthella canariensis</i>										+		
<i>Berthellina edwardsii</i>	+		+	+	+	+	+		+	+	+	+
<i>Pleurobrancha meckelii</i>	+		+	+	+	+	+	+	+	+	+	+
<i>Pleurobranchaea morosa</i>												+



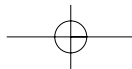
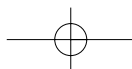


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<b>Order NUDIBRANCHIA</b>												
Suborder ANTHOBRANCHIA												
<b>Infraorder DORIDINA</b>												
<b>“PHANEROBRANCHIA”</b>												
<b>Family Corambidae</b>												
<i>Corambe testudinaria</i>		+		+								
<b>Family Onchidorididae</b>												
<i>Adalaria proxima</i>			+?									
<i>Onchidoris neapolitana</i>					+			+				
<i>Onchidoris depressa</i>		+	+	+								
<i>Onchidoris pusilla</i>		+			+							
<i>Onchidoris sparsa</i>	+	+					+	+				
<i>Onchidoris inconspicua</i>		+										
<i>Onchidoris albonigra</i>								+				
<i>Onchidoris reticulata</i>		+										
<i>Onchidoris cerviñoi</i>	+	+										
<i>Onchidoris tridactyla</i>	+											
<i>Acanthodoris pilosa</i>	+				+							
<i>Diaphorodoris luteocincta</i>	+		+		+	+	+	+	+	+		+
<i>Diaphorodoris papillata</i>	+		+		+	+	+	+				
<b>Family Goniodorididae</b>												
<i>Goniodoris nodosa</i>	+	+	+									
<i>Goniodoris castanea</i>	+	+	+	+	+		+	+	+	+	+	
<i>Okenia aspersa</i>			+									
<i>Okenia mediterranea</i>		+	+	+	+	+					+	
<i>Okenia zoobotryon</i>										+		
<i>Okenia cupella</i>					+	+	+					
<i>Okenia elegans</i>					+			+				
<i>Okenia hispanica</i>						+						
<i>Ancula gibbosa</i>	+	+	+					+				
<i>Trapania tartanella</i>	+	+	+	+		+						
<i>Trapania lineata</i>					+	+	+	+	+			
<i>Trapania maculata</i>	+	+		+	+	+	+	+	+			
<i>Trapania pallida</i>		+		+								
<i>Trapania ortei</i>			+	+	+							
<i>Trapania hispalensis</i>		+			+	+						
<i>Trapania luquei</i>										+		
<i>Trapania sanctipectrensis</i>				+								
<i>Bermudella polycerelloides</i>										+		
<b>Family Polyceridae</b>												
<i>Limacea clavigera</i>	+	+	+	+	+	+	+	+	+	+		+
<i>Polycera quadrilineata</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Polycera dubia</i>		+						+				
<i>Polycera elegans</i>	+		+		+			+	+	+		+
<i>Polycera faroensis</i>	+	+	+		+	+						
<i>Polycera hedgpethi</i>	+											
<i>Polycera aurantiomarginata</i>			+	+		+						
<i>Thecatera pennigera</i>	+		+	+						+	+	
<i>Plocamopherus maderae</i>										+	+	
<i>Crimora papillata</i>	+	+	+	+	+	+	+	+		+		
<i>Robostra europea</i>			+	+	+	+		+			+	
<i>Polycerella emertoni</i>			+	+								
<i>Kaloplocamus ramosus</i>					+	+	+	+	+	+	+	+
<i>Kaloplocamus atlanticus</i>										+		+



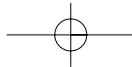
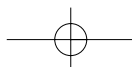


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<i>Tambja ceutae</i>					+	+				+	+	+
<i>Tambja marbellensis</i>			+		+	+						
<b>Family Aegiridae</b>												
<i>Aegires punctilucens</i>	+	+	+		+	+	+	+				
<i>Aegires leuckarti</i>					+	+	+	+	+			
<i>Aegires sublaevis</i>										+	+	+
<i>Aegires palensis</i>						+	+					
<b>“CRYPTOBRANCHIA”</b>												
<b>LABIOSTOMATA</b>												
<b>Family Chromodorididae</b>												
<i>Glossodoris edmundsi</i>										+	+	+
<i>Hypselodoris villafranca</i>	+	+	+	+	+	+	+	+	+			
<i>Hypselodoris picta</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Hypselodoris orsinii</i>	+				+	+	+	+	+			
<i>Hypselodoris fontandraui</i>	+		+		+	+	+	+	+	+		+
<i>Hypselodoris bilineata</i>			+	+	+	+	+	+	+	+	+	
<i>Hypselodoris cantabrica</i>	+	+	+	+	+	+						
<i>Hypselodoris malacitana</i>					+	+						
<i>Hypselodoris tricolor/midatlantica</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Chromodoris luteo-rosea</i>	+	+	+	+	+	+	+	+	+	+		
<i>Chromodoris purpurea</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Chromodoris krohni</i>	+	+	+	+	+	+	+	+	+	+		+
<i>Chromodoris luteopunctata</i>			+	+	+	+				+		
<i>Chromodoris britoi</i>	+				+	+		+		+	+	+
<i>Chromodoris goslineri</i>												+
<i>Cadlina laevis</i>		+			+		+	+	+			
<i>Cadlina pellucida</i>	+	+	+		+	+	+		+	+		
<b>Family Dorididae</b>												
<i>Doris verrucosa</i>	+	+	+	+	+	+	+	+	+	+		
<i>Doris pseudoargus</i>	+	+	+		+	+		+	+			
<i>Doris bertheloti</i>										+	+	
<i>Doris ocelligera</i>	+	+	+		+	+	+	+	+			+
<i>Doris sticta</i>	+		+		+			+			+	
<i>Doris (?) alboranica</i>						+						
<i>Aldisa zetlandica</i>			+									+
<i>Aldisa berghi</i>	+											
<i>Aldisa banyulensis</i>					+	+	+	+	+			
<i>Aldisa smaragdina</i>		+	+		+	+	+		+	+	+	+
<i>Aldisa expleta</i>										+		
<b>Family Discodorididae</b>												
<i>Jorunna tomentosa</i>	+	+	+	+	+	+	+	+		+		+
<i>Jorunna onubensis</i>			+	+		+				+	+	
<i>Discodoris maculosa</i>	+				+	+	+	+				
<i>Discodoris stellifera</i>	+		+		+			+				
<i>Discodoris tristis</i>												+
<i>Discodoris edwardsi</i>			+									
<i>Discodoris rubens</i>								+				
<i>Discodoris (?) rosi</i>	+	+	+		+	+		+				
<i>Discodoris confusa</i>										+	+	
<i>Thordisa filix</i>			+				+	+				
<i>Thordisa azmanii</i>	+		+	+								
<i>Platydorid stomascuta</i>			+	+	+	+	+	+	+	+	+	+
<i>Platydorid argo</i>			+	+	+	+	+	+	+	+	+	+
<i>Rostanga rubra</i>	+	+	+	+	+	+	+	+	+	+	+	+



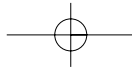
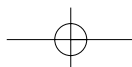


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<i>Peltodoris punctifera</i>										+	+	
<i>Peltodoris atromaculata</i>	+		+		+	+	+	+	+	+	+	+
<i>Paradoris indecora</i>			+	+	+	+	+	+	+	+		
<i>Paradoris ceneris</i>										+		
<i>Paradoris inversa</i>										+		
<i>Paradoris mollis</i>										+		
<i>Baptodoris cinnabarina</i>	+				+		+		+	+		
<i>Baptodoris perezii</i>				+		+				+	+	
<i>Geitodoris planata</i>	+		+	+	+	+		+	+	+	+	+
<i>Geitodoris pusae</i>										+	+	
<i>Geitodoris portmanni</i>						+	+	+				
<i>Geitodoris bonosi</i>	+	+						+				
<i>Geitodoris bacalladoi</i>										+		
<i>Geitodoris perfossa</i>										+	+	
<i>Taringa millegrana</i>					+					+	+	
<i>Taringa oleica</i>										+		
<i>Taringa ascitica</i>										+		
<i>Taringa tritorquis</i>										+		
<i>Taringa bacalladoi</i>										+		
<i>Taringa faba</i>								+				
<i>Thorybopus lophatus</i>												+
<b>LABIOSTOMATA incerta sedis</b>												
<i>Carminodoris ? boucheti</i>		+			+			+				
<i>Carminodoris ? spinobranchialis</i>	+											
<b>POROSTOMATA</b>												
<b>Family Phyllidiidae</b>												
<i>Phyllidia flava</i>								+	+	+		
<i>Phyllidiopsis berghi</i>										+		+
<i>Phyllidiopsis bayi</i>					+	+	+		+			
<i>Phyllidiopsis boucheti</i>										+		
<i>Reticulidia gofasi</i>												+
<b>Family Dendrodorididae</b>												
<i>Dendrodoris limbata</i>			+	+	+	+	+	+	+			
<i>Dendrodoris gradiflora</i>			+	+	+	+	+	+	+	+	+	
<i>Dendrodoris herytra</i>	+	+	+	+	+	+				+	+	+
<i>Doriopsilla areolata</i>	+	+	+	+	+	+	+	+	+	+		
<i>Doriopsilla pelseneeri</i>	+	+	+	+	+	+		+				
<b>DEXIARCHIA</b>												
<b>CLADOBRANCHIA</b>												
<b>DENDRONOTINA</b>												
<b>Family Tritoniidae</b>												
<i>Tritonia hombergi</i>		+			+		+	+				
<i>Tritonia plebeia</i>		+	+					+				
<i>Tritonia manicata</i>	+	+	+	+	+	+	+	+	+			
<i>Tritonia (Tritonidoxa) griegi</i>												+
<i>Tritonia striata</i>	+				+	+		+	+			
<i>Tritonia nilsodhneri</i>	+	+	+		+	+	+	+				
<i>Marionia blainvillea</i>	+		+	+	+	+	+	+	+	+	+	+
<i>Tritonopsis cincta</i>							+					
<b>Family Scyllaeidae</b>												
<i>Scyllaea pelagica</i>	+		+									+



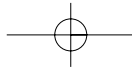
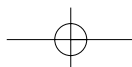


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<b>Family Hancockiidae</b>												
<i>Hancockia uncinata</i>	+	+	+		+	+	+	+	+	+		
<b>Family Lomanotidae</b>												
<i>Lomanotus marmoratus</i>		+					+					
<i>Lomanotus barlettai</i>				+		+						
<b>Family Tethyidae</b>												
<i>Tethys fimbria</i>	+		+	+		+	+	+	+	+		
<b>Family Phylliroidae</b>												
<i>Phylliroe atlantica</i>										+	+	+
<i>Phylliroe bucephala</i>										+		
<i>Cephalopige trematoides</i>										+		
<b>Family Dendronotidae</b>												
<i>Dendronotus frondosus</i>	+											
<b>Family Dotoidae</b>												
<i>Doto coronata</i>	+	+	+		+		+	+				
<i>Doto pinnatifida</i>		+	+		+							
<i>Doto fragilis</i>	+	+										
<i>Doto pygmaea</i>										+		
<i>Doto rosea</i>			+	+	+	+	+					
<i>Doto paulinae</i>							+	+				
<i>Doto cinerea</i>						+	+		+			
<i>Doto floridicola</i>			+		+	+	+	+	+	+	+	+
<i>Doto pita</i>										+		
<i>Doto doerga</i>							+					
<i>Doto dunnei</i>	+	+	+		+							
<i>Doto millbayana</i>	+		+	+	+							
<i>Doto koenneckery</i>	+	+	+			+		+				+
<i>Doto eireana</i>	+	+	+									
<i>Doto tuberculata</i>		+										+
<i>Doto acuta</i>							+					
<i>Doto arteoi</i>	+	+	+									
<i>Doto lemchei</i>	+	+	+									
<i>Doto oblicua</i>	+	+										
<i>Doto verdicioi</i>	+	+	+									
<i>Doto fluctifraga</i>										+		
<i>Doto furva</i>					+							+
<i>Doto unguis</i>						+						
<i>Doto escallari</i>										+		
<i>Doto sotilloi</i>										+		
"ARMININA"												
<b>Family Arminidae</b>												
<i>Armina maculata</i>			+	+	+	+		+	+			+
<i>Armina tigrina</i>			+			+	+	+				
<i>Armina neapolitana</i>			+					+				
<i>Armina loveni</i>			+							+		
<i>Heterodoris robusta</i>	+											
<b>Family Madrellidae</b>												
<i>Madrella aurantiaca</i>									+			
<b>Family Proctonotidae</b>												
<i>Janolus cristatus</i>	+	+	+	+	+	+	+	+		+	+	



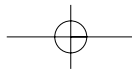
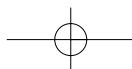


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<i>Janolus hyalinus</i>	+	+	+		+		+					
<i>Janolus faustoi</i>										+	+	
"AEOLIDINA"												
<b>Family Flabellinidae</b>												
<i>Flabellina affinis</i>			+	+	+	+	+	+	+	+		
<i>Flabellina pedata</i>	+	+	+	+	+	+	+	+	+			+
<i>Flabellina pellucida</i>								+				
<i>Flabellina gracilis</i>	+											
<i>Flabellina lineata</i>			+		+		+	+	+			
<i>Flabellina dushia</i>										+		
<i>Flabellina babai</i>			+	+	+	+	+	+				
<i>Flabellina baetica</i>				+	+							
<i>Flabellina insolita</i>			+		+							
<i>Flabellina ischitana</i>			+	+	+	+	+	+				
<i>Calmella cavolini</i>						+	+	+	+			
<b>Family Piseinotecidae</b>												
<i>Piseinotecus sphaeriferus</i>										+		
<i>Piseinotecus gabineri</i>						+						
<i>Piseinotecus gaditanus</i>			+	+						+		
<b>Family Facelinidae</b>												
<i>Favorinus branchialis</i>	+	+	+	+	+	+	+	+		+	+	+
<i>Favorinus ghanensis</i>										+		
<i>Favorinus blianus</i>		+	+									
<i>Favorinus vitreus</i>							+	+		+		
<i>Facelina annulicornis</i>	+	+	+		+	+	+	+	+	+	+	+
<i>Facelina bostoniensis</i>	+		+				+	+				
<i>Facelina coronata</i>	+	+	+	+	+	+	+	+		+		
<i>Facelina rubrovittata</i>				+	+	+	+	+	+			
<i>Facelina quatrefagesi</i>		+										
<i>Facelina variegata</i>		+	+									
<i>Facelina schwobi</i>								+				
<i>Facelina dubia</i>								+				
<i>Facelina fusca</i>								+				
<i>Phydiana lynceus</i>										+		
<i>Cratena peregrina</i>			+	+	+	+	+	+	+	+		
<i>Caloria elegans</i>			+		+	+	+	+	+	+	+	+
<i>Learchis poica</i>											+	+
<i>Facelinopsis marioni</i>				+	+	+		+				
<i>Dondice accidentalis</i>										+		
<i>Dondice banyulensis</i>			+		+	+	+	+	+			
<i>Antonietta luteorufa</i>							+					
<i>Dicata odhmeri</i>			+			+		+				+
<i>Pruvotfolia pselliotes</i>		+	+	+	+	+	+	+		+		
<i>Babakina anadoni</i>	+	+	+	+	+					+		
<i>Algarvia alba</i>			+									
<b>Family Aeolidiidae</b>												
<i>Aeolidia papillosa</i>	+	+	+									
<i>Spurilla neapolitana</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>Aeolidiella alderi</i>	+	+	+	+	+	+	+	+	+	+		
<i>Aeolidiella glauca</i>			+		+		+					
<i>Aeolidiella sanguinea</i>		+	+		+						+	+
<i>Aeolidiella indica</i>					+					+		
<i>Cerberilla bernadettae</i>		+		+						+		
<i>Berghia caerulea</i>	+		+		+	+	+	+		+		



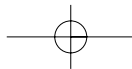


Table III (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
<i>Berghia verrucicornis</i>	+		+	+	+	+	+	+		+		
<i>Berghia columbina</i>			+	+		+				+		
<i>Limnandora nodosa</i>							+	+		+		
<b>Family Eubranchidae</b>												
<i>Eubranchius tricolor</i>		+										
<i>Eubranchius pallidus</i>		+										
<i>Eubranchius vittatus</i>		+						+				
<i>Eubranchius farrani</i>		+	+	+	+	+	+	+		+		+
<i>Eubranchius cingulatus</i>	+	+	+		+		+					
<i>Eubranchius exiguus</i>	+	+	+		+			+				
<i>Eubranchius doriae</i>			+									
<i>Eubranchius arci</i>										+		
<i>Eubranchius prietoi</i>	+				+							
<i>Eubranchius linensis</i>		+	+		+							
<i>Eubranchius leopoldoi</i>										+		
<i>Eubranchius telesfori</i>										+		
<i>Eubranchius vascoi</i>										+		
<b>Family Pseudovermidae</b>												
<i>Pseudovermis artabrensis</i>		+										
<b>Family Calmidae</b>												
<i>Calma glaucoides</i>		+	+	+				+		+		
<i>Calma gobioophaga</i>		+	+				+					
<b>Family Glaucidae</b>												
<i>Glacus atlanticus</i>									+	+	+	+
<b>Family Tergipedae</b>												
<i>Tergipes tergipes</i>		+	+	+		+	+	+				
<i>Cuthona caerulea</i>		+	+		+		+	+	+	+		+
<i>Cuthona foliata</i>	+	+	+		+			+				+
<i>Cuthona amoena</i>	+	+	+		+			+				
<i>Cuthona pallida</i>							+	+		+		
<i>Cuthona genovae</i>	+		+	+	+	+	+	+	+	+		
<i>Cuthona ocellata</i>			+		+		+	+				
<i>Cuthona granosa</i>							+					
<i>Cuthona ilonae</i>	+	+	+				+					
<i>Cuthona miniostriata</i>							+	+				
<i>Cuthona albopunctata</i>								+				
<i>Cuthona thompsoni</i>			+	+			+					
<i>Cuthona willani</i>			+	+								
<i>Cuthona fidenciae</i>										+		+
<i>Cuthona corraei</i>										+		
<i>Catriona gymnota</i>	+	+	+	+	+							
<i>Catriona maua</i>				+			+			+		
<i>Tenellia adspersa</i>		+		+			+					
<b>Family Fionidae</b>												
<i>Fiona pinnata</i>						+	+	+		+	+	+
<b>Family Embletoniidae</b>												
<i>Embletonia pulchra</i>		+	+		+		+	+				

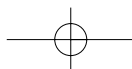
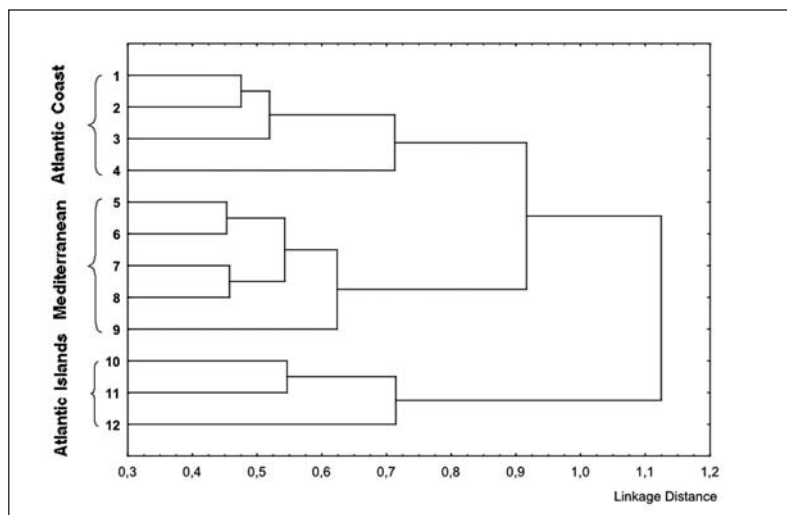


Figure 2. Horizontal tree obtained from the cluster analysis performed. Geographical study areas are numbered 1 to 12 (see text for details)



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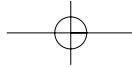
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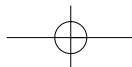
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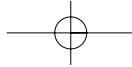
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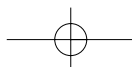


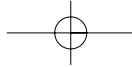
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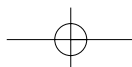


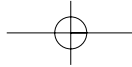
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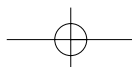


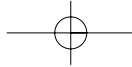
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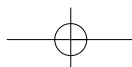


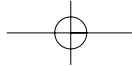
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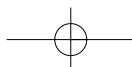


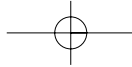
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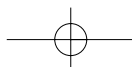


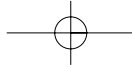
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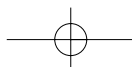


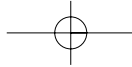
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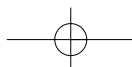


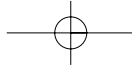
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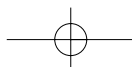


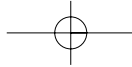
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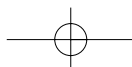


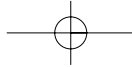
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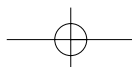


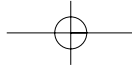
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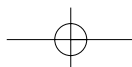


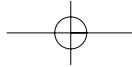
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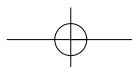


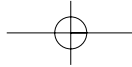
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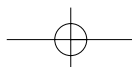


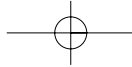
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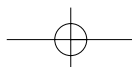


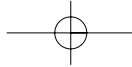
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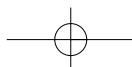


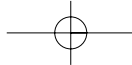
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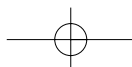


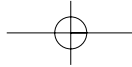
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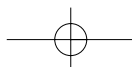


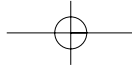
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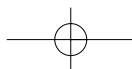


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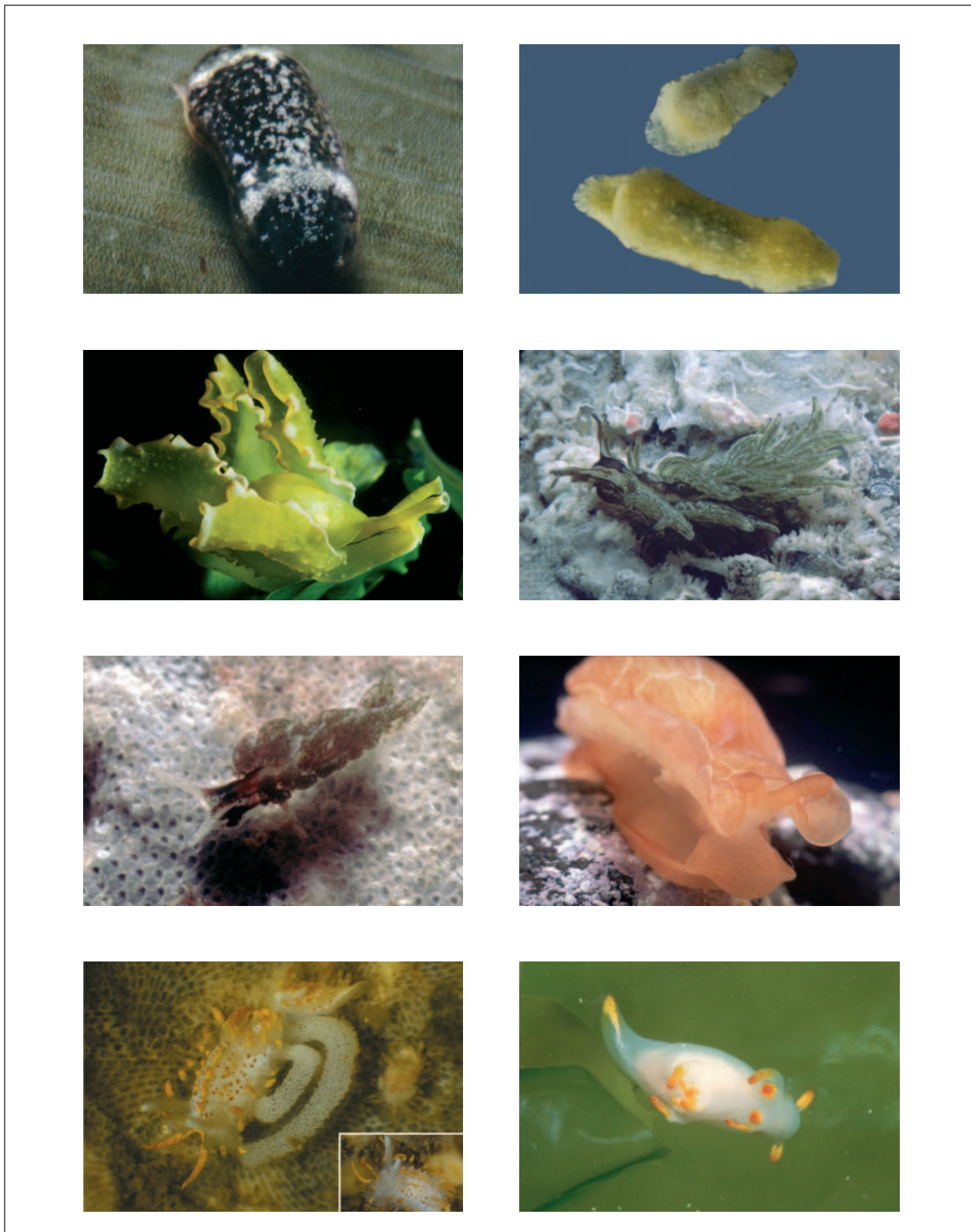
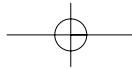
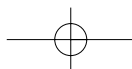


Plate 1. From left to right, from top to bottom: *Runcina adriatica* Thompson, 1980; *Runcina bahiensis* Cervera, García-Gómez and García, 1991; *Lobiger serradifalci* (Calcara, 1840); *Aplysiopsis formosa* Pruvot-Fol, 1953; *Ercolania lozanoi* Ortea, 1981; *Pleurobranchus garciagomezi* Cervera, Cattaneo-Vietti and Edmunds, 1996; *Okenia mediterranea* (Ihering, 1886); *Trapania tartanella* (Ihering, 1885)



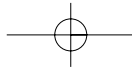
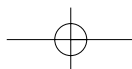


Plate 2. From left to right, from top to bottom: *Plocamopherus maderae* (Lowe, 1842); *Tambja marbellensis* Schick and Cervera, 1998; *Hypselodoris malacitana* Luque, 1986; *Chromodoris luteopunctata* (Gantès, 1962); *Thordisa azmanii* Cervera and García-Gómez, 1989; *Geitodoris pusae* (Marcus, 1955); *Taringa millegrana* (Alder and Hancock, 1854); *Doriopsilla pelseneeri* Oliveira, 1895



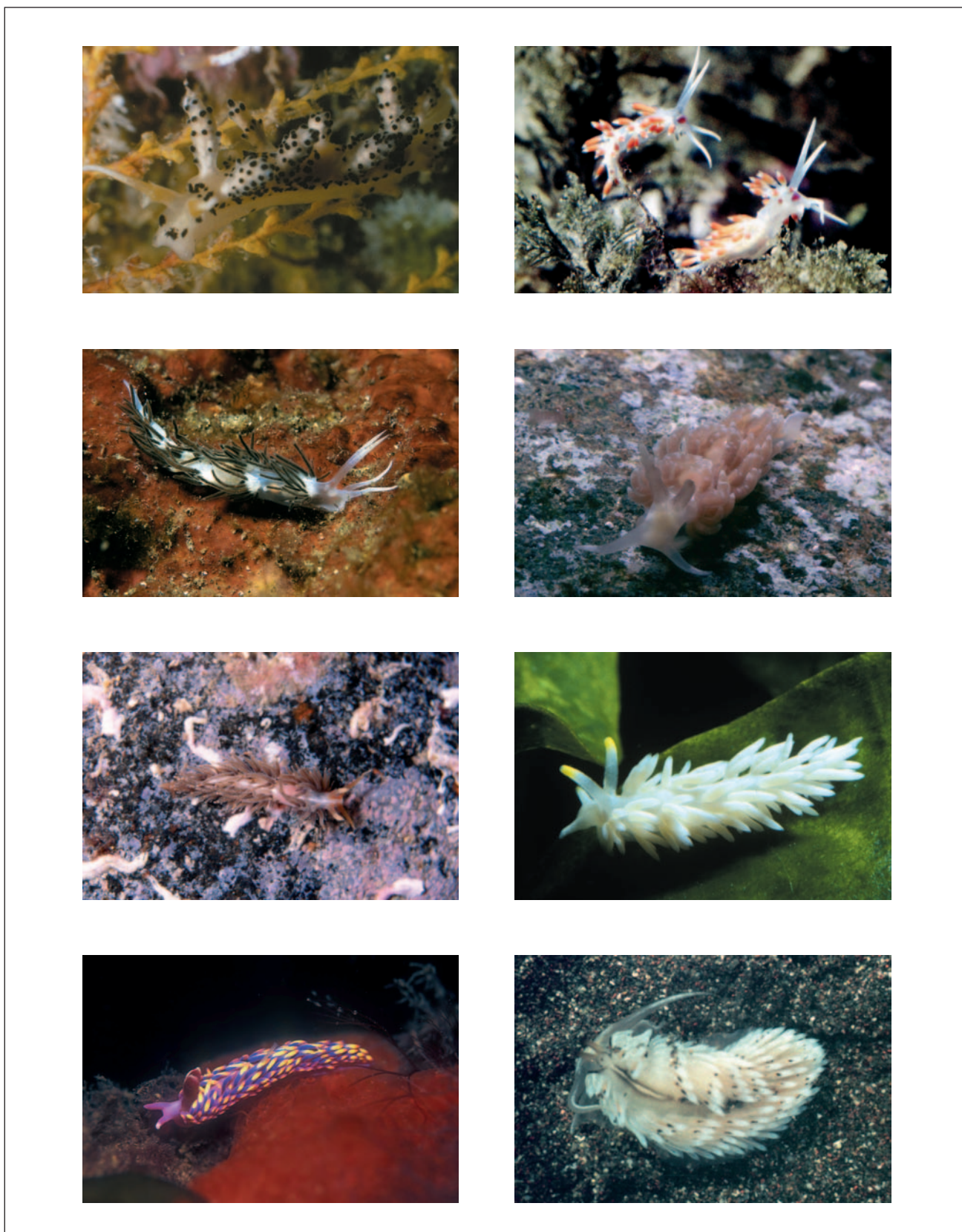
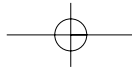
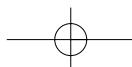


Plate 3. From left to right, from top to bottom: *Doto furva* García-Gómez and Ortea, 1983; *Calmella cavolini* (Vérany, 1846); *Piseinotecus gabinierei* (Vicente, 1975); *Favorinus vitreus* Ortea, 1982; *Learchis poica* Marcus and Marcus, 1960; *Dicata odhneri* Schmekel, 1968; *Babakina anadoni* (Ortea, 1979); *Cerberilla bernadettae* Tardy, 1965



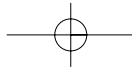
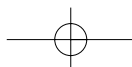
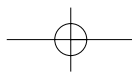
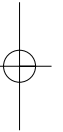
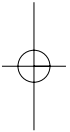
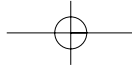
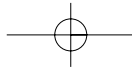


Plate 4. From left to right, from top to bottom: *Berghia columbina* (García-Gómez and Thompson, 1990); *Eubbranchus prietoi* Llera and Ortea, 1981; *Eubbranchus linensis* García-Gómez, Cervera and García, 1990; *Calma gobioophaga* Calado and Urgorri, 2002; *Cuthona ocellata* (Schmekel, 1966); *Cuthona thompsoni* García, López-González and García-Gómez, 1991; *Cuthona fidenciae* (Ortea, Moro and Espinosa, 1999); *Catriona maua* Marcus and Marcus, 1960







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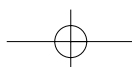
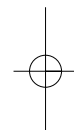
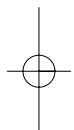
The Instituto Español de Oceanografía thanks the referees listed below, as well as others who prefer to remain anonymous, for their critical revision of this publication.

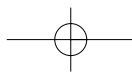
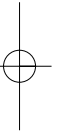
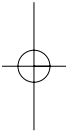
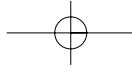
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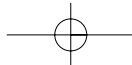
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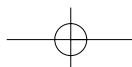






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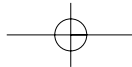
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Se incluirá un título abreviado.

A continuación figurarán un resumen en español y otro en inglés (*abstract*), con el título del trabajo en inglés.

El trabajo, cuando su naturaleza lo permita, se articulará en introducción, material y métodos, resultados, discusión, agradecimientos y bibliografía.

Los símbolos y signos químicos, físicos o matemáticos se escribirán siempre ateniéndose a las normas internacionales vigentes: SI (Sistema Internacional de Unidades), ISO (*International Standard Organization*) y UNE (Una Norma Española). Dichos símbolos, por tanto, se escribirán siempre sin punto y permanecerán invariables en plural. Las normas ISO y UNE servirán siempre de referencia en la elaboración de originales.

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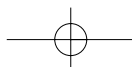
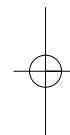
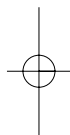
#### *Resumen y abstract*

Ambos apartados no excederán de 125 palabras cada uno y darán a conocer los objetivos del trabajo así como los procedimientos seguidos y los resultados y datos más significativos obtenidos.

Al principio del *abstract* se incluirá el título del trabajo en inglés y al final de cada apartado figurarán hasta un máximo de ocho palabras clave, no incluidas en el título y por orden de importancia, representativas del trabajo.

#### *Introducción*

La introducción no excederá de 500 palabras, indicará brevemente los objetivos del estudio y proporcionará suficiente cantidad de información como para aclarar el planteamiento del trabajo y la hipótesis que se pretende comprobar.



### Material y métodos

Este apartado será lo más conciso posible pero deberá proporcionar toda la información necesaria para permitir a cualquier investigador especializado evaluar la metodología empleada.

### Resultados

El apartado de resultados será lo más claro posible y se ceñirá a los resultados de la investigación esenciales para establecer los principales puntos del trabajo.

### Discusión

Se incluirá una breve discusión sobre la validez de los resultados observados relacionándolos con los de otros trabajos publicados sobre el mismo asunto así como un informe sobre el significado del trabajo. Se desaconseja discusiones extensas sobre la literatura existente.

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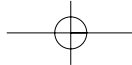
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Todas las ilustraciones (figuras, láminas, mapas y fotografías o diapositivas) deben ser originales y se prepararán en papel de alta calidad de reproducción fotográfica, o en archivos de disquete independientes del texto (junto con copias de impresora láser). Sólo se incluirán aquéllas que muestren datos esenciales; nunca deberá producirse duplicidad de datos por la presentación de los mismos en texto, tablas e ilustraciones.

El grosor de las líneas y el tamaño de las letras y otros símbolos serán los adecuados para que sean visibles y claros cuando se efectúe la reducción (en su caso) y ajuste, a una o dos columnas, al formato de la página. La reducción no podrá ser en ningún caso superior al 60 % y los símbolos menores, una vez reducidos, no serán inferiores a 1,5 mm.

En la elaboración de tablas y en los rótulos de figuras se utilizará el tipo de letra Times. Si no se dispone de este tipo se utilizará cualquier otro de letra romana (como Prestige o Dutch).



Los rótulos irán siempre en minúscula y sin negrita.

No se presentarán rótulos elaborados con transferibles.

Se procurará que las ilustraciones no sean ni apaisadas ni en color.

Las figuras se delinearán cerradas, es decir, con los correspondientes ejes de abscisas y ordenadas unidos entre sí por sus paralelas. El nombre de cada variable se escribirá siempre a lo largo de su eje, coincidiendo el final con el extremo del mismo.

Las tablas, en cambio, no llevarán nunca líneas verticales.

La posición definitiva de tablas e ilustraciones en la publicación se indicará en los márgenes del original.

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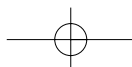
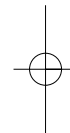
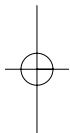
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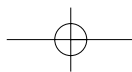
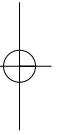
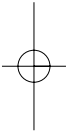
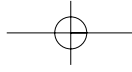
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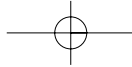
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Include an abbreviated version of the title.

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Whenever possible, divide the paper into: Introduction, Material and Methods, Results, Discussion, Acknowledgements and References.

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Italicize genus and species names, as well as the titles of journals, symposia, and books.

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Include English and Spanish versions of the abstract (*resumen*, in Spanish), no more than 125 words each, setting out the paper's objectives, as well as the procedures followed and the most relevant findings and data obtained.

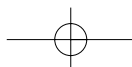
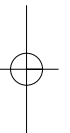
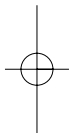
Include the title of the paper in Spanish at the beginning of the Spanish abstract. At the end of this section, list a maximum of eight key words, not included in the title and in order of importance, indicative of the paper's contents.

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The introduction should not exceed 500 words, briefly indicating the study's objectives and providing sufficient information to clarify the paper's basic focus and the hypothesis being tested.

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Make this section as concise as possible, while giving all the information necessary to enable any specialist to evaluate the methodology used.



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This section should be as clear as possible, and limited to findings essential for establishing the paper's main points.

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Include a brief discussion regarding the validity of the results observed in relation to those of other published papers on the same topic, as well as a report on the paper's significance. Extensive discussion of the literature is discouraged.

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Examples of bibliographic references:

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Guirg, M. D. 1974. A preliminary consideration of the taxonomic position of *Palmaria palmata* (Linnaeus) Stackhouse = *Rhodymenia palmata* (Linnaeus) Greville. *J. Mar. Biol. Ass. (UK)* 54: 509-529.

– Of a book:

Sinderman, C. J. 1970. *Principal diseases of marine fish and shellfish*. Academic Press. London; New York: 870 pp.

– Of an article from a book which forms part of a series:

Fraga, F. and R. Prego. 1989. Condiciones hidrográficas previas a la purga de mar. In: *Las purgas de mar como fenómeno natural. Las mareas rojas* (Cuadernos da Área de Ciencias Mariñas). F. Fraga and F. G. Figueiras (eds.) 4: 21-44. Ediciós do Castro. Seminario de Estudos Galegos. Sada (A Coruña), Spain.

– Of an article from a symposium:

Figueiras, F. G. and F. Fraga. 1990. Vertical nutrient transport during proliferation of *Gymnodinium catenatum* (Graham) in Ría de Vigo, Northwest Spain. In: *Toxic Marine Phytoplankton Proceedings of the Fourth International Conference on Toxic Marine Phytoplankton* (June 26-30, 1989. Lund, Sweden). E. Graneli *et al.* (eds.): 144-148. Elsevier. New York.

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The thickness of the lines and the size of letters and other symbols should enable them to be clearly visible when reduced (if necessary) for publication, to the size of one or two columns on the page. Originals will not be reduced more than 60 %, and reduced symbols will not be smaller than 1.5 mm.

In preparing tables and figure captions, use the Times font, or, if that is not possible, some other Roman font (such as Prestige or Dutch).

Figure captions should use lowercase letters, without boldface type.

Do not present originals made with transfers.

Illustrations should not be in colour or formatted lengthways.

Figures should be drawn with a boxed-in format, closing the abscissas and ordinates with parallel lines. The names of variables should always be placed along the axes, flush with the ends.

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After evaluation, papers will be returned to the first author so that they may be revised in keeping with the referees' comments and criticism. Authors should return the revised original and one copy to the corresponding coordinator. The Editor will then accept or reject the paper.

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