

Research Article

Estuarine and marine brachyuran crabs (Crustacea: Decapoda) from Bahia, Brazil: checklist and zoogeographical considerations

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ABSTRACT. The coast of the state of Bahia in eastern Brazil comprises more than 12% of the entire Brazilian coast. However, the crustacean fauna of this area still remains poorly known, especially the shallow-water fauna. We provide here a list of 162 brachyuran crustaceans known for the Bahia coast, based on published records as well as material deposited in the Carcinological Collection of the Universidade Estadual de Santa Cruz, Ilhéus, Bahia. The list includes estuarine and marine species (from coastal beaches to the continental shelf and slope) that have been reported at least once in the study area. Regarding longitudinal distribution patterns, five species are circum-tropical, nine are amphi-Atlantic, and two are amphi-American. The portunid *Charybdis hellerii* (A. Milne-Edwards, 1867) is an introduced Indo-West Pacific species. The remaining 145 species are native to the western Atlantic; 17 of these are endemic to Brazil. A total of 46 species (28.4%) have the southernmost limit of their known ranges in the western Atlantic between Bahia and the state of Rio de Janeiro, which suggests, for this group, the existence of a wide transition area between the Brazilian and Paulista zoogeographic provinces. Finally, two small range extensions in the western Atlantic are reported: the hymenosomatid *Elamena gordonae* Monod, 1956 from Camamu Bay (13°54'14"S) to Nova Viçosa (17°53'00.9"S), and the sesarimid *Sesarma curacaoense* De Man, 1892 from Ilhéus (15°04'58.6"S) to Mucuri (18°05'38"S).

Keywords: diversity, zoogeographical provinces, marine crustaceans, estuarine crustaceans, eastern Brazilian coast.

Cangrejos braquiuros estuarinos y marinos (Crustacea: Decapoda) de Bahia, Brasil: lista de especies y consideraciones zoogeográficas

RESUMEN. La costa del Estado de Bahia, situado en el este de Brasil, comprende más del 12% de la costa brasileña. Sin embargo, la fauna de crustáceos de esta área aún se encuentra pobremente conocida, sobretodo aquella de aguas someras. Se presenta una lista de 162 especies de crustáceos braquiuros conocidos de esta costa, en base a registros publicados y al material depositado en la Colección Carcinológica de la Universidade Estadual de Santa Cruz, Ilhéus, Bahia. La lista incluye especies estuarinas y marinas (desde playas costeras hasta la plataforma continental y talud) que han sido reportadas por lo menos una vez para el área de estudio. En cuanto a los patrones de distribución longitudinal, cinco especies son circumtropicales, nueve anfi-Atlánticas, dos anfi-Americanas, y el portúnido *Charybdis hellerii* (A. Milne-Edwards, 1867) es una especie introducida, nativa del Indo-Pacífico oriental. Las restantes 145 especies son nativas del Atlántico occidental, 17 de las cuales son endémicas de Brasil. Un total de 46 especies (28.4%) tienen su límite sur de distribución en el Atlántico occidental, entre Bahia y el Estado de Rio de Janeiro, lo que sugiere, para el grupo estudiado, la existencia de una amplia zona de transición entre las provincias zoogeográficas Brasileña y Paulista. Finalmente, se reporta dos ampliaciones de ámbito en el Atlántico occidental: el himenosomátido *Elamena gordonae* Monod, 1956 desde Bahia de Camamu (13°54'14"S) a Nova Viçosa (17°53'00.9"S), y el sesármido *Sesarma curacaoense* De Man, 1892 desde Ilhéus (15°04'58.6"S) a Mucuri (18°05'38"S).

Palabras clave: diversidad, provincias zoogeográficas, crustáceos marinos, crustáceos estuarinos, costa este de Brasil.

INTRODUCTION

Checklists of marine and estuarine species for a certain region serve as a point of departure for biogeographical studies, research on biodiversity, environmental monitoring activities, defining the extent of protected areas, and developing preservation and sustainable exploitation strategies (Hendrickx, 1995). Lists should be accurate and attempt to eliminate doubtful records; when possible, they should be based on material deposited in zoological collections.

Crustaceans are important members of tropical benthic communities. In addition to the value of the larger and more abundant species for human consumption, a tremendous variety of small species contribute to the complexity and functioning of tropical ecosystems (Hendrickx, 1995). Among decapod crustaceans, the infraorder Brachyura is prominent because of its great diversity, comprising about 700 genera and 5000 species worldwide (Melo, 1996).

Extending over about 1,188 km, Bahia's coastline is the longest of all the Brazilian states', constituting more than 12% of the Brazilian coast (Coelho & Santos, 1995). The benthic fauna between Todos os Santos Bay and the city of Vitória in the state of Espírito Santo is the least known in terms of composition on the Brazilian coast; the estuaries and coastal beaches in this part are especially poorly known (Lana *et al.*, 1996). As a consequence, this area constitutes a gap in the known distributions of many decapod crustaceans (Almeida *et al.*, 2007b). The Bahia coast includes several regions of high biological importance, such as Todos os Santos Bay, the Ilhéus coast, and the Abrolhos Archipelago, all important for conserving the benthos of the continental shelf. In a recent review of the biodiversity in Brazilian coastal and marine zones (Ministério do Meio Ambiente, 2002), Camamu Bay was categorized as a maximum-priority area for estuary and mangrove conservation.

The study area includes widely diverse coastal environments, which supposedly support high species richness. The objective of the present contribution was to review the literature concerning marine and estuarine Brachyura in the state of Bahia, aiming to organize a checklist of species that have been reported at least once for this coast, and to summarize the present state of knowledge on this important crustacean group. This list is expected to be useful for future systematical and ecological studies. Moreover, the zoogeography of the species treated herein is also included, thereby providing the grounds for a

discussion on the existence of a boundary area between the Brazilian and Paulista zoogeographical provinces on the eastern Brazilian coast (Dana, 1853; Ekman, 1953; Balech, 1954; Vannucci, 1964; Briggs, 1974; Coelho & Ramos, 1972; Coelho *et al.*, 1978; Coelho & Santos, 1980; Palacio, 1982; Boschi, 2000a, 2000b).

Historical account

Studies concerning the Brachyura fauna in Bahia began in the second half of the 19th century. In this period, a series of brachyuran species were collected during the expeditions to the coastal areas of the state of geologist Charles Frederick Hartt and other shipboard expeditions of great historical importance. These pioneer surveys occurred mainly in Salvador and adjacent areas, Todos os Santos Bay, the continental shelf off Salvador, and especially in the Abrolhos Archipelago to the south. As a result of these samples, several new crab species were described. Certain stations sampled at that time remained the southernmost known sites for some species in the western Atlantic for several decades.

The expeditions of C.F. Hartt made an important contribution to knowledge of the crustacean fauna in Bahia (as well as Brazil). During the *Thayer Expedition* (1865-1866), Hartt and partner Edward Copeland sampled sites in southern Bahia such as Porto Seguro, Canavieiras, and off Abrolhos. The Brachyura collected by him in 1867, mainly at Abrolhos and Caravelas, were studied by Smith (1869) in the first publication to treat a large number of species. Between 1875 and 1877, the geologist Richard Rathbun took samples, especially in Salvador and Todos os Santos Bay, during the *Comissão Geológica do Império do Brasil*, also led by Hartt. The innumerable specimens collected on this campaign were described in the publications of Mary Jane Rathbun, between 1892 and 1937, particularly her four monographic works (Rathbun, 1918, 1925, 1930, 1937).

Significant contributions to knowledge of the Brachyura fauna in Bahia were provided by samples from expeditions such as those of the *Hassler*, H.M.S. *Challenger*, and U.S.F.C.S. *Albatross*. A. Milne-Edwards (1873, 1878, 1879, 1880a, 1881), although studying mainly crustaceans from Mexico, included several brachyurans in his publications that had been collected during the *Hassler Expedition* when it visited northeast Brazil in 1872. Material obtained by the *Hassler* was also examined by A. Milne-Edwards & Bouvier (1923). Miers (1886) published a list of 23 Brachyura species sampled by

the H.M.S. *Challenger* far off Salvador and landed in September 1873. Based on this material, six species new to science were described. Species collected at the stations “Abrolhos” and “Bahia” (= Salvador) by the steamer *Albatross* in 1887 were studied by Rathbun (1898).

In the first half of the 20th century, efforts by Carlos Moreira and Ernst Garbe deserve special mention. Moreira (1901), in his publication “Crustáceos do Brasil”, mentioned a total of 40 marine and/or estuarine species of Brachyura for Bahia, including previous records in the literature and material deposited in the Museu Nacional (Rio de Janeiro) collection. In 1919, Garbe – at that time, the official collector for the Museu de Zoologia of the Universidade de São Paulo – sampled estuarine crabs in Ilhéus, originating material that was cited, for example, in publications by Williams (1974) and Bento *et al.* (2007). After several decades without new additions to the fauna of Brachyura in the state, Rodrigues da Costa (1968) published the list of species obtained by the French *Calypso* Expedition in 1962; the great majority of these species had been collected in the Abrolhos area. Subsequently, Joly *et al.* (1969) and Gomes Corrêa (1972) compiled the existing information on the composition of decapod fauna from the Abrolhos Archipelago, adding to the list the material collected by expeditions carried out by staff members of the Museu Nacional of Rio de Janeiro.

Coelho (1971) and Coelho & Ramos (1972) listed several species for Bahia based on coastal samplings done on board the R/V *Almirante Saldanha* along the state’s coast during the 1960s. In the 1980s, contributions from Gouvêa & Leite (1980) and Gouvêa (1986a, 1986b) dealt with the fauna at innumerable sites around Todos os Santos Bay. Carqueija & Gouvêa (1996) documented, also in this bay, the occurrence of the non-indigenous swimming-crab *Charybdis hellerii* (A. Milne-Edwards, 1937), a native of the Indo-Pacific.

Beginning in 1995, the fauna of Bahia was prominent in the surveys performed through the REVIZEE Program – Northeast and Central scores – which explored depths from about 20 m down to deep waters on the shelf and slope, resulting in the collection of several species of Brachyura without previous records in Bahia (Ramos-Porto *et al.*, 2002; Torres *et al.*, 2002; Viana *et al.*, 2002, 2003a; Rodrigues & Young, 2003; Tavares & Young, 2004; Serejo *et al.*, 2006; Torres *et al.*, 2006). Between 2003 and 2007, several projects associated with the Universidade Estadual de Santa Cruz (UESC), Ilhéus (Bahia, Brazil), aiming to inventory the crustacean

fauna in coastal areas of the southeast and south of the state, were carried out. Another survey project sponsored by the Universidade Estadual do Sudoeste da Bahia (Campus de Jequié) was carried out in Camamu Bay. These projects led to the documentation of new brachyuran records for the state’s fauna, and the extension of the known southern distributional limits of six species (Almeida *et al.*, 2006, 2007a, 2007b). The Crustacean Collection of the UESC was created in 2003 to store the material collected in these inventories.

Oceanographic factors in the study area

The Bahia coast is part of the coast of eastern Brazil and extends from the Real River on the border with Sergipe (11°27’S, 37°20’W) to Barra do Riacho Doce on the border with Espírito Santo (18°20’S, 39°40’W). This area includes two (Todos os Santos and Camamu) of Brazil’s three largest bays, as well as the largest reef complex in the South Atlantic (Abrolhos) (Leão, 2002) (Fig. 1). The study area extends from the estuaries and beaches to the continental shelf and slope, to a depth of 750 m.

Climate and associated oceanographic processes (waves and coastal currents) that affect the coast of Bahia are controlled by the South Atlantic trade winds, which strongly influence the wave and sediment dispersion patterns along the Bahia coast; and by cold fronts, resulting from the northward movement of polar masses. These cold fronts reach to about 10° or lower latitudes during the winter, and, though not possessing the strong thermal gradient observed in the south and southeast regions of Brazil, they constitute the principal rain-forming mechanism in southern Bahia (Bittencourt *et al.*, 2000; Andrade *et al.*, 2003; Aragão, 2004; Dominguez, 2006).

The Bahia coast has two basic typologies, which illustrate different types of sedimentation. In the north and central regions is the Camamu-Todos os Santos rift, where some of the largest Brazilian bays are located. Sedimentation in this part is strongly influenced by waves. In the south, rivers discharge large amounts of sediment into the ocean, producing classic wave-dominated deltas. This type of coast extends southward as far as the mouth of the Paraíba do Sul River and is typical of Brazil’s eastern region (Dominguez, 2006).

The area considered is under the influence of the Brazil Current, which originates at about 10°S (Stramma *et al.*, 1990); this current causes high salinity and temperature and transparent waters. According to Kempf (1971), river discharges have, in general, only local consequences. Among the main

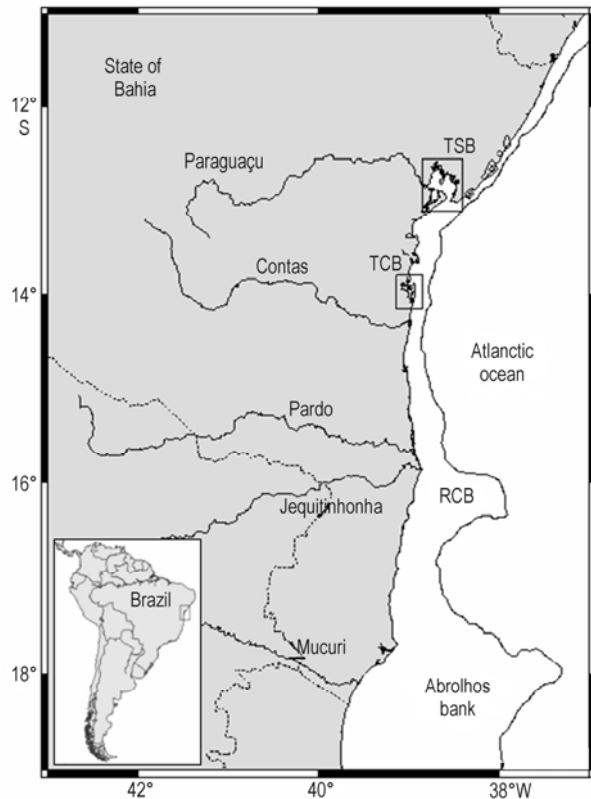


Figure 1. Location of the study area, state of Bahia, eastern Brazilian coast. (CB) Camamu Bay, (RCB) Royal Charlotte Bank, (TSB) Todos os Santos Bay. The main rivers are underlined. Scale bar = 100 km.

Figura 1. Ubicación del área de estudio, Estado de Bahia, costa este de Brasil. (CB) Bahía de Camamu, (RCB) Banco Royal Charlotte, (TSB) Bahía de Todos os Santos. Los nombres de los principales ríos se encuentran subrayados. Escala = 100 km.

rivers forming extensive estuarine areas, some deserve special mention: from north to the south, the Paraguaçu River, flowing into western Todos os Santos Bay; the Contas River, with its mouth at the city of Itacaré; the Pardo River, with its mouth at Canavieiras; the Jequitinhonha River and its mouth at Belmonte, and the Mucuri River, with its mouth at the city of Mucuri (Fig. 1).

The continental shelf of Bahia can be divided into two well-defined sectors. In the first, north of Ilhéus (14-15°S), the shelf is narrow, with a strong depth gradient and isobaths arranged almost parallel to the coastline. In the second sector, south of Ilhéus, the shelf widens and has a low depth gradient and isobaths with irregular contours (Bittencourt *et al.*, 2000). The northern part is 10 km wide off Salvador, narrowing to 5 km off Itacaré (14°16'S), the narrowest stretch of the Brazilian continental shelf (Lana *et*

al., 1996; Freire & Dominguez, 2006). In the southern sector, the main physiographic features are the Royal Charlotte Bank, reaching 100 km off Belmonte (15°51'S), and the Abrolhos Bank, located 190-200 km off Caravelas (17°45'S) (Lana *et al.*, 1996).

Little is still known about the composition of the bottom sediments on the Bahia shelf, especially south of Todos os Santos Bay (Lana *et al.*, 1996). In general, the surface bottom sediments in shallow waters constitute two great sedimentary facies of biogenic and terrigenous nature, distributed in parallel along the coastline (Leão & Brichta, 1996). Freire & Dominguez (2006) reported that the break of the central continental shelf in Bahia between Ponta do Mutá (13°52'S) and Olivença (14°56'S) is about 60 m, and the bottom in this stretch is basically composed of two sediment types: sandy and muddy siliciclastics, restricted to the coastal face and inner shelf; and carbonate sediments, mainly located on the middle and outer shelf and on the slope. The dominance of calcareous algae on the bottoms, which is characteristic of northeast Brazil, is also seen in the study area. The upper limit of this algae zone is linked to the end of the land's influence and varies accordingly. Generally, it is located near the coast at about the 20-m isobath, except at Abrolhos, where it is farther offshore. The lower limit is dependent on light penetration, and is located at the beginning of the slope at depths of 100 m or more. South of Abrolhos, the calcareous-algae bottoms are deeper and become less important (Kempff, 1970, 1971).

MATERIAL AND METHODS

The species list presented herein was based on an exhaustive analysis of the literature effectively published up to 2007. Sources of restricted access such as monographs or theses, as well as congress communications, were not used in the checklist. Biological and fishery papers were also not included in the review. This contribution does not aim to resolve taxonomic problems, but to provide investigators with a starting point for studies that are taxonomic, ecological, or zoogeographical in nature. This list is also based on the material deposited in the Carcinological Collection of the Museu de Zoologia of the Universidade Estadual de Santa Cruz (MZUESC), which comprises material of Brachyura collected in Bahia between 2003 and 2007, between 13°56'S, 39°05'W and 18°05'S, 39°33'W. For each species, the geographical distribution, previous records in Bahia including synonymous names under which a species was previously cited (if any), and the reference for the description are provided. When avail-

Table 1. Oceanographic expeditions that sampled the coast of Bahia, Brazil-station data.**Tabla 1.** Expediciones oceanográficas que recolectaron muestras en la costa de Bahia, Brasil.

| Ship/Expedition/Program | Station | Coordinates/Depth | Year |
|----------------------------------|-----------------------------------|---|---------|
| <i>Albatross</i> | “Bahia” (= Salvador) | Data not available | 1887 |
| <i>Albatross</i> | Abrolhos | 17°57'S, 38°42'W | 1887 |
| <i>Almirante Saldanha</i> | St. 1966 | 17°55'S, 37°30'W, 47 m | 1968 |
| <i>Almirante Saldanha</i> | St. 1981 | 13°48'30"S, 38°48'30"W, 49 m | 1968 |
| <i>Almirante Saldanha</i> | St. 1981B | 12°59'42"S, 38°19'30"W, 59 m | 1968 |
| <i>Calypso</i> | St. 89 | 18°18'S, 38°53'W, 38 m | 1961 |
| <i>Calypso</i> | St. 1815 – “Parages des Abrolhos” | 17°57'S, 38°42'W, 19 m | 1962 |
| <i>Calypso</i> | St. 1816 - “Parages des Abrolhos” | 17°57'S, 38°42'W, 19 m | 1962 |
| <i>Calypso</i> | St. 1817 – Abrolhos | 17°57'S, 38°42'W, 13.5 m | 1962 |
| <i>Calypso</i> | St. 1818 - Abrolhos | 17°57'S, 38°42'W, 21 m | 1962 |
| <i>Calypso</i> | St. 1822 – Abrolhos | Coordinates not available, 24 m | 1962 |
| <i>Calypso</i> | St. 1823 - “Chenal des Abrolhos” | 17°56'S, 38°50'W, 24 m | 1962 |
| <i>Calypso</i> | St. 1825 - Abrolhos | Coordinates not available, 22 m | 1962 |
| <i>Calypso</i> | St. 1826 – “Chenal des Abrolhos” | 17°52.5'S, 38°49'W, 20 m | 1962 |
| <i>Calypso</i> | St. 1827 - Abrolhos | 17°45'30"S, 38°48'00"W, 24 m | 1962 |
| <i>Calypso</i> | St. 1830 – “Passos de Jucurusu” | 17°16'S, 38°30.5'W, 110-130 m | 1962 |
| <i>Calypso</i> | St. 1831 – “Banc St. Antonio” | Coordinates not available, 20 m | 1962 |
| <i>Challenger</i> | Salvador | 12°59'S, 38°31'W, 12-36 m | 1873 |
| <i>Challenger</i> | Salvador, inland | 12°59'S, 38°31'W | 1873 |
| Hartt Explorations | Bonfim, Salvador | 12°55'S, 38°30'W | 1876-77 |
| Hartt Explorations | Mapele, Simões Filho | 12°46'S, 38°25'W | 1876-77 |
| Hartt Explorations | Mar Grande, Ilha de Itaparica | 12°59'S, 38°31'W | 1875-77 |
| Hartt Explorations | Periperi, Salvador | 12°52'S, 38°28'W | 1875-77 |
| Hartt Explorations | Plataforma, Salvador | 12°59'S, 38°31'W | 1876-77 |
| Hartt Explorations | Rio Vermelho, Salvador | 13°00'S, 38°29'W | 1875-77 |
| <i>Hassler</i> | “Bahia” | 11°49'S, 37°27'W, 21-30 m | 1872 |
| <i>Hassler</i> | “Bahia-2” | 11°49'S, 37°20'W, 72 m | 1872 |
| <i>Hassler</i> | “Bahia-3” | 11°49'S, 37°29'W, 30 m | 1872 |
| <i>Hassler</i> | “Bahia-4” | 11°49'S, 37°10'W, 27 m | 1872 |
| <i>Hassler</i> | Abrolhos | 17°57'S, 38°42'W, 54 m | 1872 |
| REVIZEE Program, Central Score | St. C5-2R | 13.646°S, 38.742°W, 55 m | 2001 |
| REVIZEE Program, Central Score | St. C5-4R | 14.808°S, 38.917°W, 20 m | 2001 |
| REVIZEE Program, Central Score | St. C5-5R | 15.568°S, 38.83°W, 20 m | 2001 |
| REVIZEE Program, Central Score | St. C5-7R | 16.117°S, 38.17°W, 40 m | 2001 |
| REVIZEE Program, Central Score | St. C5-10R | 17.103°S, 36.741°W, 50 m | 2001 |
| REVIZEE Program, Central Score | St. C5-12R | 17.042°S, 37.608°W, 50 m | 2001 |
| REVIZEE Program, Central Score | St. C5-16R | 18.059°S, 37.315°W, 100 m | 2001 |
| REVIZEE Program, Central Score | St. C5-504 | 14.482° S, 38.901° W, 278 m | 2001 |
| REVIZEE Program, Central Score | St. C5-517 | 13°22'21"S, 38°36'68"W, 750 m | 2001 |
| REVIZEE Program, Central Score | St. D-0538 | 13°40'741"S (sic), 38°71'601"W (sic), 450-500 m | 1999 |
| REVIZEE Program, Central Score | St. E-0517 | 13°22'173"S (sic), 38°36'566"W (sic), 750 m | 2000 |
| REVIZEE Program, Northeast Score | Cruise 3, St. 5 | 12°09.3'S, 37°29.8'W, 380 m | 1999 |
| REVIZEE Program, Northeast Score | Cruise 3, St. 12 | 11°36.3'S, 37°13.1'W, 365 m | 2000 |
| REVIZEE Program, Northeast Score | Cruise 3, St. 50 | 12°09.3'S, 37°29.8W, 380 m | 1999 |
| REVIZEE Program, Northeast Score | Cruise 3, St. 51 | 12°09.1'S, 37°29.0'W, 500 m | 1999 |
| REVIZEE Program, Northeast Score | Cruise 3, St. 59 | 12°58.6'S, 38°13.3'W, 590 m | 1999 |
| REVIZEE Program, Northeast Score | Cruise 3, St. 60 | 12°58'S, 38°14'W, 220 m | 1999 |
| <i>Thayer</i> | St. 090, Rio Pardo, Canavieiras | 15°44'S, 38°58'W | 1866 |
| <i>Thayer</i> | Santa Cruz | 16°16'S, 39°01'W | 1866 |
| <i>Thayer</i> | St. 102, Porto Seguro | 16°25'S, 39°07'W | 1866 |

able, the name of the collection site is provided. If a site was not mentioned by the authors, the geographical coordinates are provided. For material collected in the *Thayer*, *Hartt*, *Hassler*, *Albatross*, *Challenger*, *Almirante Saldanha*, and *Calypso* expeditions and the REVIZEE Program, the station number is provided, and additional data (coordinates and depths) are listed in Table 1. For references that do not identify a site or provide coordinates, the citation was given only as “Bahia”. Sampling depth was also included when available. Species marked with an asterisk are represented in the Crustacean Collection of the MZUESC. Comments on the historical nature, geographical distribution, and taxonomic changes were inserted when relevant, especially those that occurred after the landmark review of Melo (1996). The classification into superfamilies and families follows the proposal of Martin & Davis (2001). The classification of Karasawa & Schweitzer (2006) was followed for the complex group Xanthoidea *sensu lato* (superfamilies Pilumnoidoidea, Xanthoidea, Eriphioidea, Goneplacoidea, and Portunoidea) based on a profound phylogenetic study including recent and fossil genera. However, several genera of this superfamily treated in this publication were not included by the authors in their analyses. Karasawa *et al.* (2008) evaluated the Portunoidea, and their findings indicated that this superfamily is much more diverse at the family level than previously recognized. Subfamilies were not used. The order of families within each superfamily and of species within each family is alphabetic. Although classification proposals always represent divergent opinions, the objective of this study was not to discuss the systematic position of the species in higher categories such as superfamily, family, and subfamily. The division of the eastern Brazilian coast into zoogeographical provinces is based on the proposals of Coelho & Ramos (1972) and Coelho *et al.* (1978). Thus, the Brazilian coast is divided into three provinces: (1) Guyanas, extending from the states of Amapá to Maranhão; (2) Brazilian, from Maranhão to Espírito Santo; and (3) Paulista, from Espírito Santo to southern Brazil (Fig. 2).

For the species classification according to depth, in Table 2, we adopted the classification used by Barreto *et al.* (1993b): 0-80 m, coastal species; 0 to >80 m, eurybathyal species; >80 m, bathyal species. Abbreviations used in the Results section are Exp. (Expedition) and St. (Station).

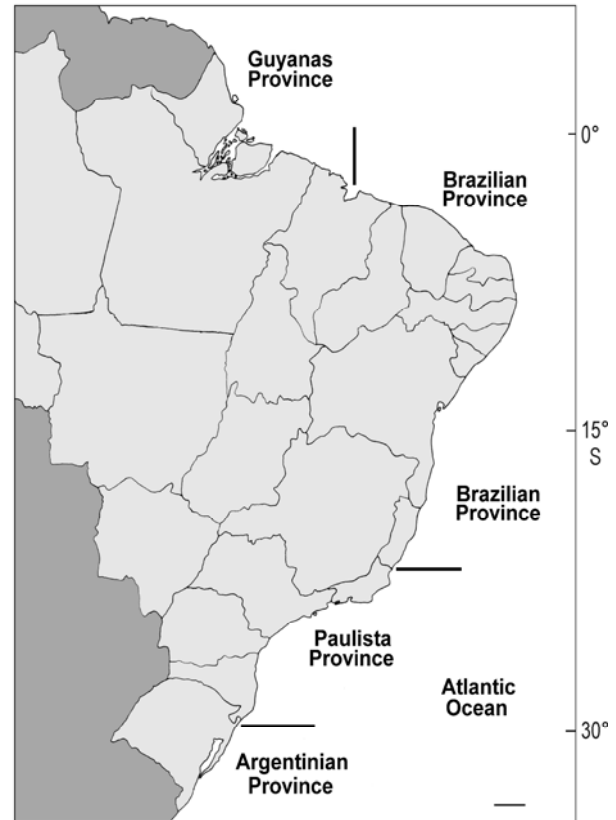


Figure 2. Marine zoogeographic provinces on the Brazilian coast, adapted from Coelho & Ramos (1972). Scale bar = 185 km.

Figura 2. Provincias zoogeográficas marinas en la costa leste de Brasil, adaptado de Coelho & Ramos (1972). Escala = 185 km.

RESULTS

List of species:

Infraorder Brachyura Latreille, 1802

Superfamily Homolodromioidea Alcock, 1900

Family Homolodromiidae Alcock, 1900

1. *Homolodromia monstrosa* Martin, Christiansen & Trautwein, 2001

Distribution: Western Atlantic – Surinam, Guyana, and Brazil (Bahia) (Tavares & Young, 2004).

Previous records: Tavares & Young (2004), St. E-0517 (REVIZEE Program, Central Score).

Description: Martin *et al.*, 2001: 319, figs. 4-7.

Superfamily Dromioidea de Haan, 1833**Family Dromiidae de Haan, 1833****2. *Dromia erythropus* (G. Edwards, 1771)**

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (Fernando de Noronha, and from Amapá to Santa Catarina). Central Atlantic – Ascension (Manning & Chace, 1990; Melo & Campos Jr., 1999; Viana *et al.*, 2003a, 2003b).

Previous records: Rathbun (1937); Forest (1974); Gouvêa (1986a), Salvador; Melo & Campos Jr. (1999), Arembépe and Baía de Salvador (= Todos os Santos Bay).

Description: Melo & Campos Jr., 1999: 279, Fig. 2

3. *Dromia gouveai* Melo & Campos Jr., 1999*

Distribution: Western Atlantic – Brazil (Bahia and São Paulo) (Melo & Campos Jr., 1999).

Previous records: Melo & Campos Jr. (1999) and Melo *et al.* (2003), Salvador; Almeida *et al.* (2007a), Ilhéus coast, 20 m.

Description: Melo & Campos Jr., 1999: 281, Fig. 3.

Remarks: The type locality of *D. gouveai* is “Geribatuba”, Salvador (Melo & Campos Jr., 1999; Melo *et al.*, 2003). We believe that the correct name of the locality is “Praia de Geribatuba”, municipality of Vera Cruz, Itaparica Island, near Salvador.

4. *Hypoconcha arcuata* Stimpson, 1858*

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, Surinam, and Brazil (from Amapá to São Paulo) (Melo & Campos Jr., 1999).

Previous records: Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo & Campos Jr., 1999: 284, Fig. 4.

5. *Hypoconcha parasitica* (Linnaeus, 1763)

Distribution: Western Atlantic – North Carolina to Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to Santa Catarina) (Melo & Campos Jr., 1999).

Previous records: *Hypoconcha sabulosa* Guérin-Méneville, 1854 – Coelho (1966); Coelho & Ramos (1972); Coelho & Ramos-Porto (1989). *Hypoconcha parasitica* – Barreto *et al.* (1993a); Melo & Campos Jr. (1999), Salvador.

Description: Melo & Campos Jr., 1999: 285, Fig. 5.

6. *Moreiradromia antillensis* (Stimpson, 1858)*

Distribution: Western Atlantic – Bermuda, North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul). Central Atlantic – Ascension (Manning & Chace, 1990; Melo, 1996).

Previous records: *Dromidia Antillensis* (sic) – Smith (1869), Abrolhos. *Dromidia antillensis* – Moreira (1901); Rathbun (1937); Rodrigues da Costa (1968), Abrolhos (R/V *Calypso*, Stations 1816–1818); Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Coelho & Ramos (1972), “Bahia” and seamounts off Bahia; Gouvêa (1986a), Salvador; Coelho & Ramos-Porto (1989); Barreto *et al.* (1993a). *Cryptodromiopsis antillensis* – Melo & Campos Jr. (1999), Salvador, Itagi (doubtful locality, possibly misspelled), Itapegipe (misspelled = Itapagipe Peninsula, Salvador) and Abrolhos (R/V *Calypso*, St. 1818 and R/V *Almirante Saldanha*, St. 1966). *Moreiradromia antillensis* – Serejo *et al.* (2006), St. C5-7R (REVIZEE Program, Central Score); Almeida *et al.* (2007a, 2007b), Ilhéus coast and Camamu Bay, respectively.

Description: Melo & Campos Jr., 1999: 276, Fig. 1 (as *C. antillensis*).

Remarks: Species referred several times from Bahia as *D. antillensis*, until 1993. Melo & Campos Jr. (1999), reviewing the family Dromiidae in Brazil, reported this crab as *Cryptodromiopsis antillensis*. Finally, Guinot & Tavares (2003) transferred it to the new genus *Moreiradromia* Guinot & Tavares, 2003.

Superfamily Raninoidea de Haan, 1839**Family Raninidae de Haan, 1839****7. *Raninoides loevis* (Latreille, 1825)***

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (from Amapá to São Paulo) (Melo, 1996).

Previous records: Barreto *et al.* (1993a); Almeida *et al.* (2007a), Ilhéus coast.

Description: Melo, 1996: 116.

Family Symethidae Goeke, 1981**8. *Symethis variolosa* (Fabricius, 1793)**

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (Fer-

nando de Noronha, and from Amapá to São Paulo) (Melo, 1996).

Previous records: *Zanclifer caribensis* (De Freminville, 1832) – Henderson (1888), off Salvador (*Challenger* Exp.); Moreira (1901). *Symethis variolosa* – Coelho & Ramos (1972); Barreto *et al.* (1993a); Serejo *et al.* (2006), St. C5-5R (REVIZEE Program, Central Score).

Description: Melo, 1996: 117.

Superfamily Dorippoidea MacLeay, 1838

Family Dorippidae MacLeay, 1838

9. *Ethusa americana* H. Milne-Edwards, 1880

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (from Maranhão to Rio de Janeiro) (Melo, 1996).

Previous records: *Ethusa mascarone americana* – Rodrigues da Costa (1968), Abrolhos (R/V *Calypso*, St. 1817); Gomes Corrêa (1972), Abrolhos. *Ethusa americana* – Barreto *et al.* (1993a), Serejo *et al.* (2006), St. C5-5R (REVIZEE Program, Central Score).

Description: Melo, 1996: 106.

Superfamily Calappoidea Milne-Edwards, 1837

Family Calappidae Milne-Edwards, 1837

10. *Acanthocarpus alexandri* Stimpson, 1871

Distribution: Western Atlantic – Massachusetts, from North Carolina to Florida, Gulf of Mexico, Antilles, Brazil (from Piauí to Rio Grande do Sul), and Uruguay (Melo, 1996; Ramos-Porto, *et al.*, 2002; Rodrigues & Young, 2003).

Previous records: Ramos-Porto *et al.* (2002) and Viana *et al.* (2003a), Cruise 3, St. 12 (REVIZEE Program, Northeast Score).

Description: Rodrigues & Young, 2003: 2, Figs. 1–2.

11. *Acanthocarpus bispinosus* H. Milne-Edwards, 1880

Distribution: Western Atlantic – Florida (Gulf of Mexico), Antilles, and Brazil (from Pernambuco to Bahia) (Powers, 1977; Ramos-Porto *et al.*, 2002; Rodrigues & Young, 2003).

Previous records: Rodrigues & Young (2003), off Boipeba Island (450–500 m) and Itacaré (278–522 m) (REVIZEE Program, Central Score); Serejo *et al.* (2006), St. C5-504 (REVIZEE Program, Central Score).

Description: Rodrigues & Young, 2003: 5, Figs. 3–4.

12. *Calappa galloides* Stimpson, 1859*

Distribution: Western Atlantic – Bermuda, and from Florida to Brazil (Fernando de Noronha, and from Alagoas to Rio Grande do Sul). Eastern Atlantic – from Canary Islands to Angola. Central Atlantic – Ascension (Manning & Chace, 1990; Melo, 1996; González *et al.*, 2000).

Previous records: *Calappa gallus* (Herbst, 1803) – Rathbun (1898, 1937), “Bahia” (*Albatross* Exp. and material deposited in the Copenhagen Museum); Moreira (1901); Coelho & Ramos (1972); Gouvêa (1986b), Salvador; Barreto *et al.* (1993a). *Calappa galloides* – Almeida *et al.* (2007a), Ilhéus coast, 40–41 m.

Description: Melo, 1996: 124 (as *C. gallus*).

Remarks: This species was first reported from Bahia, as *C. gallus*, by Rathbun (1898), who examined material collected during the *Albatross* Expedition. *Calappa galloides* was considered by her as a junior synonym of *C. gallus*, with a range covering the Atlantic, extending to the Pacific (see Rathbun, 1898, 1937). Examining specimens from Ascension, Manning & Chace (1990) attributed the previous Atlantic records of *C. gallus* to *C. galloides*.

13. *Calappa ocellata* Holthuis, 1958*

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to Rio de Janeiro) (Melo, 1996).

Previous records: *Callappa flammea* (misspelled) Herbst, 1794 – Joly *et al.* (1969), Abrolhos. *Calappa ocelata* (misspelled) – Gomes Corrêa (1972), Abrolhos. *Calappa ocellata* – Barreto *et al.* (1993a); Almeida *et al.* (2007a, 2007b), Ilhéus coast and Camamu Bay, respectively.

Description: Melo, 1996: 126.

14. *Cryptosoma balguerii* (Desbonne, 1867)

Distribution: Western Atlantic – Bermuda, and from North Carolina to Brazil (from Amapá to Rio de Janeiro) (Galil & Clark, 1996; Melo, 1996).

Previous records: *Cycloes bairdii* Stimpson, 1860 – Coelho & Ramos (1972); Barreto *et al.* (1993a).

Description: Galil & Clark, 1996: 184, Figs. 1D–F, 3B, 4.

Remarks: Galil & Clark (1996), reviewing the nomenclature of the genera *Cryptosoma* Brullé, 1837 and *Cycloes* de Haan, 1837, attributed the western

Atlantic records of *Cycloes bairdii* to *Cryptosoma balguerii*. *Cryptosoma* also includes two eastern Pacific species, one of them *C. bairdii*, which ranges from Baja California, Mexico, to Costa Rica. The Indo-Pacific species group was assigned to the genus *Cycloes*.

Family Hepatidae Stimpson, 1871

15. *Hepatus pudibundus* (Herbst, 1785)*

Distribution: Western Atlantic – Georgia, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul) (Melo, 1996).

Previous records: *Hepatus princeps* (Herbst, 1794) – Rathbun (1937), Plataforma (Salvador, Hartt Explorations). *Hepatus pudibundus* – Coelho & Ramos (1972); Gouvêa (1986b), Salvador, Candeias, and Itaparica Island; Almeida *et al.* (2007a, 2007b), Ilhéus coast (15–16 m) and Camamu Bay, respectively.

Description: Melo, 1996: 131.

Superfamily Leucosioidea Samouelle, 1819

Family Leucosiidae Samouelle, 1819

16. *Callidactylus asper* Stimpson, 1871

Distribution: Western Atlantic – Bermuda, North Carolina, Florida, Gulf of Mexico, Antilles, Colombia, and Brazil (from Amapá to Bahia) (Melo, 1996; Serejo *et al.*, 2006).

Previous records: Serejo *et al.* (2006), REVIZEE Program, Central Score.

Description: Melo, 1996: 157.

17. *Ebalia stimpsoni* A. Milne-Edwards, 1880

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, Colombia, and Brazil (from Amapá to São Paulo) (Melo, 1996).

Previous records: *Ebalia stimpsonii* (sic) – Rodrigues da Costa (1968), Abrolhos (R/V *Calypso*, St. 1817 and 1827); Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos; Coelho & Ramos-Porto (1986). *Ebalia stimpsoni* – Coelho & Torres (1980), Salvador and Porto Seguro; Barreto *et al.* (1993a); Young & Serejo (2005), Abrolhos.

Description: Melo, 1996: 139.

18. *Acanthilia intermedia* (Miers, 1886)

Distribution: Western Atlantic – North Carolina, South Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Maranhão to Rio de Janeiro) (Melo, 1996).

Previous records: *Iliacantha intermedia* – Miers (1886), off Salvador (*Challenger* Exp.); Coelho & Torres (1980), Salvador; Barreto *et al.* (1993a).

Description: Melo, 1996: 159 (as *I. intermedia*)

Remarks: *I. intermedia* was described from a specimen obtained during the *Challenger* Expedition off Salvador (Miers, 1886). Galil (2000) removed this species to the monotypic genus *Acanthilia*.

19. *Iliacantha liodactylus* Rathbun, 1898*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to Bahia) (Melo, 1996; Almeida *et al.*, 2007a).

Previous records: Coelho & Ramos (1972); Coelho & Torres (1980), Salvador; Coelho & Ramos-Porto (1986); Barreto *et al.* (1993a); Almeida *et al.* (2007a), Ilhéus coast.

Description: Melo, 1996: 160.

20. *Iliacantha sparsa* Stimpson, 1871

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, Colombia, and Brazil (from Pará to Espírito Santo) (Melo, 1996).

Previous records: Coelho & Ramos (1972); Coelho & Torres (1980), Salvador; Coelho & Ramos-Porto (1986); Barreto *et al.* (1993a).

Description: Melo, 1996: 161.

21. *Lithadia brasiliensis* (von Martens, 1872)

Distribution: Western Atlantic – Brazil (from Pará to São Paulo) (Melo, 1996).

Previous records: *Lithadia cariosa* Stimpson, 1860 – Miers (1886), off Salvador (*Challenger* Exp.).

Description: Melo, 1996: 141.

22. *Lithadia vertiginosa* (Coelho, 1973)

Distribution: Western Atlantic – Brazil (Seamounts off Ceará, and from Pará to Bahia) (Melo, 1996).

Previous records: *Ebalia cariosa* (Stimpson, 1860) – Rodrigues da Costa (1968), “Passos de Jucuruçu” (R/V *Calypso*, St. 1830). *Ebalia vertiginosa* – Coelho & Torres (1980), Salvador. *Lithadia vertiginosa* – Coelho & Ramos-Porto (1986); Barreto *et al.* (1993a).

Description: Melo, 1996: 144.

23. *Myropsis quinquespinosa* Stimpson, 1871

Distribution: Western Atlantic – Massachusetts, New Jersey, North Carolina, South Carolina, Florida, Gulf of Mexico, Central America, Antilles, northern South America, Brazil (Pará, and from Paraíba to Rio Grande do Sul), and Uruguay (Melo, 1996; Torres *et al.*, 2002).

Previous records: Torres *et al.* (2002), Cruise 3, St. 60 (REVIZEE Program, Northeast Score); Viana *et al.* (2003a), same station plus 11°36'S, 37°12.8'W (375 m) and 11°36.3'S, 37°13.1'W (365 m); Serejo *et al.* (2006) (REVIZEE Program, Central Score).

Description: Torres *et al.*, 2002: 109, Fig. 1.

24. *Persephona lichtensteinii* Leach, 1817*

Distribution: Western Atlantic – from Venezuela to Brazil (from Amapá to São Paulo) (Melo, 1996).

Previous records: Almeida *et al.* (2007a, 2007b), Ilhéus coast (15–16 m) and Camamu Bay, respectively.

Description: Melo, 1996: 152.

25. *Persephona mediterranea* (Herbst, 1794)*

Distribution: Western Atlantic – from New Jersey to Florida, Gulf of Mexico, Antilles, northern South America, Brazil (from Amapá to Rio Grande do Sul), and Uruguay (Melo, 1996).

Previous records: Almeida *et al.* (2007a), Ilhéus coast, and possibly Miers (1886) (see remarks on *P. punctata*).

Description: Melo, 1996: 153.

26. *Persephona punctata* (Linnaeus, 1758)*

Distribution: Western Atlantic – Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul) (Melo, 1996).

Previous records: Miers (1886), off Salvador (*Challenger* Exp.); Coelho & Torres (1980); Almeida *et al.* (2007a, 2007b), Ilhéus coast (15–16 m) and Camamu Bay, respectively.

Description: Melo, 1996: 154.

Remarks: Miers (1886) mentioned the occurrence of one individual of *P. punctata* off Salvador, among the material dredged by the *Challenger*. He said, in litt.: “The characteristic coloration is in this specimen almost obliterated”. This remark led Torres (1998) to suggest that the material analyzed by Miers (1886) could belong to *P. mediterranea*, a species that has reddish spots on the dorsal region of

the carapace. It is possible to note these subtle spots in Plate XXV of Miers' publication.

27. *Speloeophorus elevatus* Rathbun, 1898

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, and Brazil (from Maranhão to Bahia) (Melo, 1996; Melo & Torres, 1998).

Previous records: Coelho & Torres (1980), Salvador; Coelho & Ramos-Porto (1986); Melo & Torres (1998), St. 1981 (R/V *Almirante Saldanha*); Barreto *et al.* (1993a); Serejo *et al.* (2006), St. C5-2R (REVIZEE Program, Central Score).

Description: Melo & Torres, 1998: 124, Figs. 4–6.

Superfamily Majoidea Samouelle, 1819

Family Epialtidae MacLeay, 1838

28. *Acanthonyx dissimulatus* Coelho, 1993*

Distribution: Western Atlantic – Brazil (from Maranhão to São Paulo) (Coelho & Torres, 1993; Melo, 1996; Dall'Occo *et al.*, 2004).

Previous records: *Acanthonyx petiverii* H. Milne-Edwards, 1834 – Rathbun (1894, 1925), Mar Grande, Bay of Bahia (= Todos os Santos Bay) (Hartt Explorations); Moreira (1901); Gouvêa (1986a), Salvador. *Acanthonyx dissimulatus* – Young & Serejo (2005), Abrolhos; Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 170.

29. *Epialtus bituberculatus* H. Milne-Edwards, 1834*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Ceará to São Paulo) (Melo, 1996).

Previous records: Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Gouvêa (1986a), Salvador; Serejo *et al.* (2006), REVIZEE Program, Central Score; Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 174.

Remarks: *Epialtus bituberculatus* was collected on the coast of Bahia during the REVIZEE Program, between 20–67 m, and not at the stations C5-4F (1200 m) and C5-10R (50 m), as reported by Serejo *et al.* (2006) (C. Serejo, *pers. comm.*).

Family Inachidae MacLeay, 1838

30. *Aepinus septemspinus* (H. Milne-Edwards, 1879)

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, and Brazil (Fernando de Noronha and Rocas Atoll, and from Pará to São Paulo) (Melo, 1996).

Previous records: Coelho & Ramos (1972); Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Barreto *et al.* (1993a).

Description: Melo, 1996: 180.

31. *Anomalothir furcillatus* (Stimpson, 1871)

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (from Bahia to Rio Grande do Sul) (Melo, 1996; Viana *et al.*, 2003a).

Previous records: Viana *et al.* (2003a), 11°36.3'S, 37°13.1'W (REVIZEE Program, Northeast Score, 365 m).

Description: Coelho, 1999: 157, Fig. 2.

32. *Coryrhynchus algicola* (Stebbing, 1914)*

Distribution: Western Atlantic – Colombia and Brazil (from Maranhão to São Paulo) (Melo, 1996; Coelho, 2006).

Previous records: *Podochela riisei* Stimpson, 1860 – Coelho (1971), Abrolhos. *Podochela algicola* – Coelho & Ramos (1972). *Podochela (Coryrhynchus) algicola* – Barreto *et al.* (1993a). *Coryrhynchus algicola* – Coelho (2006), Camamu Bay, Ilhéus, and R/V *Calypso* (St. 89 and 1827); Almeida *et al.* (2007a, 2007b), Ilhéus coast (20 m) and Camamu Bay, respectively.

Description: Melo, 1996: 185 (as *P. algicola*).

Remarks: *C. algicola* was cited from Bahia for the first time by Coelho (1971), as *Podochela riisei*. Further records (Coelho & Ramos, 1972; Barreto *et al.*, 1993a) were published under *P. algicola*. Coelho (2006) revised the genus *Podochela* Stimpson, 1860 on the Caribbean and Atlantic South America coast, including the species in the genus *Coryrhynchus* Kingsley, 1879. The rostrum in both genera is not spine-shaped as in *Ericerodes* Rathbun, 1897; rather it is more rounded in *Coryrhynchus*, resembling a visor, and is triangular in *Podochela*.

33. *Ericerodes gracilipes* (Stimpson, 1871)*

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul) (Melo, 1996; Coelho, 2006).

Previous records: *Podochela gracilipes* – Coelho (1971); Coelho & Ramos (1972). *Podochela (Ericerodes) gracilipes* – Barreto *et al.* (1993a). *Ericerodes*

gracilipes – Coelho (2006), St. 1981B (R/V *Almirante Saldanha*).

Description: Melo, 1996: 187 (as *P. gracilipes*).

Remarks: The species was moved from the genus *Podochela* to *Ericerodes*. Species of *Ericerodes* differ from *Coryrhynchus* by the triangular rostrum, with its apex ending in a spine (Coelho, 2006).

34. *Ericerodes minusculus* (Coelho, 1972)

Distribution: Western Atlantic – Brazil (Seamounts off Ceará and Rio Grande do Norte, and from Ceará to Bahia) (Melo, 1996; Coelho, 2006).

Previous records: *Podochela (Ericerodes) minuscula* – Barreto *et al.* (1993a).

Description: Melo, 1996: 188 (as *P. minuscula*).

Remarks: Recently moved from *Podochela* to *Ericerodes* Rathbun, 1897 (Coelho, 2006).

35. *Metoporphaphis calcarata* (Say, 1818)*

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, and Brazil (from Rio Grande do Norte to Rio de Janeiro) (Melo, 1996; Ferreira & Sankarankutty, 2002).

Previous records: *Metoporphaphis forficulatus* A. Milne-Edwards, 1878 – Miers (1886), off Salvador (*Challenger* Exp.); Moreira (1901). *Metoporphaphis calcarata* – Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Almeida *et al.* (2003, 2007b), Camamu Bay; Almeida *et al.* (2007a), Ilhéus coast (20 m).

Description: Melo, 1996: 183.

36. *Podochela brasiliensis* Coelho, 1972*

Distribution: Western Atlantic – Brazil (from Piauí to Espírito Santo) (Melo, 1996; Coelho, 2006; Serejo *et al.*, 2006).

Previous records: *Podochela riisei* – Gomes Corrêa (1972), Abrolhos. *Podochela brasiliensis* – Barreto *et al.* (1993a); Almeida *et al.* (2003, 2007b), Camamu Bay; Coelho (2006), Camamu Bay and Abrolhos; Serejo *et al.* (2006), St. C5-5R (REVIZEE Program, Central Score).

Description: Melo, 1996: 186.

37. *Stenorhynchus seticornis* (Herbst, 1788)*

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, Brazil (from Amapá to Rio Grande do Sul), Uruguay, and Argentina (Melo, 1996).

Previous records: *Leptopodia sagittaria* (Fabricius, 1793) – A. Milne-Edwards (1878); Miers (1886), off

Salvador (*Challenger* Exp.); Rathbun (1894, 1925), Mar Grande and Periperi (Salvador) (Hartt Explorations). *Stenorhynchus seticornis* – Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Coelho (1971), Salvador; Coelho & Ramos (1972); Gouvêa (1986a), Lauro de Freitas and Salvador; Barreto *et al.* (1993a); Almeida *et al.* (2007a, 2007b), Ilhéus coast (20–49 m) and Camamu Bay, respectively.

Description: Melo, 1996: 190.

Family Inachoididae Dana, 1851

38. *Batrachonotus brasiliensis* Rathbun, 1894

Distribution: Western Atlantic – Brazil (from Pará to São Paulo) (Melo, 1996).

Previous records: Barreto *et al.* (1993a).

Description: Melo, 1996: 197.

39. *Collodes inermis* A. Milne-Edwards, 1878*

Distribution: Western Atlantic – Antilles and Brazil (from Amapá to São Paulo) (Melo, 1996; Dall’Occo *et al.*, 2004).

Previous records: A. Milne-Edwards (1878), A. Milne-Edwards & Bouvier (1923), and Rathbun (1925), “Bahia” (*Hassler* Exp.); Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Coelho & Ramos (1972); Gouvêa & Leite (1980), Itaparica Island; Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 200.

Remarks: *C. inermis* was originally described by A. Milne-Edwards (1878) from material obtained by the *Hassler* Expedition on the coast of Bahia (11°49’S, 37°27’W).

40. *Collodes rostratus* A. Milne-Edwards, 1878

Distribution: Western Atlantic – Brazil (from Bahia to Rio Grande do Sul) and Argentina (to Patagonia) (Gomes Corrêa, 1972; Melo, 1996).

Previous records: Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos.

Description: Melo, 1996: 200.

41. *Inachoides forceps* A. Milne-Edwards, 1879*

Distribution: Western Atlantic – from North Carolina to Florida, Gulf of Mexico, Antilles, Guyanas, and Brazil (from Amapá to Rio de Janeiro) (Melo, 1996).

Previous records: Coelho (1971), Abrolhos; Coelho & Ramos (1972); Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 206.

Family Mithracidae MacLeay, 1838

42. *Leptopisa setirostris* (Stimpson, 1871)

Distribution: Western Atlantic – Florida, Antilles, Venezuela, and Brazil (from Maranhão to Espírito Santo) (Melo, 1996).

Previous records: Rathbun (1925), “Bahia-2” (11°49’S, 37°20’W, *Hassler* Exp.); Barreto *et al.* (1993a).

Description: Melo, 1996: 213.

43. *Macrocoeloma concavum* Miers, 1886*

Distribution: Western Atlantic – Antilles and Brazil (Fernando de Noronha, and from Maranhão to Bahia) (Melo, 1996; Almeida *et al.*, 2007a).

Previous records: *Macrocoeloma concava* – Miers (1886), off Salvador (*Challenger* Exp.). *Macrocoeloma concavum* – Moreira (1901); Barreto *et al.* (1993a); Almeida *et al.* (2007a), Ilhéus coast, 40–44 m.

Description: Melo, 1996: 216.

Remarks: This species was described by Miers (1886) as *M. concava*, based on specimens collected during the *Challenger* Expedition at the Fernando de Noronha and Bahia stations.

44. *Macrocoeloma eutheca* (Stimpson, 1871)

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Central America, Antilles, and Brazil (from Maranhão to Espírito Santo) (Melo, 1996).

Previous records: Coelho & Ramos (1972); Barreto *et al.* (1993a).

Description: Melo, 1996: 217.

45. *Macrocoeloma laevigatum* (Stimpson, 1860)*

Distribution: Western Atlantic – Florida (Florida Keys), Antilles, and Brazil (from Pará to Bahia) (Powers, 1977; Melo, 1996; Serejo *et al.*, 2006).

Previous records: Serejo *et al.* (2006), St. C5-5R (REVIZEE Program, Central Score); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 218.

46. *Macrocoeloma septemspinosum* (Stimpson, 1871)*

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (from Ceará to Espírito Santo) (Melo, 1996; Serejo *et al.*, 2006).

Previous records: *Macrocoeloma septemspinosa* – Miers (1886), off Salvador (*Challenger* Exp.). *Macrocoeloma septemspinosum* – Moreira (1901); Barreto *et al.* (1993a); Almeida *et al.* (2007a), Ilhéus coast, 41–42 m.

Description: Melo, 1996: 219.

47. *Macrocoeloma subparallelum* (Stimpson, 1860)

Distribution: Western Atlantic – Gulf of Mexico, Antilles, Venezuela, and Brazil (Fernando de Noronha, and from Amapá to Espírito Santo) (Melo, 1996).

Previous records: Gouvêa (1986a), Salvador.

Description: Melo, 1996: 220.

48. *Macrocoeloma trispinosum* (Latreille, 1825)*

Distribution: Western Atlantic – Bermuda, North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (Fernando de Noronha, and from Piauí to São Paulo) (Melo, 1996).

Previous records: *Macrocoeloma trispinosa* – Miers (1886), off Salvador (*Challenger* Exp.). *Macrocoeloma trispinosum* – Moreira (1901); Coelho & Ramos (1972); Barreto *et al.* (1993a).

Description: Melo, 1996: 221.

49. *Microphrys antillensis* Rathbun, 1920

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (from Paraíba to Rio de Janeiro) (Melo, 1996).

Previous records: Gouvêa & Leite (1980) and Gouvêa (1986a), Salvador; Young & Serejo (2005), Abrolhos; Türkay (1976).

Description: Melo, 1996: 223.

50. *Microphrys bicornutus* (Latreille, 1825)*

Distribution: Western Atlantic – Bermuda, from North Carolina to Florida, Gulf of Mexico, Central America, Antilles, Venezuela, and Brazil (Fernando de Noronha, and from Maranhão to Rio Grande do Sul) (Melo, 1996).

Previous records: *Milnia bicornuta* Stimpson, 1860 – Smith (1869), Abrolhos. *Microphrys bicornutus* – Rathbun (1898), Abrolhos (*Albatross* Exp.); Rathbun (1925), Abrolhos (*Albatross* Exp.), Plataforma (Sal-

vador, Hartt Explorations) and Porto Seguro (*Thayer* Exp., St. 102); Coelho (1971), Salvador; Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos; Gouvêa & Leite (1980), Itaparica Island; Gouvêa (1986a), Salvador and Itaparica Island.

Description: Melo, 1996: 224.

51. *Mithraculus coryphe* (Herbst, 1801)

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (Fernando de Noronha, and from Ceará to São Paulo) (Melo, 1996).

Previous records: *Mithraculus coronatus* Stimpson, 1860 – Smith (1869), Abrolhos; Moreira (1901). *Mithrax coryphe* – Rathbun (1898), Abrolhos (*Albatross* Exp.). *Mithrax (Mithraculus) coryphe* – Rathbun (1925), Abrolhos (*Albatross* Exp.) and Mar Grande (Hartt Explorations); Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos. *Mithraculus corphe* (misspelled) – Coelho & Torres (1990), Salvador.

Description: Melo, 1996: 228.

52. *Mithraculus forceps* (A. Milne-Edwards, 1875)*

Distribution: Western Atlantic – from North Carolina to Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (Saint Paul's Rocks, Fernando de Noronha, Rocas Atoll, and from Maranhão to Santa Catarina) (Holthuis *et al.*, 1980; Melo, 1996; Rieger & Giraldi, 1996).

Previous records: *Mithrax forceps* – Miers (1886), off Salvador (*Challenger* Exp.); Rathbun (1898), Abrolhos (*Albatross* Exp.); Moreira (1901); Gouvêa (1986a), Salvador. *Mithrax (Mithraculus) forceps* – Rathbun (1925), Abrolhos (*Albatross* Exp.) and Plataforma (Salvador, Hartt Explorations); Coelho (1971), Salvador; Coelho & Ramos (1972). *Mithraculus forceps* – Coelho & Torres (1990), Salvador and Abrolhos; Barreto *et al.* (1993a); Young & Serejo (2005), Abrolhos; Serejo *et al.* (2006), St. C5-5R (REVIZEE Program, Central Score); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 229.

53. *Mithraculus sculptus* (Lamarck, 1818)

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, and Brazil (from Rio Grande do Norte to Bahia) (Melo, 1996).

Previous records: *Mithrax (Mithraculus) sculptus* – Rathbun (1925), Abrolhos (*Hassler* Exp.); Gomes Corrêa (1972), Abrolhos.

Description: Melo, 1996: 230.

54. *Mithrax braziliensis* Rathbun, 1892*

Distribution: Western Atlantic – Brazil (from Piauí to São Paulo) (Melo, 1996; Dall’Occo *et al.*, 2004).

Previous records: *Mithrax braziliensis* – Rathbun (1892), Mar Grande, Bay of Bahia (= Todos os Santos Bay, Hartt Explorations); Moreira (1901); Gouvêa (1986a), Itaparica Island. *Mithrax (Mithrax) braziliensis* – Rathbun (1925), Mar Grande, Bay of Bahia (= Todos os Santos Bay, Hartt Explorations).

Description: Melo, 1996: 234.

Remarks: The type locality of *M. braziliensis* is Mar Grande, Bay of Bahia (= Todos os Santos Bay) (Rathbun, 1892).

55. *Mithrax hemphilli* Rathbun, 1892

Distribution: Western Atlantic – Florida, Antilles, and Brazil (Rocas Atoll, and from Maranhão to Rio de Janeiro) (Melo, 1996).

Previous records: *Mithrax hemphilli* – Rathbun (1898), Abrolhos (*Albatross* Exp.); Moreira (1901); Coelho (1971), Salvador; Barreto *et al.* (1993a); Serejo *et al.* (2006), St. C5-2R (REVIZEE Program, Central Score). *Mithrax (Mithrax) hemphilli* – Rathbun (1925), Abrolhos (*Albatross* Exp.); Gomes Corrêa (1972), Abrolhos. *Mithrax hemphilli* (misspelled) – Gouvêa (1986a), Salvador.

Description: Melo, 1996: 236.

56. *Mithrax hispidus* (Herbst, 1790)

Distribution: Western Atlantic – from Delaware to southern Florida, Gulf of Mexico, Antilles, and Brazil (from Pará to Santa Catarina) (Melo, 1996; Rieger & Giraldi, 2001).

Previous records: *Mithrax hispidus* – Smith (1869), Abrolhos; Rathbun (1898), Abrolhos (*Albatross* Exp.); Gouvêa (1986a), Lauro de Freitas, Salvador, and Itaparica Island; Barreto *et al.* (1993a). *Mithrax (Mithrax) hispidus* – Rathbun (1925), Plataforma and Bonfim (Salvador, Hartt Explorations), Porto Seguro (*Thayer* Exp., St. 102), and Abrolhos (*Hassler* Exp.); Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos.

Description: Melo, 1996: 237.

57. *Mithrax tortugae* Rathbun, 1920*

Distribution: Western Atlantic – Florida, Antilles, northern South America, and Brazil (from Pará to Santa Catarina) (Melo, 1996; Barros & Pimentel, 2001; Rieger & Giraldi, 2001).

Previous records: Almeida *et al.* (2007a), Ilhéus coast.

Description: Melo, 1996: 238.

58. *Nemausa acuticornis* (Stimpson, 1871)*

Distribution: Western Atlantic – from North Carolina to Florida, Gulf of Mexico, Antilles, and Brazil (from Amapá to São Paulo) (Melo, 1996; Alves *et al.*, 2006).

Previous records: *Mithrax (Mithrax) acuticornis* – Rathbun (1925), “Bahia-2” (*Hassler* Exp.); Rodrigues da Costa (1968), Abrolhos and “Passos de Jurucussu” (R/V *Calypso*, St. 1817 and St. 1830, respectively); Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos. *Mithrax acuticornis* – Gouvêa & Leite (1980), Salvador. *Nemausa acuticornis* – Barreto *et al.* (1993a); Serejo *et al.* (2006), St. C5-2R and C5-10R (REVIZEE Program, Central Score); Almeida *et al.* (2007a), Ilhéus coast, 41–42 m.

Description: Melo, 1996: 241.

59. *Nemausa cornutus* (de Saussure, 1857)

Distribution: Western Atlantic – Bermuda, Florida (Florida Straits), Antilles, and Brazil (from Amapá to Espírito Santo) (Melo, 1996; Serejo *et al.*, 2006).

Previous records: *Mithrax cornutus* – Miers (1886) and Rathbun (1925), off Salvador (*Challenger* Exp.); Moreira (1901). *Nemausa cornutus* – Barreto *et al.* (1993a).

Description: Melo, 1996: 242.

60. *Stenocionops furcatus* (Olivier, 1791)*

Distribution: Western Atlantic – Georgia, Florida, Gulf of Mexico, Antilles, Colombia, and Brazil (from Ceará to Rio Grande do Sul) (Melo, 1996).

Previous records: *Pericera cornuta* Milne-Edwards, 1834 – A. Milne-Edwards (1873); *Stenocionops furcata* – Türkay (1976); Almeida *et al.* (2007a), Ilhéus coast.

Description: Melo, 1996: 244 (as *S. furcata*).

Family Pisidae Dana, 185161. *Chorinus heros* (Herbst, 1790)*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (from Ceará to Bahia) (Melo, 1996).

Previous records: Rathbun (1894), Rio Vermelho (Salvador, Hartt Explorations); Rathbun (1925), Rio Vermelho and “Bahia” (material deposited in the

Copenhagen Museum); Moreira (1901); Coelho & Ramos (1972); Barreto *et al.* (1993a).

Description: Melo, 1996: 254.

62. *Libinia ferreirae* Brito Capello, 1871*

Distribution: Western Atlantic – Venezuela and Brazil (from Pará to Santa Catarina) (Melo, 1996).

Previous records: Almeida *et al.* (2007a), Ilhéus coast, 15–16 m.

Description: Melo, 1996: 260.

63. *Microlissa brasiliensis* (Rathbun, 1923)

Distribution: Western Atlantic – Brazil (from Ceará to São Paulo) (Melo, 1996).

Previous records: *Lissa brasiliensis* – Rodrigues da Costa (1968), “Passos de Jucuruçu” (R/V *Calypso*, St. 1830); Coelho & Ramos (1972). *Microlissa brasiliensis* – Barreto *et al.* (1993a).

Description: Melo, 1996: 262.

64. *Notolopas brasiliensis* Miers, 1886*

Distribution: Western Atlantic – Colombia, Venezuela, and Brazil (from Amapá to São Paulo) (Melo, 1996).

Previous records: Miers (1886), off Salvador (*Challenger* Exp.); Moreira (1901); Barreto *et al.* (1993a); Almeida *et al.* (2007a, 2007b), Ilhéus coast (20 m) and Camamu Bay, respectively.

Description: Melo, 1996: 264.

Remarks: Miers (1886) described *N. brasiliensis* from specimens dredged off Salvador, during the *Challenger* Expedition.

65. *Pelia rotunda* A. Milne-Edwards, 1875*

Distribution: Western Atlantic – Brazil (from Pará to Rio Grande do Sul), Uruguay, and Argentina (Melo, 1996).

Previous records: Coelho & Ramos (1972); Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 265.

66. *Rochinia crassa* (A. Milne-Edwards, 1879)

Distribution: Western Atlantic – Massachusetts, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to São Paulo) (Williams, 1984a; Viana *et al.*, 2002; Dall’Occo *et al.*, 2004).

Previous records: Viana *et al.* (2002, 2003a), Cruise 3, St. 50, 51, and 59 (REVIZEE Program, Northeast Score).

Description: Williams, 1984a: 322, Figs. 256, 260a.

Family Tychidae Dana, 1851

67. *Picroceroides tubularis* Miers, 1886

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, and Brazil (from Maranhão to Espírito Santo) (Melo, 1996).

Previous records: Miers (1886), off Salvador (*Challenger* Exp.); Moreira (1901); Coelho & Ramos (1972); Barreto *et al.* (1993a); Serejo *et al.* (2006), St. C5-2R (REVIZEE Program, Central Score).

Description: Melo, 1996: 270.

Remarks: *P. tubularis* was described based on material collected by the *Challenger* from Fernando de Noronha and Bahia (Miers, 1886).

68. *Pitho lherminieri* (Schramm, 1867)*

Distribution: Western Atlantic – from North Carolina to Florida, Gulf of Mexico, Antilles, and Brazil (Fernando de Noronha, and from Pará to São Paulo) (Melo, 1996).

Previous records: Rodrigues da Costa (1968), Abrolhos (R/V *Calypso*, St. 1815, 1817, 1818, 1827); Coelho (1971) and Gomes Corrêa (1972), Abrolhos; Coelho & Ramos (1972); Gouvêa & Leite (1980), Salvador; Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 271.

Superfamily Hymenosomatoidea MacLeay, 1838

Family Hymenosomatidae MacLeay, 1838

69. *Elamena gordonae* Monod, 1956*

Distribution: Western Atlantic – Brazil (Sergipe and Bahia). Eastern Atlantic – from Guinea to Sierra Leone. Western Pacific – Australia (Queensland) (Lucas, 1980; Almeida *et al.*, 2007b).

Previous records: Almeida *et al.* (2007b), Camamu Bay.

Description: Monod, 1956: 469, Figs. 629–637 [as *Elamena (Trigonoplax) gordonae*].

Remarks: Known from few specimens throughout its geographic range. It was reported for the first time from Bahia by Almeida *et al.* (2007b). Knowledge of its distribution in the western Atlantic was then extended from the coast of Sergipe to Camamu Bay (13°54′14″S). Slight morphological differences in the carapace and abdomen between the two specimens from Camamu Bay were observed (Almeida *et al.*, 2007b). Herein, we report the collection of a

specimen (female, not ovigerous, lot MZUESC#837) at Nova Viçosa (17°53'00.9"S), extending the southernmost limit of the known range of *E. gordonae*.

Superfamily Parthenopoidea MacLeay, 1838

Family Parthenopidae MacLeay, 1838

70. *Agolambrus agonus* (Stimpson, 1871)

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, Guyanas, and Brazil (from Amapá to Rio Grande do Sul) (Melo, 1996).

Previous records: *Parthenope* (*Parthenope*) *agona* – Barreto *et al.* (1993a).

Description: Melo, 1996: 285 [as *Parthenope* (*Parthenope*) *agona*].

Remarks: Included in the new genus *Agolambrus* by Tan & Ng (2007), which is monotypic. *Agolambrus* superficially resemble the Indo-West Pacific genus *Parthenope* Weber, 1795, but could be easily distinguished by having a strongly produced pterygostomial ridge, that is visible in dorsal view. Other significant morphological differences between the two genera were discussed by Tan & Ng (2007).

71. *Celatopesia concava* (Stimpson, 1871)

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (from Maranhão to Rio de Janeiro) (Melo, 1996).

Previous records: *Cryptopodia concava* – Rodrigues da Costa (1969), Abrolhos, 8–24 m; Gomes Corrêa (1972), Abrolhos; Barreto *et al.* (1993a).

Description: Chiong & Ng, 1998: 205, Figs. 32–33.

Remarks: Chiong & Ng (1998) found several morphological differences to separate the two American species of *Cryptopodia* H. Milne-Edwards, 1834 (*C. concava* and *C. hassleri* Rathbun, 1925) in a new genus *Celatopesia* Chiong & Ng, 1998. The species of *Cryptopodia* are now understood to be restricted to the Indo-Pacific.

72. *Heterocrypta granulata* (Gibbes, 1850)

Distribution: Western Atlantic – from Massachusetts to Florida, Gulf of Mexico, Antilles, and Brazil (from Ceará to Paraná) (Melo, 1996).

Previous records: Miers (1886), off Salvador (*Challenger* Exp.); Moreira (1901).

Description: Melo, 1996: 279.

73. *Heterocrypta lapidea* Rathbun, 1901*

Distribution: Western Atlantic – Antilles and Brazil (from Pará to Rio Grande do Sul) (Melo, 1996).

Previous records: Gomes Corrêa (1972), Abrolhos; Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 280.

74. *Piloslambrus guerini* (Brito Capello, 1871)*

Distribution: Western Atlantic – Antilles and Brazil (from Rio Grande do Norte to São Paulo) (Melo, 1996).

Previous records: *Lambrus guérinii* (sic) – Miers (1886), off Salvador (*Challenger* Exp.). *Lambrus guerini* – Moreira (1901). *Platylambrus guerini* – Almeida *et al.* (2007a), Ilhéus coast; *Parthenope* (*Platylambrus*) *guerini* – Türkay (1976).

Description: Melo, 1996: 288 [as *Parthenope* (*Platylambrus*) *guerini*].

Remarks: The genus *Piloslambrus* Tan & Ng, 2007, was erected to accommodate the eastern Pacific species *Lambrus depressiusculus* Stimpson, 1871 and the western Atlantic *L. guerini*. This genus bears some morphological similarities with the Indo-West Pacific genera *Aulacolambrus* Paul'son, 1875 and *Certolambrus* Tan & Ng, 2003 (see Tan & Ng, 2007).

75. *Platylambrus serratus* (H. Milne-Edwards, 1834)*

Distribution: Western Atlantic – Bermuda, North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Pará to São Paulo) (Melo, 1996; Viana *et al.*, 2003a).

Previous records: *Lambrus serratus* – Miers (1886), off Salvador (*Challenger* Exp.); Moreira (1901). *Parthenope* (*Platylambrus*) *serrata* – Barreto *et al.* (1993a). *Platylambrus serratus* – Almeida *et al.* (2007a), Ilhéus coast (20 m).

Description: Melo, 1996: 290 [as *Parthenope* (*Platylambrus*) *serrata*].

76. *Thyrolambrus astroides* Rathbun, 1894

Distribution: Western Atlantic – Gulf of Mexico, Antilles, and Brazil (from Pará to Rio de Janeiro) (Melo, 1996).

Previous records: Barreto *et al.* (1993a); Serejo *et al.* (2006), St. C5-12R (REVIZEE Program, Central Score).

Description: Melo, 1996: 294.

Superfamily Cancroidea Latreille, 1802**Family Atelecyclidae Ortmann, 1893**

77. *Trichopeltarion pezzutoi* Tavares & Melo, 2005

Distribution: Western Atlantic – Brazil (Bahia, São Paulo, and Santa Catarina) (Tavares & Melo, 2005).

Previous records: *Trichopeltarion nobile* A. Milne-Edwards, 1880 – Tavares & Young (2004), St. D-0538 (REVIZEE Program, Central Score). *Trichopeltarion pezzutoi* – Tavares & Melo (2005) (same station).

Description: Tavares & Melo, 2005: 236, Figs. 1, 3.

Superfamily Pilumnoidoidea Guinot & Macpherson, 1987**Family Pilumnoididae Guinot & Macpherson, 1987**

78. *Pilumnoides coelhoi* Guinot & Macpherson, 1987

Distribution: Western Atlantic – Brazil (from Bahia to Santa Catarina) (Melo, 1996).

Previous records: Guinot & Macpherson (1987), Abrolhos (30 m); Serejo *et al.* (2006), St. C5-5R (REVIZEE Program, Central Score).

Description: Melo, 1996: 378.

Remarks: The type locality of *P. coelhoi* is Abrolhos Archipelago. The type material was dredged by the ship *Commandant Parfait* in 1888 (Guinot & Macpherson, 1987).

Superfamily Xanthoidea MacLeay, 1838**Family Domeciidae Ortmann, 1893**

79. *Domecia acanthophora* (Desbonne, in Desbonne & Schramm, 1867)

Distribution: Western Atlantic – Bermuda, North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (Saint Paul's Rocks, Rocas Atoll, Fernando de Noronha, and from Paraíba to São Paulo) (Melo, 1996; Alves *et al.*, 2006).

Previous records: *Domecia hispida* Rathbun, 1930 – Joly *et al.* (1969), Abrolhos. *Domecia acanthophora* form *acanthophora* – Gomes Corrêa (1972), Abrolhos.

Description: Melo, 1996: 344.

Family Panopeidae Ortmann, 1893

80. *Acantholobulus bermudensis* (Benedict & Rathbun, 1891)*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Ceará to Santa Catarina) (Melo, 1996; Felder & Martin, 2003).

Previous records: *Panopeus bermudensis* – Rathbun (1930), Bonfim (Salvador, Hartt Explorations); Joly *et al.* (1969), Abrolhos.

Description: Felder & Martin, 2003: 440, Figs. 1a–f, 2a–f, 3a–d.

Remarks: Species cited from Brazil as *P. bermudensis*, designated as the type species of the new genus *Acantholobulus* Felder & Martin, 2003. *Hexapanopeus heblingi* Rodrigues & Loyola e Silva, 1998 was considered a junior synonym of *A. bermudensis*. The record of *P. mirafloresensis* Abele & Kim, 1989 from Brazil (Ferreira & Sankarankutty, 1997) was also attributed to *A. bermudensis* (see Felder & Martin, 2003).

81. *Acantholobulus schmitti* (Rathbun, 1930)*

Distribution: Western Atlantic – Brazil (from Ceará to Santa Catarina) and Uruguay (Melo, 1996).

Previous records: *Hexapanopeus schmitti* – Rathbun (1930), Bonfim (Salvador, Hartt Explorations); Gouvêa & Leite (1980), Itaparica Island; Gouvêa (1986a), Salvador. *Acantholobulus schmitti* – Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 360 (as *H. schmitti*).

Remarks: As *Panopeus bermudensis*, *H. schmitti* was included in the new genus *Acantholobulus*, because of the morphological similarity between the tip of the first pair of male pleopods, the frontal region, the pattern of dentition on the antero-lateral margin of the carapace, and the larval development of both species (see Felder & Martin, 2003).

82. *Cyrtoplax spinidentata* (Benedict, 1892)

Distribution: Western Atlantic – Antilles and Brazil (from Ceará to Rio Grande do Sul) (Melo, 1996; Bezerra *et al.*, 2005).

Previous records: Gouvêa (1971, 1986b), Candeias and Simões Filho.

Description: Melo, 1996: 403.

83. *Eurypanopeus abbreviatus* (Stimpson; 1860)*

Distribution: Western Atlantic – east coast of the U.S.A., Gulf of Mexico, Antilles, northern South America, and Brazil (from Ceará to Rio Grande do Sul) (Melo, 1996).

Previous records: *Panopeus politus* Smith, 1869 – Smith (1869), Abrolhos; *Eurypanopeus abbreviatus* – Rathbun (1930) (Hartt Explorations); Joly *et al.* (1969), Abrolhos; Gouvêa (1986a); Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 349.

Remarks: First recorded from Bahia by Smith (1989), who described *P. politus* (type locality Abrolhos), a junior synonym of *E. abbreviatus* (see Rathbun, 1930).

84. *Eurytium limosum* (Say, 1818)*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (from Pará to Santa Catarina) (Melo, 1996).

Previous records: *Eurytium limosum* – Rathbun (1930), Plataforma (Salvador, Hartt Explorations) and Ilhéus; Gomes Corrêa (1972), Abrolhos; Almeida *et al.* (2006), Ilhéus. *Erytium limosum* (misspelled) – Joly *et al.* (1969), Abrolhos.

Description: Melo, 1996: 351.

85. *Garthiope spinipes* (A. Milne-Edwards, 1880)

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Venezuela, and Brazil (from Amapá to São Paulo) (Melo, 1996; Alves *et al.*, 2006).

Previous records: *Micropanope spinipes* – A. Milne-Edwards (1880a) and A. Milne-Edwards & Bouvier (1923), Abrolhos (*Hassler* Exp.); Miers (1886), off Salvador (*Challenger* Exp.); Moreira (1901); Rathbun (1930), Abrolhos (*Hassler* Exp.); Joly *et al.* (1969), Abrolhos.

Description: Melo, 1996: 354.

Remarks: The original description of *G. spinipes* was based on a specimen obtained at Abrolhos during the *Hassler* Expedition (A. Milne-Edwards, 1880a).

86. *Hexapanopeus angustifrons* (Benedict & Rathbun, 1891)*

Distribution: Western Atlantic – east coast of the U.S.A., Antilles, and Brazil (from Pernambuco to Santa Catarina) (Melo, 1996).

Previous records: Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 357.

87. *Hexapanopeus caribbaeus* (Stimpson 1871)*

Distribution: Western Atlantic – Antilles, northern South America, and Brazil (from Pará to Rio Grande do Sul) (Melo, 1996; Rieger *et al.*, 1996).

Previous records: Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 358.

88. *Hexapanopeus paulensis* Rathbun, 1930

Distribution: Western Atlantic – South Carolina, Florida, Gulf of Mexico, and Brazil (from Pará to Santa Catarina) (Melo, 1996).

Previous records: Gouvêa (1986a), Itaparica Island.

Description: Melo, 1996: 359.

89. *Micropanope nuttingi* (Rathbun, 1898)*

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, Surinam, and Brazil (from Amapá to São Paulo) (Melo, 1996).

Previous records: Gouvêa & Leite (1980), Salvador and Itaparica Island; Gouvêa (1986a), Salvador; Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 364.

90. *Panopeus americanus* de Saussure, 1857*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Pará to Santa Catarina) (Melo, 1996; Barros *et al.*, 1997).

Previous records: Rathbun (1930), Plataforma and Bonfim (Salvador, Hartt Explorations); Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Gouvêa (1986b), Candeias.

Description: Melo, 1996: 369.

91. *Panopeus harttii* Smith, 1869*

Distribution: Western Atlantic – east coast of the U.S.A., Antilles, and Brazil (from Maranhão to São Paulo). Central Atlantic – Ascension (Manning & Chace, 1990; Melo, 1996).

Previous records: *Panopeus harttii* (sic) – Smith (1869), Abrolhos. *Panopeus harttii* – Moreira (1901); Rathbun (1930), Plataforma (Salvador, Hartt Explorations) and Abrolhos; Coelho Filho & Coelho (1996); Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay. *Panopeus hartii* (misspelled) – Joly *et al.* (1969), Abrolhos.

Description: Melo, 1996: 372.

Remarks: The type locality of *P. harttii* is Abrolhos Archipelago (Smith, 1869).

92. *Panopeus lacustris* Desbonne, 1867*

Distribution: Western Atlantic – Bermuda, Florida, Antilles, Colombia, and Brazil (from Pará to Rio de Janeiro) (Melo, 1996; Barros *et al.*, 1997).

Previous records: *Panopeus herbstii granulatus* A. Milne-Edwards, 1880 – A. Milne-Edwards (1880a). *Panopeus Herbstii* (sic) H. Milne-Edwards, 1834 – A. Milne-Edwards (1880b). *Panopeus crassus* A. Milne-Edwards (1880) – A. Milne-Edwards (1880b, 1881). *Panopeus herbstii* forma *crassa* – Rathbun (1930), Plataforma (Salvador) and Mapele (Simões Filho) (Hartt Explorations). *Panopeus herbstii* forma *obesa* – Rathbun (1930), Ilhéus. *Panopeus herbstii* – Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos. *Panopeus lacustris* – Williams (1984b); Almeida *et al.* (2006, 2007b), Ilhéus and Camamu Bay, respectively.

Description: Melo, 1996: 373.

Remarks: Williams (1984b) divided the *P. herbstii* complex into six species, one of them *P. lacustris*. He examined photographs of a syntype of *P. crassus* from Bahia (A. Milne-Edwards, 1880b, 1881), deposited in the collection of the Muséum National d'Histoire Naturelle, Paris, concluding that this individual is, in fact, a specimen of *P. lacustris*. These two species were therefore considered synonyms. Williams (1984b) also attributed to *P. lacustris* the records of *P. herbstii granulatus*, *P. herbstii*, and *P. herbstii* forma *crassa* from Bahia (A. Milne-Edwards, 1880a, 1880b; Rathbun, 1930).

93. *Panopeus occidentalis* de Saussure, 1857*

Distribution: Western Atlantic – east coast of the U.S.A., Central America, Antilles, northern South America, and Brazil (from Pernambuco to Rio Grande do Sul) (Melo, 1996).

Previous records: Gouvêa (1986b), Salvador and Candeias; Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 374.

94. *Panopeus rugosus* H. Milne-Edwards, 1881*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (from Pernambuco to Rio Grande do Sul) (Melo, 1996).

Previous records: H. Milne-Edwards (1881); Moreira (1901); Rathbun (1930), Cannavieiras (= Canavieiras) (Thayer Exp., St. 090); Almeida *et al.* (2006, 2007b), Ilhéus and Camamu Bay, respectively.

Description: Melo, 1996: 375.

Remarks: The type locality of *P. rugosus* is “Bahia” (A. Milne-Edwards, 1881).

Family Pilumnidae Samouelle, 181995. *Pilumnus caribaeus* Desbonne & Schramm, 1867*

Distribution: Western Atlantic – east coast of the U.S.A., Antilles, northern South America, and Brazil (from Pará to Santa Catarina) (Melo, 1996).

Previous records: *Pilumnus braziliensis* (sic) Miers, 1886 – Miers (1886), off Salvador (*Challenger* Exp.). *Pilumnus braziliensis* – Moreira (1901). *Pilumnus caribaeus* – Rathbun (1930), Bay of Bahia (= Todos os Santos Bay); Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 381.

Remarks: The original description of *P. braziliensis* was based on material collected off Salvador by the *Challenger* (Miers 1886). Rathbun (1930) included this species among the synonyms of *P. caribaeus*.

96. *Pilumnus dasypodus* Kingsley, 1879*

Distribution: Western Atlantic – North Carolina, South Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Paraíba to Santa Catarina) (Melo, 1996).

Previous records: Rathbun (1930), Bonfim (Salvador, Hartt Explorations); Gouvêa & Leite (1980), Salvador and Itaparica Island; Gouvêa (1986a), Salvador; Barreto *et al.* (1993a).

Description: Melo, 1996: 382.

97. *Pilumnus quoyi* Milne-Edwards, 1834

Distribution: Western Atlantic – Guyanas and Brazil (from Amapá to São Paulo) (Melo, 1996).

Previous records: Barreto *et al.* (1993a).

Description: Melo, 1996: 385.

98. *Pilumnus reticulatus* Stimpson, 1860*

Distribution: Western Atlantic – Central America, Antilles, northern South America, Brazil (from Pará to Rio Grande do Sul), Uruguay, and Argentina (Buenos Aires and northern Patagonia). Eastern Pacific – from Gulf of California to Gulf of Panama (Hendrickx, 1995; Melo, 1996).

Previous records: Rathbun (1930), Mapele (Simões Filho, Hartt Explorations) and Bay of Bahia (= Todos os Santos Bay, material deposited in the Copen-

hagen Museum); Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Gouvêa (1986a), Salvador; Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 386.

99. *Pilumnus spinosissimus* Rathbun, 1898

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, and Brazil (from Rio Grande do Norte to Santa Catarina) (Melo, 1996).

Previous records: Serejo *et al.* (2006), St. C5-2R and C5-4R (REVIZEE Program, Central Score).

Description: Melo, 1996: 387.

Family Xanthidae MacLeay, 1838

100. *Cataleptodius floridanus* (Gibbes, 1850)*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, Central America, northern South America, and Brazil (Rocas Atoll, Fernando de Noronha, and from Ceará to Rio Grande do Sul). Eastern Atlantic – from Guinea to Gabon (Melo, 1996).

Previous records: *Chlorodius floridanus* (sic) – Smith (1869), Abrolhos. *Leptodius floridanus* – Rathbun (1898), Abrolhos (*Albatross* Exp.); Moreira (1901); Rathbun (1930), Bonfim and Plataforma (both in Salvador, Hartt Explorations); Gomes Corrêa (1972), Abrolhos; Gouvêa (1986a), Lauro de Freitas, Salvador, and Itaparica Island; Gouvêa (1986b), Salvador and Itaparica Island.

Description: Melo, 1996: 343.

101. *Edwardsium spinimanus* (H. Milne-Edwards, 1834)

Distribution: Western Atlantic – Antilles, Guyanas, and Brazil (from Ceará to Rio Grande do Sul) (Melo, 1996).

Previous records: Coelho Filho & Coelho (1996).

Description: Melo, 1996: 345.

102. *Glyptoxanthus vermiculatus* (Lamarck, 1818)

Distribution: Western Atlantic – Northern South America and Brazil (Bahia and Espírito Santo) (Melo, 1996; Serejo *et al.*, 2006).

Previous records: Serejo *et al.* (2006), St. C5-16R (REVIZEE Program, Central Score).

Description: Melo, 1996: 355.

103. *Melybia thalamita* Stimpson, 1871

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to São Paulo) (Melo, 1996).

Previous records: *Melybia forceps* A. Milne-Edwards, 1880 – A. Milne-Edwards (1880a) and A. Milne-Edwards & Bouvier (1923), Abrolhos (*Hassler* Exp.). *Melybia thalamita* – Rathbun (1930), Abrolhos (*Hassler* Exp.); Barreto *et al.* (1993a); Serejo *et al.* (2006), St. C5-2R (REVIZEE Program, Central Score).

Description: Melo, 1996: 361.

Remarks: Rathbun (1930) added *M. forceps* (type locality Abrolhos) to the list of synonyms of *M. thalamita*.

104. *Paractaea nodosa* (Stimpson, 1860)

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, Brazil (from Amapá to Rio de Janeiro), and Uruguay (Melo, 1996).

Previous records: *Actaea rufopunctata* var. *nodosa* – Miers (1886), off Salvador (*Challenger* Exp.); *Actaea rufopunctata* – Moreira (1901); *Paractaea rufopunctata nodosa* – Barreto *et al.* (1993a); Coelho Filho & Coelho (1996); Serejo *et al.* (2006), St. C5-4R, C5-5R, C5-7R, and C5-10R (REVIZEE Program, Central Score).

Description: Melo, 1996: 376. (as *P. rufopunctata nodosa*).

105. *Platypodiela spectabilis* (Herbst, 1794)

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (Fernando de Noronha, Trindade Island, and from Rio Grande do Norte to Rio de Janeiro) (Melo, 1996).

Previous records: *Platypodia spectabilis* – Gouvêa (1986a), Salvador. *Platypodiela spectabilis* – Coelho Filho & Coelho (1996); Serejo *et al.* (2006), St. C5-2R (REVIZEE Program, Central Score).

Description: Melo, 1996: 388.

106. *Xanthodius denticulatus* (White, 1847)*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (Saint Paul's Rocks, and from Ceará to São Paulo). Central Atlantic – Ascension. Eastern Atlantic – Ghana and some islands of the Gulf of Guinea (Manning & Chace, 1990; Melo, 1996; Alves *et al.*, 2006).

Previous records: *Xantho denticulata* – Smith (1869), Abrolhos. *Cycloxanthops denticulatus* – Rathbun (1898), Abrolhos (*Albatross* Exp.). *Xanthodius denticulatus* – Rathbun (1930), Abrolhos (*Albatross* Exp.); Gomes Corrêa (1972), Abrolhos; Coelho Filho & Coelho (1996).

Description: Melo, 1996: 394.

Superfamily Eriphioidea MacLeay, 1838

Family Eriphiidae MacLeay, 1838

107. *Eriphia gonagra* (Fabricius, 1781)*

Distribution: Western Atlantic – Bermuda, North Carolina, Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (from Pará to Santa Catarina) (Melo, 1996).

Previous records: Smith (1869), Abrolhos; Rathbun (1898, 1930), “Bahia” and Abrolhos (*Albatross* Exp.), Plataforma and Rio Vermelho (both in Salvador), and Abrolhos (Hartt Explorations); Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Türkay (1976); Gouvêa (1986a), Lauro de Freitas, Salvador, and Itaparica Island; Bento *et al.* (2007), Ilhéus.

Description: Melo, 1996: 346.

Family Oziidae Dana, 1851

108. *Menippe nodifrons* Stimpson, 1859*

Distribution: Western Atlantic – east coast of the U.S.A., Central America, Antilles, northern South America, and Brazil (from Pará to Santa Catarina). Eastern Atlantic – from Cape Verde to Angola (Melo, 1996; Barros & Pimentel, 2001).

Previous records: Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos.

Description: Melo, 1996: 362.

Superfamily Goneplacoidea MacLeay, 1838

Family Chasmocarcinidae Serène, 1964

109. *Chasmocarcinus arcuatus* Coelho Filho & Coelho, 1998*

Distribution: Western Atlantic – Brazil (Amapá, Pará, Bahia, and Espírito Santo) (Coelho Filho & Coelho, 1998).

Previous records: Coelho Filho & Coelho (1998), Abrolhos (R/V *Calypso*, St. 1823 and 1826); Almeida *et al.* (2007b), Camamu Bay.

Description: Coelho Filho & Coelho, 1998: 800, Figs. 1–4.

Remarks: Rodrigues da Costa (1968) described *C. peresi* from material collected at nine stations of the R/V *Calypso* around Abrolhos. However, Coelho Filho & Coelho (1998) verified that part of the type material of *C. peresi* (stations 1823 and 1826) represented, in fact, a second species, described as *C. arcuatus*.

110. *Chasmocarcinus meloi* Coelho Filho & Coelho, 1998

Distribution: Western Atlantic – Brazil (from Maranhão to Bahia) (Coelho Filho & Coelho, 1998).

Previous records: Coelho Filho & Coelho (1998), Stations CEPEMAR (12°52.4'S, 38°10.6W and 12°53.24'S, 38°15.8W) and Arembepe.

Description: Coelho Filho & Coelho, 1998: 809, Figs. 8–9.

111. *Chasmocarcinus peresi* Rodrigues da Costa, 1968

Distribution: Western Atlantic – Brazil (from Pará to Bahia) (Melo, 1996).

Previous records: Rodrigues da Costa (1968), Abrolhos (R/V *Calypso*, Stations 1815–1818, 1822, 1823, 1825–1827); Melo *et al.* (2003), Abrolhos (R/V *Calypso*, Stations 1815 and 1816); Young & Serejo (2005), Abrolhos.

Description: Melo, 1996: 421.

Remarks: The type locality of *C. peresi* is Abrolhos Archipelago (R/V *Calypso*, St. 1818) (Rodrigues da Costa, 1968) (see remarks on *C. arcuatus*).

Family Euryplacidae Stimpson, 1871

112. *Euryplax nitida* Stimpson, 1859*

Distribution: Western Atlantic – Bermuda, North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (from Piauí to Santa Catarina) (Melo, 1996).

Previous records: Gomes Corrêa (1972), Abrolhos; Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 407.

Family Goneplacidae MacLeay, 1838

113. *Bathyplox typhla* A. Milne-Edwards, 1880

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (from Pernambuco to Rio de Janeiro) (Tavares, 1996).

Previous records: Serejo *et al.* (2006), St. C5-517 (REVIZEE Program, Central Score).

Description: Melo, 1996: 399.

Superfamily Portunoidea Rafinesque, 1815**Family Mathildellidae Karasawa & Kato, 2003**114. *Neopilumnoplax americana* (Rathbun, 1898)

Distribution: Western Atlantic – North Carolina, Georgia, Florida, Gulf of Mexico, Cuba, and Brazil (Bahia and Espírito Santo) (Melo, 1996; Serejo *et al.*, 2006).

Previous records: Serejo *et al.* (2006), St. C5-517 (REVIZEE Program, Central Score).

Description: Melo, 1996: 400.

Remarks: The first reference of *N. americana* from Brazil, as *Pilumnoplax americana*, was published by Rodrigues da Costa (1968). He analyzed specimens dredged on Abrolhos Bank by the R/V *Calypso*, at a station located very close to Bahia, but still in waters of the state of Espírito Santo. Recently, this crab was collected off the Bahia coast, during the REVIZEE Program, Central Score (Serejo *et al.*, 2006).

Family Macropipidae Stephenson & Campbell, 1960115. *Bathynectes longispina* Stimpson, 1871

Distribution: Western Atlantic – from Massachusetts to Florida, Gulf of Mexico, Cuba, and Brazil (from Rio Grande do Norte to Espírito Santo) (Powers, 1977; Tavares, 2003; Torres *et al.*, 2006).

Previous records: Torres *et al.* (2006), Cruise 3, St. 5 (REVIZEE Program, Northeast Score).

Description: Tavares, 2003: 1, Figs. 1, 2.

Family Portunidae Rafinesque, 1815116. *Arenaeus cribrarius* (Lamarck, 1818)*

Distribution: Western Atlantic – Bermuda, Massachusetts, North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, Brazil (from Ceará to Rio Grande do Sul), Uruguay, and Argentina (Melo, 1996; Scelzo, 2001).

Previous records: Gouvêa (1986b), Salvador.

Description: Melo, 1996: 311.

117. *Callinectes bocourti* A. Milne-Edwards, 1879*

Distribution: Western Atlantic – east coast of the U.S.A. (from North Carolina southwards), Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul) (Melo, 1996; Santos *et al.*, 2000).

Previous records: Moreira (1901); Rathbun (1930), Cannavieiras (sic) (= Canavieiras); Williams (1974), Ilhéus; Almeida *et al.* (2006, 2007b), Ilhéus and Camamu Bay.

Description: Melo, 1996: 313.

118. *Callinectes danae* Smith, 1869*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Pará to Rio Grande do Sul) (Melo, 1996; Barros *et al.*, 1997).

Previous records: *Callinectes danae* (sic) – Smith (1869). *Charybdis danai* (misspelled) – Moreira (1901). *Callinectes danae* – Rathbun (1930); Williams (1974), Itaparica Island, Madre de Deus, and Ilhéus; Almeida *et al.* (2006, 2007b), Ilhéus and Camamu Bay; Bento *et al.* (2007), Ilhéus.

Description: Melo, 1996: 314.

Remarks: Part of the material referred by Rathbun (1930) (Plataforma, Salvador) as *C. danae*, was confused with *C. marginatus* (= *C. larvatus*) (see Williams, 1974).

119. *Callinectes exasperatus* (Gerstaecker, 1856)*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Pará to Santa Catarina) (Melo, 1996; Barros *et al.*, 2001).

Previous records: Moreira (1901); Rathbun (1930), Cannavieiras (= Canavieiras) (St. 090) and Porto Seguro (St. 102) (both localities sampled during the *Thayer* Exp.); Williams (1974), Madre de Deus Island and Ilhéus; Almeida *et al.* (2006, 2007b), Ilhéus and Camamu Bay.

Description: Melo, 1996: 315.

120. *Callinectes larvatus* Ordway, 1863*

Distribution: Western Atlantic – Bermuda, from North Carolina to Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Pará to São Paulo) (Melo, 1996; Barros *et al.*, 1997).

Previous records: *Callinectes larvatus* – Smith (1869); Almeida *et al.* (2006, 2007b), Ilhéus and Camamu Bay. *Callinectes marginatus* A. Milne-Edwards, 1861– Moreira (1901); Rathbun (1930), Porto Seguro (*Thayer* Exp., St. 102) and Rio Vermelho (Salvador, Hartt Explorations); Rodrigues da Costa (1968), St. 1831 (R/V *Calypso*); Williams (1974), Plataforma (Salvador, Hartt Explorations), Madre de Deus Island and Ilhéus; *Callinectes danae*

– Rathbun (1930), material from Plataforma (Salvador) (see Williams, 1974).

Description: Melo, 1996: 316.

121. *Callinectes ornatus* Ordway, 1863*

Distribution: Western Atlantic – from North Carolina to Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul) (Melo, 1996).

Previous records: Smith (1869), Caravelas; Gouvêa & Leite (1980), Salvador; Gouvêa (1986b), Salvador; Coelho & Ramos-Porto (1992); Barreto *et al.* (1993a); Almeida *et al.* (2006, 2007b), Ilhéus (15–20 m) and Camamu Bay, respectively.

Description: Melo, 1996: 317.

122. *Callinectes sapidus* Rathbun, 1896*

Distribution: Western Atlantic – east coast of the U.S.A., Central America, Antilles, Venezuela, Brazil (from Alagoas to Rio Grande do Sul), and Argentina (Province of Buenos Aires) (occasionally). Eastern Atlantic – Mediterranean, Adriatic and Black seas. Western Pacific – Japan (Melo, 1996; Calado, 2000).

Previous records: *Callinectes sapidus acutidens* Rathbun, 1895 – Rathbun (1896, 1930), Santa Cruz (Thayer Exp.). *Callinectes sapidus* – Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 318.

Remarks: Rathbun (1896) described the subspecies *C. sapidus acutidens*, from material collected during the Thayer Expedition in Santa Cruz (= Santa Cruz Cabralia, near Porto Seguro), state of Bahia. This taxon is considered a junior synonym of *C. sapidus* (see Williams, 1974).

123. *Charybdis hellerii* (A. Milne-Edwards, 1867)*

Distribution: Western Atlantic – Florida, Cuba, Colombia, Venezuela, French Guyana, and Brazil (from Ceará to Santa Catarina). Eastern Mediterranean – Egypt and Israel. Widely distributed in the Indo-Pacific (Mantelatto & Dias, 1999; Tavares & Amouroux, 2003; Bezerra & Almeida, 2005).

Previous records: Carqueija & Gouvêa (1996), Almeida *et al.* (2003, 2007b), Camamu Bay; Almeida *et al.* (2006), Ilhéus.

Description: Carqueija & Gouvêa, 1996: 107, Figs. 2–3.

Remarks: Nonindigenous species of Indo-Pacific origin (Campos & Turkey, 1989; Lemaitre, 1995). *C.*

hellerii is a good example of successful introduction of marine species in the Atlantic (Tavares & Amouroux, 2003). This swimming-crab was first reported from the Bahia coast by Carqueija & Gouvêa (1996), in Todos os Santos Bay. Later, Almeida *et al.* (2003) collected a specimen in Camamu Bay. A juvenile specimen was trawled in the Cachoeira River estuary, Ilhéus (Almeida *et al.*, 2006). Almeida *et al.* (2007b) reported the collection of 16 individuals, at five stations between July 2003 and September 2005, also in Camamu Bay. Bezerra & Almeida (2005) summarized previous records of *C. hellerii* in Brazil.

124. *Cronius ruber* (Lamarck, 1818)

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul). Eastern Atlantic – from Senegal to Angola. Eastern Pacific – from Baja California, Mexico, to Peru, including Galapagos and Clipperton (Hendrickx, 1995; Melo, 1996).

Previous records: A. Milne-Edwards & Bouvier (1923), “Bahia” (Hassler Exp.); Barreto *et al.* (1993a).

Description: Melo, 1996: 320.

125. *Cronius tumidulus* (Stimpson, 1871)*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, Guyanas, and Brazil (from Pará to São Paulo) (Melo, 1996).

Previous records: *Cronius bispinosus* Miers, 1886 – Miers (1886), off Salvador (Challenger Exp.); Moreira (1901). *Cronius tumidulus* – Rathbun (1930), “Bahia” (Hassler Exp.) and Porto Seguro; Barreto *et al.* (1993a); Serejo *et al.* (2006), St. C5-2R, C5-4R, and C5-5R (REVIZEE Program, Central Score); Almeida *et al.* (2007a, 2007b), Ilhéus coast and Camamu Bay, respectively.

Description: Melo, 1996: 321.

Remarks: *C. bispinosus*, described from off Salvador by Miers (1886), is a junior synonym of *C. tumidulus* (see Rathbun, 1930).

126. *Laeonectes vocans* (A. Milne-Edwards, 1878)

Distribution: Western Atlantic – Gulf of Mexico, Antilles, and Brazil (Bahia, Espírito Santo, and Rio de Janeiro). Eastern Atlantic – Madeira, Cape Verde,

São Tomé and Príncipe, and Annobon. Central Atlantic – Ascension (Manning & Chace, 1990; Melo, 1996; Serejo *et al.*, 2006).

Previous records: Serejo *et al.* (2006), St. C5-10R (REVIZEE Program, Central Score).

Description: Melo, 1996: 322.

127. *Portunus anceps* (de Saussure, 1858)*

Distribution: Western Atlantic – Bermuda, North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (from Amapá to Rio de Janeiro). Central Atlantic – Ascension (Manning & Chace, 1990; Melo, 1996).

Previous records: *Neptunus sulcatus* A. Milne-Edwards, 1879 – A. Milne-Edwards (1879) and A. Milne-Edwards & Bouvier (1923), “Bahia-3” (*Hassler* Exp.). *Portunus (Portunus) anceps* – Rathbun (1930), “Porto da Bahia” (probably Salvador Harbor) and Bahia (*Hassler* Exp.). *Portunus anceps* – Barreto *et al.* (1993a); Almeida *et al.* (2007a, 2007b), Ilhéus coast (20 m) and Camamu Bay, respectively.

Description: Melo, 1996: 324.

Remarks: A. Milne-Edwards (1879) described *N. sulcatus* (junior synonym of *P. anceps*) based on a specimen obtained off the coast of Bahia during the *Hassler* Expedition.

128. *Portunus ordwayi* (Stimpson, 1860)

Distribution: Western Atlantic – from Massachusetts to Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (Fernando de Noronha, and from Amapá to Rio Grande do Sul) (Melo, 1996).

Previous records: *Achelous ordwayi* (sic) – Smith (1869). *Portunus (Achelous) ordwayi* – Rathbun (1898, 1930), Abrolhos (*Albatross* Exp.); Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos. *Achelous ordwayi* – Moreira (1901). *Portunus ordwayi* – Barreto *et al.* (1993a); Serejo *et al.* (2006), St. C5-2R and C5-5R (REVIZEE Program, Central Score).

Description: Melo, 1996: 326.

129. *Portunus spinicarpus* (Stimpson, 1871)*

Distribution: Western Atlantic – North Carolina, South Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul) (Melo, 1996).

Previous records: *Portunus spinicarpus* – Rodrigues da Costa (1968), Abrolhos (R/V *Calypso*, St. 1816,

1817, and 1827); Coelho & Ramos (1972); Coelho & Ramos-Porto (1992); Barreto *et al.* (1993a); Almeida *et al.* (2007a), Ilhéus coast (20 m). *Portunus (Achelous) spinicarpus* – Gomes Corrêa (1972), Abrolhos.

Description: Melo, 1996: 328.

130. *Portunus spinimanus* Latreille, 1819*

Distribution: Western Atlantic – Bermuda, from New Jersey to Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (Pará, and from Pernambuco to Rio Grande do Sul) (Melo, 1996; Viana *et al.*, 2003a).

Previous records: *Achelous spinimanus* – Smith (1869). *Portunus (Achelous) spinimanus* – Rathbun (1930), Plataforma (Salvador, Hartt Explorations). *Portunus spinimanus* – Barreto *et al.* (1993a); Almeida *et al.* (2007a, 2007b), Ilhéus coast and Camamu Bay, respectively.

Description: Melo, 1996: 329.

Superfamily Cryptochiroidea Paulson, 1875

Family Cryptochiridae Paulson, 1875

131. *Troglocarcinus corallicola* Verrill, 1908*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, and Brazil (Rocas Atoll, Fernando de Noronha, and from Maranhão to São Paulo). Central Atlantic – Ascension and Saint Helena. Eastern Atlantic – Gabon, São Tomé and Príncipe, and Annobon (Kropp & Manning, 1987; Melo, 1996; Nogueira, 2003).

Previous records: Utinomi (1944); Coelho (1966); Coelho & Ramos (1972); Barreto *et al.* (1993a).

Description: Melo, 1996: 511.

Remarks: Kropp & Manning (1987) commented that the records of *T. corallicola* in agaricid coral hosts in northeast Brazil are doubtful (Coelho, 1966; Coelho & Ramos, 1972). According to them, the species in question may be *Opecarcinus hypostegus* (Shaw & Hopkins, 1977), another gall crab known from Brazil, commonly found in association with this coral family.

Superfamily Pinnotheroidea de Haan, 1833

Family Pinnotheridae de Haan, 1833

132. *Dissodactylus crinitichelis* Moreira, 1901*

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, northern South

America, Brazil (from Pará to Rio Grande do Sul), and Argentina (Melo, 1996).

Previous records: *Dissodactylus crinitichelis* – Coelho & Ramos (1972); Gouvêa (1986b), Salvador; Barreto *et al.* (1993a); Young & Serejo (2005), Abrolhos. *Dissodactylus crinitichelis* (misspelled) – Gouvêa (1986a), Salvador.

Description: Melo, 1996: 436.

133. *Holothuriophilus tomentosus* (Ortmann, 1894)

Distribution: Western Atlantic – Brazil (Bahia and Santa Catarina) (Melo & Boehs, 2004; Serejo *et al.*, 2006).

Previous records: *Pinnaxodes tomentosus* – Serejo *et al.* (2006), St. C5-5R (REVIZEE Program, Central Score).

Description: Melo & Boehs, 2004: 229, Figs. 2–7.

Remarks: The first report of this pea crab since its original description was published by Melo & Boehs (2004), who found this species associated with bivalve mollusks in Santa Catarina, southern Brazil. These authors also transferred this pinnotherid from the genus *Pinnaxodes* Heller, 1865 to *Holothuriophilus* Nauk, 1880. Serejo *et al.* (2006) extended the range of *H. tomentosus* to Bahia, based on material sampled during the REVIZEE Program. However, these authors provided no drawings or information on possible hosts for their material.

134. *Parapinnixa hendersoni* Rathbun, 1918*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (Maranhão, Bahia, Espírito Santo, and Paraná) (Melo *et al.*, 1989; Melo, 1996).

Previous records: Righi (1967), Abrolhos; Barreto *et al.* (1993a); Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 442.

135. *Pinnixa latissima* Coelho, 1997

Distribution: Western Atlantic – Brazil (Pernambuco and Bahia) (Coelho, 1997).

Previous records: Coelho (1997), 12°44'25"S, 38°08'76"W (sic).

Description: Coelho, 1997: 177, Fig. 4.

136. *Pinnixa sayana* Stimpson, 1860*

Distribution: Western Atlantic – from Massachusetts to North Carolina, Florida, Gulf of Mexico, and Brazil (from Amapá to Rio Grande do Sul) (Melo, 1996).

Previous records: Coelho (1997), 12°43'85"S (sic), 38°05'50"W; Almeida *et al.* (2007b), Camamu Bay.

Description: Melo, 1996: 434.

137. *Tumidotheres maculatus* (Say, 1818)

Distribution: Western Atlantic – from Massachusetts to Florida, Gulf of Mexico, Antilles, Brazil (from Alagoas to São Paulo), Uruguay, and Argentina (Melo, 1996).

Previous records: *Pinnotheres maculatus* – Gouvêa (1986b), Salvador.

Description: Melo, 1996: 443.

138. *Zaops ostreus* (Say, 1817)*

Distribution: Western Atlantic – from Massachusetts to Florida, Gulf of Mexico, Antilles, and Brazil (from Ceará to Santa Catarina) (Melo, 1996; Bezerra *et al.*, 2006).

Previous records: *Zaops ostreum* – Martins & D'Incao (1996), Itaparica Island.

Description: Melo, 1996: 444.

Superfamily Ocypodoidea Rafinesque, 1815

Family Ocypodidae Rafinesque, 1815

139. *Ocypode quadrata* (Fabricius, 1787)*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (Fernando de Noronha, and from Pará to Rio Grande do Sul) (Melo, 1996).

Previous records: *Ocypoda arenaria* Say, 1817 – Miers (1886), Salvador (*Challenger* Exp., inland); *Ocypode arenaria* – Rathbun (1898), “Bahia” and Abrolhos (*Albatross* Exp., inland); *Ocypode albicans* Bosc, 1801-02 – Rathbun (1918), Itaparica, Mar Grande, and Caravelas (Hartt Explorations), and Abrolhos (*Albatross* Exp.); *Ocypode quadrata* – Gomes Corrêa (1972), Abrolhos; Gouvêa (1986a), Lauro de Freitas and Salvador; Gouvêa (1986b), Lauro de Freitas, Salvador, and Itaparica Island; Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus.

Description: Melo, 1996: 484.

140. *Uca burgersi* Holthuis, 1967*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (from Maranhão to São Paulo) (Melo, 1996).

Previous records: *Uca (Minuca) burgersi* – Crane (1975), Salvador and Itaparica.

Description: Melo, 1996: 487.

141. *Uca leptodactyla* Rathbun, 1898*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (from Maranhão to Santa Catarina) (Melo, 1996; Calado & Sousa, 2003).

Previous records: Rathbun (1918), Plataforma (Salvador, Hartt Explorations) and Porto Seguro (*Thayer* Exp., St. 102); Coelho & Ramos (1972); Gouvêa (1986b), Lauro de Freitas, Salvador, Candeias, and Ilha de Maré; Coelho (1995); Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus. *Uca (Celuca) leptodactyla* – Crane (1975), Salvador, Plataforma (Salvador), Itaparica, and Porto Seguro.

Description: Melo, 1996: 489.

142. *Uca maracoani* (Latreille, 1802-03)*

Distribution: Western Atlantic – Antilles, northern South America, and Brazil (from Pará to Paraná) (Melo, 1996; Barros *et al.*, 1997).

Previous records: Rathbun (1918), Plataforma (Salvador, Hartt Explorations) and Porto Seguro (*Thayer* Exp., St. 102); Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus. *Uca (Uca) maracoani maracoani* – Crane (1975), Salvador, Plataforma (Salvador), Itaparica, and Porto Seguro.

Description: Melo, 1996: 490.

143. *Uca mordax* (Smith, 1870)*

Distribution: Western Atlantic – Gulf of Mexico, Central America, northern South America, and Brazil (from Pará to São Paulo) (Melo, 1996).

Previous records: Gouvêa (1986b), Salvador and Ilha de Maré; Coelho (1995); Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 491.

144. *Uca rapax* (Smith, 1870)*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (from Pará to Santa Catarina) (Melo, 1996).

Previous records: *Uca pugnax rapax* – Rathbun (1918), Plataforma (Salvador) and Caravelas (Hartt Explorations). *Uca rapax* – Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 492.

145. *Uca thayeri* Rathbun, 1900*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, Central America, Venezuela, and

Brazil (from Maranhão to Santa Catarina) (Melo, 1996).

Previous records: Rathbun (1918), Plataforma (Salvador, Hartt Explorations); Almeida *et al.* (2006), Ilhéus. *Uca (Minuca) rapax* – Crane (1975), Salvador and Itaparica.

Description: Melo, 1996: 493.

146. *Uca vocator* (Herbst, 1804)*

Distribution: Western Atlantic – Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (from Pernambuco to Santa Catarina) (Melo, 1996).

Previous records: Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus.

Description: Melo, 1996: 496.

147. *Ucides cordatus* (Linnaeus, 1763)*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (from Pará to Santa Catarina) (Melo, 1996).

Previous records: *Uca cordata* – Smith (1869). *Ucides cordatus* – Rathbun (1918), Plataforma (Salvador, Hartt Explorations); Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus.

Description: Melo, 1996: 497.

Family Palicidae Rathbun, 1898148. *Palicus acutifrons* (A. Milne-Edwards, 1880)

Distribution: Western Atlantic – Brazil (Bahia and Espírito Santo) (Melo, 1996).

Previous records: *Cymopolia acutifrons* – A. Milne-Edwards (1880b), A. Milne-Edwards & Bouvier (1902) and Rathbun (1918), “Bahia-4” (*Hassler* Exp.).

Description: Melo, 1996: 501.

Remarks: The type locality of *P. acutifrons* is the coast of Bahia; the type material was obtained during the *Hassler* Expedition (A. Milne-Edwards, 1880b).

149. *Palicus affinis* A. Milne-Edwards & Bouvier, 1899

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, Guyanas, and Brazil (from Maranhão to Espírito Santo) (Melo, 1996).

Previous records: Coelho & Ramos (1972); Barreto *et al.* (1993a).

Description: Melo, 1996: 502.

150. *Palicus alternatus* Rathbun, 1897

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, and Brazil (Bahia, Rio de Janeiro, and Rio Grande do Sul) (Melo, 1996; Serejo *et al.*, 2006).

Previous records: Serejo *et al.* (2006), St. C5-2R (REVIZEE Program, Central Score).

Description: Melo, 1996: 503.

Superfamily Grapsoidea MacLeay, 1838**Family Gecarcinidae MacLeay, 1838**151. *Cardisoma guanhumi* Latreille, 1825*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Ceará to São Paulo) (Melo, 1996).

Previous records: Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus.

Description: Melo, 1996: 480.

Family Grapsidae MacLeay, 1838152. *Goniopsis cruentata* (Latreille, 1803)*

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, Guyanas, and Brazil (Fernando de Noronha, Rocas Atoll, and from Pará to Santa Catarina) (Melo, 1996; Targino *et al.*, 2001).

Previous records: *Goniopsis cruentatus* – Smith (1869) and Moreira (1901), Abrolhos; *Goniopsis cruentata* – Rathbun (1918), Plataforma (Salvador, Hartt Explorations); Gouvêa (1986b), Candeias, Simões Filho, and Itaparica Island; Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus.

Description: Melo, 1996: 449.

153. *Pachygrapsus gracilis* (de Saussure, 1858)*

Distribution: Western Atlantic – Gulf of Mexico (Texas), Caribbean, French Guyana, Brazil (Trinidad Island, and from Pará to Rio Grande do Sul), and Argentina. Eastern Atlantic – from Senegal to Angola (Melo, 1996; Barros *et al.*, 1997; Poupin *et al.*, 2005).

Previous records: Rathbun (1918), Plataforma (Salvador, Hartt Explorations); Gouvêa (1986b), Salvador, Candeias, Simões Filho, Ilha de Maré; Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 453.

154. *Pachygrapsus transversus* (Gibbes, 1850)*

Distribution: Western Atlantic – Bermuda, from Massachusetts (Cape Cod) to Florida, Gulf of Mexi-

co, Antilles, northern South America, Brazil (Trinidad Island, and from Ceará to Rio Grande do Sul), and Uruguay. Eastern Atlantic – from southern Portugal to Namibia, including Madeira, Canary Islands, and Cape Verde. Mediterranean – from Alboran Sea to Levantine basin (Melo, 1996; Poupin *et al.*, 2005; Schubart *et al.*, 2005).

Previous records: Rathbun (1898), Abrolhos (*Albatross* Exp., inland); Moreira (1901); Rathbun (1918), Plataforma (Salvador, Hartt Explorations) and Abrolhos (*Albatross* Exp., inland); Gouvêa (1986a), Lauro de Freitas, Salvador, and Itaparica Island; Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 454.

Remarks: Based on morphological and genetic differences, Schubart *et al.* (2005) revalidated the species *P. socius* Stimpson, 1871 for the Eastern Pacific representatives of *P. transversus* (Hendrickx, 2005; Poupin *et al.*, 2005).

155. *Planes cyaneus* Dana, 1851

Distribution: Western Atlantic – Gulf of Mexico, Brazil (Rocas Atoll, Pará, and from Rio Grande do Norte to Rio Grande do Sul), Uruguay, and Argentina. Central Atlantic – Saint Helena. Eastern Atlantic – Canary Islands, Morocco, and South Africa. Eastern Pacific – from California to the Straits of Magellan, including Galapagos. Widely distributed in the Indo-Pacific (Melo, 1996; Prado & Melo, 2002; Viana *et al.*, 2003a).

Previous records: Prado & Melo (2002), Bom Abrigo (doubtful locality, unknown).

Description: Prado & Melo, 2002: 580, Fig. 1.

Family Plagusiidae Dana, 1851156. *Plagusia depressa* (Fabricius, 1775)

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (Saint Paul's Rocks, Rocas Atoll, Fernando de Noronha, Trinidad Island, and from Ceará to Bahia). Central Atlantic – Ascension and Saint Helena. Eastern Atlantic – Azores, Madeira, and from Senegal to Angola (Manning & Chace, 1990; Melo, 1996).

Previous records: Melo (1996).

Description: Melo, 1996: 458.

Family Sesarmidae Dana, 1851157. *Aratus pisonii* (H. Milne-Edwards, 1837)*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, northern South America, and Bra-

zil (from Pará to São Paulo). Eastern Pacific – from Nicaragua to Peru (Melo, 1996; Barros *et al.*, 1997).

Previous records: Rathbun (1918), Mapelle, Bay of Bahia (= Mapele, Todos os Santos Bay, Hartt Explorations); Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 460.

158. *Armases angustipes* (Dana, 1852)*

Distribution: Western Atlantic – Mexico, Antilles, and Brazil (from Pará to Santa Catarina) (Melo, 1996; Barros *et al.*, 1997).

Previous records: *Sesarma (Holometopus) miersii iheringi* Rathbun, 1918 – Rathbun (1918). *Sesarma (Holometopus) ricordi* H. Milne-Edwards, 1853 – Rathbun (1918), Itaparica Island and Salvador. *Sesarma (Holometopus) angustipes* – Abele (1972a, 1972b), Itaparica Island and Salvador; Coelho & Ramos-Porto (1981), Paripe (Salvador); *Sesarma (Holometopus) miersii* Rathbun, 1897 – Coelho & Ramos (1972). *Armases angustipes* – Abele (1992), Itaparica Island and Salvador; Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 462.

Remarks: The type locality of the subspecies *Sesarma (Holometopus) miersii iheringi* is “Bahia” (Rathbun 1918). Abele (1972a), when establishing this taxon as a junior synonym of *S. (Holometopus) angustipes*, mentioned Salvador as the site of collection of the holotype analyzed by Rathbun (1918). The Brazilian material cited by Rathbun as *Sesarma (Holometopus) ricordi*, was also attributed to *S. (Holometopus) angustipes* (Abele, 1972a, 1992).

159. *Armases rubripes* (Rathbun, 1897)*

Distribution: Western Atlantic – Central America, northern South America, Brazil (from Ceará to Rio Grande do Sul), Uruguay, and Argentina (Melo, 1996).

Previous records: *Sesarma mülleri* A. Milne-Edwards, 1869 – Miers (1886), Salvador (*Challenger* Exp., inland). *Sesarma (Holometopus) rubripes* – Rathbun (1897). *Sesarma rubripes* – Moreira (1901). *Metasesarma rubripes* – Abele (1972a). *Armases rubripes* – Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 466 (as *M. rubripes*).

Remarks: Rathbun (1897) proposed *S. rubripes* as a new name for the specimen collected by the *Challenger* Expedition inland, in Bahia (= Salvador), erroneously referred to by Miers (1886) as *S. mülleri*. Thus, the type locality of *A. rubripes* is Salvador (see Abele, 1972a).

160. *Sesarma curacaoense* De Man, 1892*

Distribution: Western Atlantic – Florida, Antilles, Panama, and Brazil (to Bahia) (Abele, 1992).

Previous records: Rathbun (1918) and Abele (1992), Mapelle, Bay of Bahia (= Mapele, Todos os Santos Bay, Hartt Explorations); Almeida *et al.* (2006), Ilhéus.

Description: Abele, 1992: 12, Figs. 3a, 5c, 8.

Remarks: Rathbun (1918) and Abele (1992) referred to Bahia as the southern limit of the range of this crab on the South American coast; both authors studied specimens collected between 1876 and 1877 from the locality of Mapele, municipality of Simões Filho, around Todos os Santos Bay. Almeida *et al.* (2006) cited *S. curacaoense* for Ilhéus (15°04'58.6"S; 38°59'53.4"W). We now report the collection of individuals in Mucuri (18°05'38'S) (lot MZUESC 808), southern state of Bahia, near the border of the state of Espírito Santo. This is the southernmost known record for the species. The few reports of *S. curacaoense* in Brazil are possibly due to confusion with *S. crassipes* Cano, 1889, as pointed out by Abele (1992). According to him, the status of *S. curacaoense* and *S. crassipes* in Brazil requires a review.

161. *Sesarma rectum* Randall, 1840*

Distribution: Western Atlantic – Antilles (Granada), Venezuela, Guyanas, and Brazil (from Amapá to Santa Catarina) (Melo, 1996; Schubart *et al.*, 1999).

Previous records: *Sesarma (Holometopus) rectum* – Rathbun (1918), Mapelle, Bay of Bahia (= Mapele, Todos os Santos Bay) and Caravelas (Hartt Explorations); *Sesarma rectum* – Abele (1992), Mapele (Simões Filho, not Salvador) and Caravelas (Hartt Explorations); Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus.

Description: Melo, 1996: 469.

Family Varunidae Milne-Edwards, 1853

162. *Cyclograpsus integer* H. Milne-Edwards, 1837*

Distribution: Western Atlantic – Florida, Gulf of Mexico, Central America, northern South America, and Brazil (from Ceará to Santa Catarina). Eastern Atlantic – from Cape Verde to Senegal. Indo-Pacific (Melo, 1996).

Previous records: Almeida *et al.* (2006), Ilhéus.

Description: Melo, 1996: 465.

DISCUSSION

Doubtful records

Epialtus brasiliensis Dana, 1852 has been cited from the Abrolhos Archipelago and Salvador (Joly *et al.*, 1969; Gomes Corrêa, 1972; Gouvêa, 1986a). However, the species has an apparently disjointed geographical distribution, with a northern group occurring in Colombia and a southern group in southeast Brazil, from Espírito Santo to São Paulo (Melo, 1996), which makes the records from Bahia doubtful. A similar case is *Eurypanopeus depressus* (Smith, 1869), recorded from Salvador and adjacent areas (Gouvêa & Leite, 1980; Gouvêa, 1986a). This species, with no other records from Brazil, has a similar distribution, occurring in the north at Bermuda and from Massachusetts Bay to the Dutch West Indies, and in the south off Uruguay and Argentina (Williams, 1984a; Spivak & Luppi, 2005).

Portunus gibbesii (Stimpson, 1859) was initially reported for Salvador by Gouvêa (1986b), and then for Bahia by Melo (1996). These reports indicate the east coast of this state as the southern distributional limit of the species in the western Atlantic. In a recent study on the portunids of Brazil (Santos, 2007), the record for Bahia was not confirmed. The single valid record of *P. gibbesii* in Brazil is that of Coelho & Ramos-Porto (1992) for Maranhão (material deposited in the Carcinological Collection of the Universidade Federal de Pernambuco, Recife, Brazil) (C.R. Santos, *pers. comm.*). Thus, as described above, and because the material of Gouvêa (1986b) is not deposited in any collection where its identification can be confirmed, this species was excluded from the present list. Another doubtful citation not included on this list is the portunid *Callinectes arcuatus* Ordway, 1863 (Gouvêa, 1987), a species of the eastern Pacific (Williams, 1974); this was possibly confused with some variation of *C. danae*. Gouvêa (1987) did not mention where the material was deposited. Furthermore, the published drawings provide insufficient detail to permit confirmation of this record.

A series of other doubtful records were published by Gouvêa & Leite (1980) and Gouvêa (1986a, 1986b). Confirmation of these records is impossible for the same reasons mentioned in the previous paragraph. *Pilumnus gonzalensis* Rathbun, 1893, *Cycloxanthops novemdentatus* (Lockington, 1876), and *C. vittatus* (Stimpson, 1860) are eastern Pacific species (Hendrickx, 1995), and there are no other records for Brazil. The western Atlantic species *Pelia mutica* (Gibbes, 1850), *Pitho aculeata* (Gib-

bes, 1850), *Epialtus dilatatus* A. Milne-Edwards, 1878, *Neopanope texana* (Stimpson, 1859), *Pilumnus marshi* Rathbun, 1901, and *Pilumnus sayi* Rathbun, 1897 also have not been recorded elsewhere for Brazil. *Parapinnixa bouvieri* Rathbun, 1918 is known from North Carolina to Amapá and off São Paulo (Melo, 1996; Nucci & Melo, 1999). *Uca uruguayensis* Nobili, 1901 is probably an erroneous identification because this is a cold-water species that ranges from Rio de Janeiro to Argentina (Melo, 1990, 1996). In the same publication, *Ocyropode albicans* was cited but, in fact, is a junior synonym of the also-cited *O. quadrata* (see Chace & Hobbs, 1969).

Zoogeography

The analysis of the current distribution of the 162 species known for Bahia based on Melo's proposal (1985) allows their classification in four patterns of longitudinal distribution:

1) Circum-tropical species, which occur in tropical regions of the Atlantic, eastern Pacific, and Indo-Pacific: *Elamena gordonae*, *Cronius ruber*, *Pachygrapsus transversus*, *Planes cyaneus*, and *Cyclograpsus integer*. The occurrence of *E. gordonae* in the western Atlantic suggests a circum-tropical distribution, which is uncommon among hymenosomatids because of their brief larval development and low fecundity (Lucas, 1980; Almeida *et al.*, 2007b) (Fig. 3).

2) Amphi-American species, which occur in both the western Atlantic and eastern Pacific: *Pilumnus reticulatus* and *Aratus pisonii*.

3) Amphi-Atlantic species, which are found in both the western and eastern Atlantic: *Calappa galloides*, *Cataleptodius floridanus*, *Xanthodius denticulatus*, *Menippe nodifrons*, *Laleonectes vocans*, *Troglocarcinus corallicola*, *Goniopsis cruentata*, *Pachygrapsus gracilis*, and *Plagusia depressa*.

4) Western Atlantic species, including a total of 145 species, of which 17 are endemic to Brazilian waters: *Dromia gouveai*, *Lithadia brasiliensis*, *L. vertiginosa*, *Acanthonyx dissimulatus*, *Ericerodes minusculus*, *Podochela brasiliensis*, *Batrachonotus brasiliensis*, *Mithrax brasiliensis*, *Microlissa brasiliensis*, *Trichopeltarion pezzutoi*, *Pilumnoides coelhoi*, *Chasmocarcinus arcuatus*, *C. meloi*, *C. peresi*, *Holothuriophilus tomentosus*, *Pinnixa latissima*, and *Palicus acutifrons*. Of these, the bathyal *T. pezzutoi* and the coastal species *P. coelhoi*, *D. gouveai*, and *H. tomentosus* (Melo, 1996; Melo & Campos Jr., 1999; Melo & Boehs, 2004; Tavares & Melo, 2005;

Serejo *et al.*, 2006) are species that are possibly common to the Brazilian and Paulista zoogeographic provinces, whereas *C. peresi* is common to the Brazilian and Guyanas provinces. The remaining 12 species occur in the Brazilian province, although *L. brasiliensis*, *L. vertiginosa*, *B. brasiliensis*, and *C. arcuatus* extend their northern ranges to the Guyanas province, and *B. brasiliensis* and *M. brasiliensis* reach the coast of São Paulo within the Paulista province.

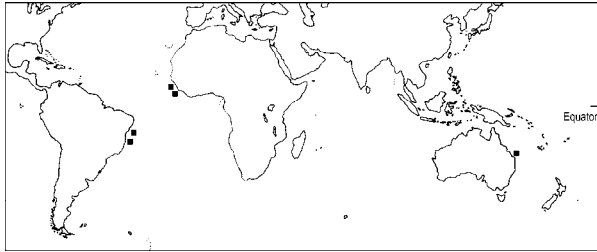


Figure 3. Known range of *Elamena gordonae* Monod, 1956 (Brachyura: Hymenosomatidae). Scale bar = approx. 1600 km.

Figura 3. Distribución conocida de *Elamena gordonae* Monod, 1956 (Brachyura: Hymenosomatidae). Escala = aprox. 1600 km.

Among the western Atlantic species, *C. sapidus* shows a modern disjointed distribution – a northern group occurs from the east coast of the U.S.A. to Venezuela and a southern group occurs from northeastern Brazil to Argentina (Williams, 1974; Melo, 1996; Calado, 2000; Santos & D’Incao, 2004). Possible causes of the disjointed distribution of the blue crab in the western Atlantic were discussed by Santos & D’Incao (2004). Its introduction in other parts of the world is probably a result of transport in the ballast water of ships (Williams, 1974; Santos & D’Incao, 2004).

The remaining species from the Bahia coast (Carqueija & Gouvêa, 1996; Almeida *et al.*, 2003, 2006, 2007b), also transported to the western Atlantic by means of ballast water, is the Indo-Pacific portunid *Charybdis hellerii* (Campos & Türkay, 1989; Lemaitre, 1995; Tavares & Amouroux, 2003).

Dromia erythropus, *Moreiradromia antillensis*, *Mithraculus forceps*, *Domestia acanthophora*, *Panopeus harttii*, and *Portunus anceps* are western Atlantic species that extend their range to the central Atlantic (Holthuis *et al.*, 1980; Manning & Chace, 1990; Melo, 1996).

The Brazilian coast has been divided by several authors into zoogeographic provinces (e.g. Dana,

1853; Ekman, 1953; Balech, 1954; Coelho & Ramos, 1972; Briggs, 1974; Coelho *et al.*, 1978; Coelho & Santos, 1980; Palacio, 1982; Boschi, 2000a, 2000b). On the eastern coast, there is a consensus on the existence of a boundary region between a tropical (Brazilian) and a subtropical province, recognized as an area of hydrological and faunistic transition (named Paulista province in the present contribution). However, the names of these areas and the limits proposed for them have historically varied according to the author and group studied. Figure 4 shows the southernmost distribution limits in the western Atlantic of the brachyuran species reported in the present work. For a significant number (28.4%), the known meridional limit is between the southeast/south coast of Bahia and Rio de Janeiro. A second species group (22.8%) is distributed southward as far as São Paulo. The northern limit of these species is North Carolina, a similar transition area between the temperate cold water provinces north of Cape Hatteras and the warm waters south of this cape (Cerame-Vivas & Gray, 1966; Vernberg & Vernberg, 1970). Up to nearly half (48.8%) of the other species have distributions extending in the south to latitudes between Paraná and Argentina. The area located between Rio de Janeiro and Rio Grande do Sul, which corresponds to the Paulista province (Palacio, 1982), is influenced by the Brazil Current and the cold waters of the Malvinas Current. Besides, several water masses occur over the continental shelf, which is still influenced by the discharges from Río de la Plata and the subtropical convergence (Melo, 1990; Melo-Filho, 2006). The very cold waters in this province act as an ecological barrier limiting the distributions of many tropical species.

The data presented here suggest that the area from southeast/south of Bahia to Rio de Janeiro conforms a transition area between the Brazilian and Paulista provinces for the studied species. Other authors have proposed less spacious transition areas between the two provinces, generally not including depending to Rio de Janeiro and the north coast of São Paulo. Similar results were obtained by Torres (1988) when studying the current distribution of the superfamily Majoidea on the Atlantic coast of South America. These studies show that the number of species decreases considerably in the Paulista province, in relation to the amount observed in the Brazilian province. Palacio (1982) argues against the persistent belief that Cabo Frio, on the coast of Rio de Janeiro, constitutes a limit for tropical organisms (see Briggs, 1974; Boschi, 2000a, 2000b), proposing that the northern limit of the Paulista province occurs between Espírito Santo and Rio de Janeiro far

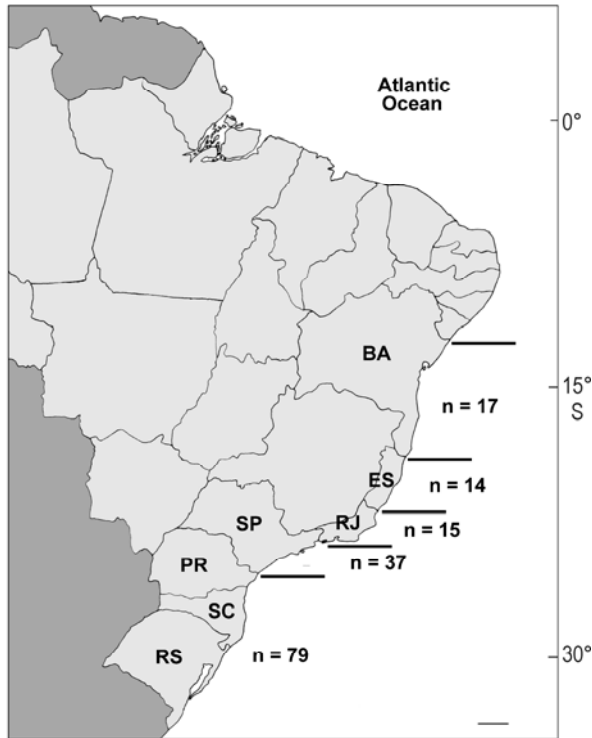


Figure 4. Southernmost limit of known range in the western Atlantic of the brachyuran crabs reported from Bahia, Brazil. (n) number of species; Brazilian states: (BA) Bahia, (ES) Espírito Santo, (PR) Paraná, (RJ) Rio de Janeiro, (RS) Rio Grande do Sul, (SC) Santa Catarina, (SP) state of São Paulo. Scale bar = 185 km.

Figura 4. Límite sur de la distribución en el Atlántico Occidental, de los cangrejos braquiuros reportados para Bahia, Brasil. (n) numero de especies; Estados Brasileños: (BA) Bahia, (ES) Espírito Santo, (PR) Paraná, (RJ) Rio de Janeiro, (RS) Rio Grande do Sul, (SC) Santa Catarina, (SP) São Paulo. Escala = 185 km.

off the 23°C isotherm. Coelho & Koenig (1972), analyzing the distribution of stomatopods, isopods, and tanaidaceans off north and northeast Brazil, suggest that the area south of Bahia may also be considered to be a transition area between the Brazilian and Subtropical Brazilian (= Paulista) provinces; these results are the most similar to those observed in the present contribution.

The distributional limits of a species are determined by the environmental action during all stages of its life history. At any place, when a certain environmental factor fluctuates more than another, it may constitute a limiting factor for distribution (Vernberg & Vernberg, 1970). If the Bahia coast represents part of a transition area among provinces, what ecological factors could be limiting the merid-

ional progression of the species on this part of Brazilian coast?

Table 2 groups the information concerning latitudinal distribution limits and ecological preferences of brachyuran species with their southernmost distribution limits in the western Atlantic on the Bahia coast. In terms of latitudinal distributions, the group consists basically of tropical species, such that lower temperatures would represent a limiting factor on distribution. In relation to their bathymetric distributions, coastal, eurybathyal, and bathyal species (*H. monstrosa* and *A. bispinosus*, which certainly possess a wider geographic distribution than previously documented in the literature) are represented. Concerning the type of bottom and substrate, certain species are found preferably over calcareous algae bottoms, other on soft bottoms with a predominance of sand or mud, and some are eurytopic. *Sesarma curacaoense* inhabits mangroves and estuarine areas and *Plagusia depressa* typically occurs over hard substrates in the intertidal zone. Very little data is available in the literature on *Elamena gordonae* and *Pinnixa latissima*. Therefore, species for which Bahia is a meridional limit have extremely variable depth and bottom type preferences, and it is not possible to establish any pattern of ecological distribution.

In the case of species that occur over calcareous algae bottoms, the deepening and regression of this kind of bottom south of Abrolhos (Kempff, 1970, 1971) certainly act as thermal and edafic barrier for this species group, limiting its distribution. Bottoms of this type of algae off Cabo Frio, for example, occur in great patches surrounded by mud and sand up to about 165 m (Otmann & Otmann, 1969). These greater depths, with colder waters, represent a thermal barrier for the survival of species adapted to the calcareous algae bottoms. Rodrigues da Costa (1968), studying the brachyura fauna off the east coast of Brazil obtained by the R/V Calypso, observed two areas of faunistic change: one between Abrolhos and Cabo Frio and the other between São Paulo and Santa Catarina. It was also verified that the first limit to the southward progression of tropical species is edafic due to the increased amount of muddy substrate on the ocean floor. Coelho *et al.* (1978) established a correlation between the south limit of the Brazilian province and the changes in the nature of the continental shelf bottoms, especially concerning the occurrence of biogenic bottoms.

Another factor that could influence the gradual disappearance of brachyuran species on the coast between southeast/south Bahia and Rio de Janeiro but that was not considered in previous local faunal distribution studies is the belt formed by relatively

Table 2. Range and ecology of brachyuran species with southernmost limit of known range on the coast of Bahia (coastal species: 0-80 m; eurybathyal species: 0- >80 m; bathyal species: > 80 m).

Tabla 2. Distribución geográfica y ecología de las especies de braquiuros, cuyo límite sur de distribución conocido en el Atlántico occidental, se ubica en la costa de Bahia (especie costera: 0-80 m; especie euribatial: 0- >80 m; especie batial: > 80 m).

| Species | Range | Ecology |
|---------------------------------|--|---|
| <i>Homolodromia monstrosa</i> | Surinam, Guyana and Bahia. | Type of bottom unknown. Bathyal, 631–750 m. |
| <i>Acanthocarpus bispinosus</i> | Gulf of Mexico (Florida) to Antilles; Brazil (from Pernambuco to Bahia). | Mud, mud and shells, and coral bottoms. Bathyal, 201–522 m. |
| <i>Callidactylus asper</i> | Bermuda; North Carolina to Bahia. | Calcareous algae, occasionally sand and organogenic bottoms. Eurybathyal, 25–90 m. |
| <i>Iliacantha liodactylus</i> | Florida to Bahia. | Mud bottom. Eurybathyal, from shallow waters to 130 m. |
| <i>Lithadia vertiginosa</i> | Brazil (from Pará to Bahia). | Calcareous algae and organogenic bottoms. Eurybathyal, 18–90 m. |
| <i>Speloeophorus elevatus</i> | Florida to Antilles; Brazil (from Maranhão to Bahia). | Calcareous algae, occasionally sand bottoms. Eurybathyal, 20–83 m. |
| <i>Ericerodes minusculus</i> | Brazil (from Ceará to Bahia). | Sand and calcareous algae bottoms. Coastal, 20–70 m. |
| <i>Macrocoeloma concavum</i> | Antilles and Brazil (from Maranhão to Bahia). | Calcareous algae and shell bottoms. Coastal, from shallow waters to 40 m. |
| <i>M. laevigatum</i> | Florida, Antilles, and Brazil (Pará to Bahia). | Sand, rocks, and calcareous algae bottoms. Coastal, from shallow waters to 30 m. |
| <i>Mithraculus sculptus</i> | Florida to Antilles, and Brazil (Rio Grande do Norte to Bahia). | Sand, mud, shells, and coral bottoms. Coastal, from shallow waters to 60 m. |
| <i>Chorinus heros</i> | Bermuda; Florida to Bahia. | Sand, shells, coral, and rock bottoms. Coastal, from shallow waters to 50 m. |
| <i>Elamena gordonae</i> | Circum-tropical. Eastern Atlantic, Australia, and Brazil (Sergipe and Bahia). | Few data available. On hard bottoms, associated with sponges and hydrocorals. Coastal, 13–40 m. |
| <i>Chasmocarcinus meloi</i> | Brazil (from Maranhão to Bahia). | Mud and organogenic bottoms. Eurybathyal, 21–130 m. |
| <i>C. peresi</i> | Brazil (from Pará to Bahia). | Mud bottoms. Coastal, 15–25 m. |
| <i>Pinnixa latissima</i> | Brazil (Pernambuco and Bahia). | Few data available. On soft bottoms, in stomatopod and polychaete tubes. Shallow-water. |
| <i>Plagusia depressa</i> | Eastern/Central Atlantic; from North Carolina to Antilles; Brazil (from Ceará to Bahia). | In crevices of rocks and coral, and tidal pools. Coastal, inter-subtidal. |
| <i>Sesarma curacaoense</i> | Florida to Bahia. | Mangroves, oyster beds, and rocks in mud bottom. Coastal, inter-supratidal. |

extensive drainage basins located along this part of the Brazilian coast, such as those of the rivers Jequitinhonha, Pardo, Doce, and Paraíba do Sul (Figure 5).

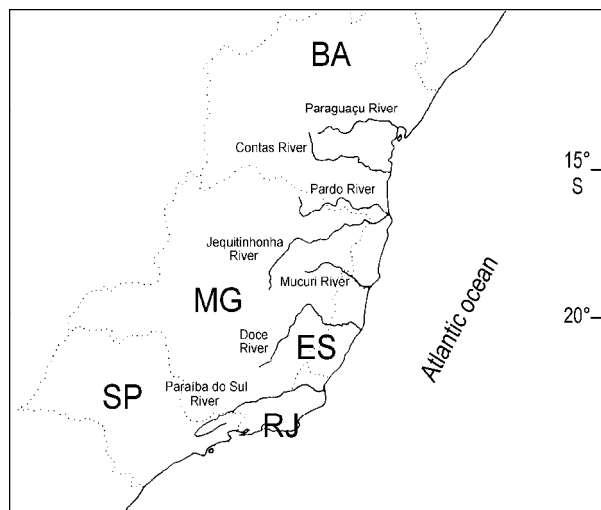


Figure 5. Major Atlantic drainages along the eastern Brazilian coast. States: (BA) Bahia, (ES) Espírito Santo, (MG) Minas Gerais, (RJ) Rio de Janeiro, (SP) São Paulo. Scale bar = 185 km.

Figura 5. Principales drenajes fluviales de la costa leste de Brasil. Estados: (BA) Bahia, (ES) Espírito Santo, (MG) Minas Gerais, (RJ) Rio de Janeiro, (SP) São Paulo. Escala = 185 km.

These basins are located in areas of high average altitudes and precipitation (Dominguez, 2006; Dominguez *et al.*, 2006). The average annual precipitation in the coastal area off Abrolhos is, for example, about 1750 mm (Leão, 2002). The bottom of Abrolhos Bank is rich in siliciclastic sediments, with part of this component of fluvial origin being transported by oceanic currents in the area. Sediments brought by greater rivers located more than 200 km north of the Abrolhos reef reach the area periodically due to increased seasonal precipitation (Leão, 2006). Dominguez *et al.* (2006) commented on the great load of sediments from the Jequitinhonha River, especially in the summer months, as a result of the advection of cold fronts that reach the interior of the continent, causing rains. These factors suggest that the volume of continental water discharged by these rivers is more significant than can be imagined, especially in the rainy season. This fresh-water discharge may act as a limiting factor on the distribution of esthenohaline species.

Final considerations

The marine and estuarine brachyuran fauna from Bahia currently consists of 162 species distributed in

39 families and 19 superfamilies. Of all the species listed in the present contribution, 96 (59.2%) are represented in the MZUESC Crustacean Collection, which brings together a significant portion of the regional biodiversity of this important group of Crustacea. Recent inventory projects in Bahia's coastal areas and continental shelf and slope contributed significantly to increasing the number of species for the state's coastline. Seventeen species were recorded for the first time during the samplings of the REVIZEE Program (Northeast and Central scores) (Torres *et al.*, 2002; Ramos-Porto *et al.*, 2002; Viana *et al.*, 2002, 2003a; Rodrigues & Young, 2003; Tavares & Young, 2004; Torres *et al.*, 2006; Serejo *et al.*, 2006). Inventories done on crustacean fauna in coastal areas of central, southeastern, and southern Bahia broadened knowledge on the geographic distribution of the brachyurans *Ilicantha liodactylus*, *Macrocoeloma concavum*, *M. laevigatum*, *M. septemspinatum*, *Elamena gordonae*, and *Sesarma curacaoense* beyond the first record of 10 species for the state (Almeida *et al.*, 2006, 2007a, 2007b). Here, the knowledge on the distribution of *E. gordonae* and *S. curacaoense* is increased again. In spite of the sampling efforts reported herein, the fauna of the Bahia coast is still poorly known. Off the coast of São Paulo, for example, 193 Brachyura species are known (Dall'Occo *et al.*, 2004), whereas, for Pernambuco, with less than 200 km coast, a total of 148 species have been recorded to date (Coelho *et al.*, 2002). In other words, almost the same number of species is known for the latter area as for Bahia, with more than 1,100 km of coastline. The crustacean fauna in the states of São Paulo and Pernambuco is quite well-known when compared to that of Bahia. In fact, some coastal areas of Bahia are still unexplored and present great potential for discovery, including new species for science.

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