



Stomatopod and decapod crustaceans from Camamu Bay, state of Bahia, Brazil

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Abstract

Camamu Bay, located on the central coast of the state of Bahia, Brazil (13°47' to 14°10'S), is the third-largest Brazilian bay. It is included in a zone that perhaps constitutes the last unexplored frontier on the Brazilian coast, situated between Todos os Santos Bay in Bahia, and the city of Vitória in Espírito Santo. Moreover, this zone coincides with an area of remarkable zoogeographical interest, the transition zone between the Brazilian and Paulista provinces. Camamu Bay contains a wide diversity of marine environments such as sandy beaches, rocky substrata, and mangroves, and it is still in a good state of preservation compared to other large Brazilian bays. The objective of this study was to survey the fauna of Crustacea (orders Stomatopoda and Decapoda) in Camamu Bay. The material analyzed was collected by trawling from July 2003 to September 2005. Voucher specimens were deposited in the collections of the Universidade Estadual de Santa Cruz and the Universidade Estadual do Sudoeste da Bahia, located in the cities of Ilhéus and Jequié (state of Bahia, Brazil), respectively. A total of 93 species, belonging to 35 families, was collected. The order Stomatopoda was represented by 3 families and 4 species; the order Decapoda was represented by 31 families and 89 species. The most important family in terms of number of species was Alpheidae, with 11 species. Of the total number of species, 88 are recorded from Camamu Bay for the first time, while 10 species are cited from the state of Bahia for the first time. The southern geographical distributional limits in the western Atlantic for the caridean *Synalpheus pandionis* and the brachyurans *Macrocoeloma laevigatum* and *Elamena gordonae* are extended.

Key words: crustaceans, diversity, estuaries, Camamu Bay, Bahia

Introduction

Faunistic surveys are important foundations for knowledge and monitoring of areas of high interest, such as estuaries. In Brazil, wide-ranging systematic studies focusing on the invertebrate fauna of soft bottoms are few, mainly because of the scarcity of specialized professionals and financial support for oceanographic expeditions. Fewer still are studies on the spatial-temporal variability of benthic communities (Blankensteyn & Moura 2002).

Decapod crustaceans are important members of tropical benthic communities. Besides the value of the largest and most abundant species as a food source for humans, a wide variety of small species contribute to the size, complexity, and functioning of tropical ecosystems (Hendrickx 1995).

Camamu Bay is located on the central coast of the state of Bahia, Brazil (13°47' to 14°10'S) and is the third-largest Brazilian bay (Oliveira *et al.* 1998; Oliveira *et al.* 2002). A recent diagnosis of the Brazilian biodiversity in coastal and marine zones (Ministério do Meio Ambiente 2002) indicated this bay as a region of high interest for conservation of estuaries and mangroves. Camamu remains less affected by human activities compared to other large Brazilian bays, e.g., Todos os Santos in the state of Bahia (Barroso *et al.* 2002), Guanabara in the state of Rio de Janeiro (Lavrado *et al.* 2000, Breves-Ramos *et al.* 2005), and other estuarine regions of the coast of Bahia.

Besides its ecological importance, Camamu Bay is included in a zone that perhaps constitutes the last unexplored frontier on the Brazilian coast between Todos os Santos Bay and the city of Vitória in the state of Espírito Santo. Moreover, this zone coincides with an area of remarkable zoogeographical interest, the transition zone between the Brazilian and Paulista provinces (Coelho & Ramos 1972; Palacio 1982). In this area, taxonomic surveys and analyses of distribution patterns, as well as studies of the ecology of many invertebrate groups are scantier and more limited than those available for adjacent areas. Especially poorly known are estuaries and coastal beaches (Lana *et al.* 1996). As a consequence, this portion of the eastern Brazilian coast constitutes a gap in the range of many decapod species.

According to Diegues (2000), the major impacts from human activity in Camamu are the growing and largely unplanned tourist activity, accelerated urbanization, and mining operations, among others responsible for environmental changes. The artisanal crustacean fishery is one of the most important economic resources in the region.

Despite the great diversity of ecosystems in the region of Camamu, the faunistic and floristic composition is poorly known. Concerning the decapod crustacean fauna, the only previous study was by Almeida *et al.* (2003), who mentioned the occurrence of *Sicyonia laevigata* Stimpson, 1871, *Podochela brasiliensis* Coelho, 1972, *Metoporhaphis calcarata* (Say, 1818), and the Indo-West Pacific portunid *Charybdis hellerii* A. Milne Edwards, 1867. The presence of this non-indigenous species is a matter for concern, because the region affords a wide range of habitats suitable for its establishment. More recently, Coelho (2006) reported the inachid crab *Coryrhynchus algicola* (Stebbing, 1914) from Camamu Bay.

The objective of the present contribution was to investigate the fauna of sublittoral decapod and stomatopod crustaceans, in unconsolidated substrata in Camamu Bay, in order to provide basic information for future biological and ecological studies, as well as monitoring and management of the fauna.

Material and methods

Description of the study area

Camamu Bay is located on the central coast of Bahia, between 13°56' and 14°03'S, and 38°58' and 39°07'W (Fig. 1). Its position between the continent to the west and an area of coral reefs and sandbanks to the east protects the complex against strong ocean currents (Diegues 2000). Only short rivers flow into the bay. There are many islands in its interior; some of them large: Tubarões, Campinho, Taipu Mirim, Grande, and Pequena islands. Along its shores are abundant mangrove forests, covering an area of more than 40 km² (Oliveira *et al.* 2002), as well as restinga forest, Atlantic rainforest, rocky shores which form natural pools, and reefs, all still well preserved and little studied.

The reefs and natural pools are located along the coast, on the side of the open sea. The mean annual temperature is between 20 and 24°C. Annual precipitation varies from 1500 and 2500 mm; the rainfall is distributed evenly through the year (Diegues 2000).

Salinity varies slightly, from salty to brackish most of the time, even at low tide. This pattern changes near the mouths of larger rivers such as Camamu and Maraú, where salinity reaches 0 (zero) at low tide (M.C. Guerrazzi, unpublished data).

The water is turbid, generally with strong currents most of the year, but becomes transparent and calm from December to March (summer). The bottom sediments of the estuary range from clay to silt, to totally sandy near the bay mouth. Thus, there is a higher organic matter concentration inside the bay and a lower concentration near the mouths of the rivers (M.C. Guerrazzi, unpublished data).

Information is available about the geology of the rivers, including the geochemistry of the mangroves, most accurately about the mineral composition of the soil (Oliveira *et al.* 1998; Oliveira *et al.* 2002), as well as the large deposits of barium sulphate (barite) and associated minerals which have been mined for more than

60 years on Grande and Pequena islands in the middle of the bay (Netto 1977; Oliveira *et al.* 2002). Other mineral resources being extracted are manganese, gypsum, and petroleum (Oliveira *et al.* 2002). The Cretaceous sedimentary basin of Camamu is still little known. It shelters a broad array of fossils from many invertebrate phyla, including several species described from the region (Souza-Lima *et al.* 2003).

Sampling methods

This study was carried out between July 2003 and September 2005, for a total of 12 months of sampling, as part of the project “Inventário da Macrofauna Bentônica e da Ictiofauna na Baía de Camamu - BA” (Process number 2001-68), linked to the Universidade Estadual do Sudoeste da Bahia (UESB), Jequié Campus, Bahia.

Sampling of unconsolidated substrates was carried out at 8 stations (St.), which were located approximately 2.5 km from each other. Their coordinates were established using a GPS (St. 1: 13°53'04"S, 38°57'06"W; St. 2: 13°53'21"S, 38°57'49"W; St. 3: 13°54'25"S, 38°59'14"W; St. 4: 13°54'06"S, 39°00'22"W; St. 5: 13°54'14"S, 39°00'34"W; St. 6: 13°55'21"S, 39°02'13"W; St. 7: 13°56'19"S, 39°03'57"W; St. 8: 13°56'24"S, 39°05'04"W), from the mouth of the Acaraí River, in front of Camamu City, to the bay mouth, near the Ponta do Mutá, locality of Barra Grande (Figs. 1–2). Material trawled during exploratory collections, in June and September 2000, was also included.

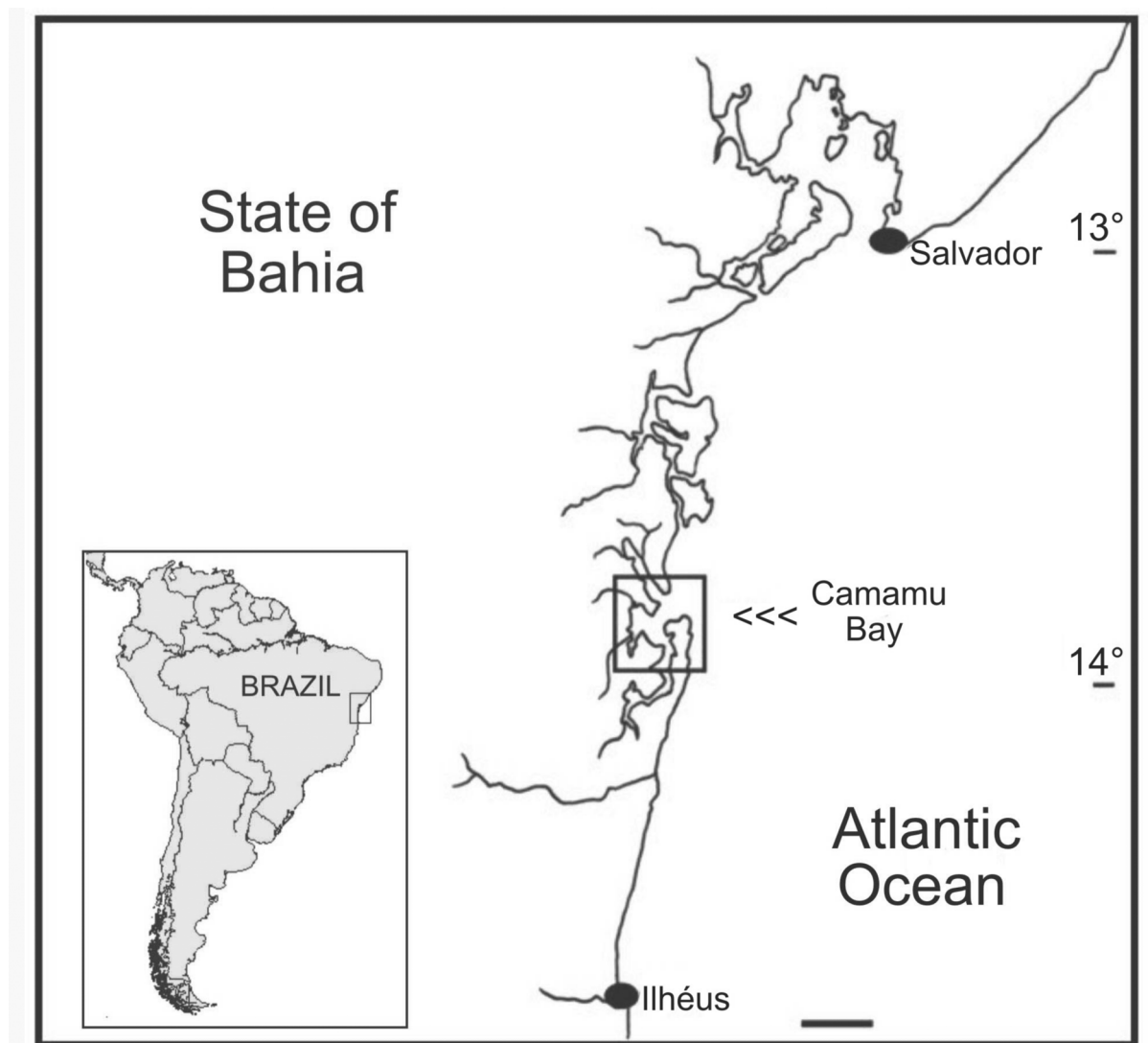


FIGURE 1. Location of the study area, Camamu Bay, Bahia, Brazil. Scale bar = 13.5 km.

Sampling was carried out from a fishing boat (trawler) using a trawl net with mesh of 3 cm (measured between knots) and aperture of 4 cm. Each trawl, at each station, was done for 10 min at a speed of 2.5 km/h.

Biological material obtained in the trawls was pre-sorted on the boat, between one station and the next. Further sorting and identifications were done in the Ecology Laboratory of the Departamento de Ciências Biológicas, UESB, and in Carcinology Laboratory of the Departamento de Oceanografia, Universidade Federal de Pernambuco, Recife, Brazil.

Plant material was fixed in 4% formalin and stored in plastic pots. Algae and their associated organisms were separated and identified in the laboratory, according to collection station. Voucher specimens were fixed in 70% ethanol and deposited in the Crustacean collection of the Museu de Zoologia, Universidade Estadual de Santa Cruz (MZUESC), Ilhéus, Bahia, Brazil. Additional material was deposited in the collection of the Museu de História Natural, UESB (CrUESB).

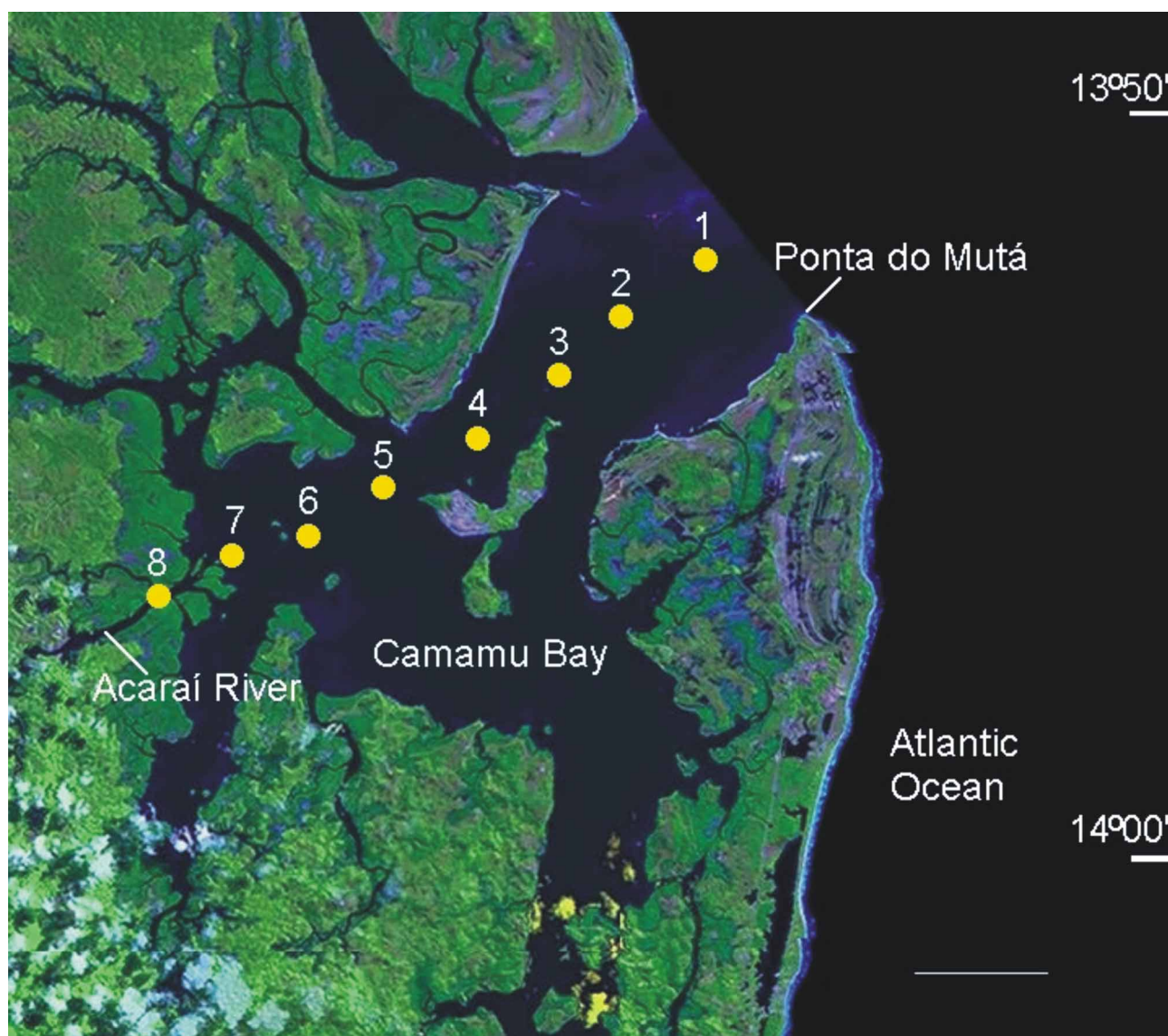


FIGURE 2. Location of the sampling stations (yellow) in Camamu Bay, Bahia, Brazil. Source: Miranda & Coutinho (2004). Scale bar = 3 km.

The classification adopted in this contribution follows Martin & Davis' (2001) proposed scheme to family level. In each family, the order of genera and species is alphabetic. Material examined, geographic range, eco-

logical notes, and previous records from the state of Bahia (if any) are provided for each species. The information for species under “material examined” includes, between parentheses, the total N of specimens analyzed, and also the data for the voucher material deposited at MZUESC. In some cases, remarks concerning distribution, taxonomy, or collection site are also provided. New records from Bahia were checked against a databank that stores references about the taxonomy and distribution of crustaceans in the North and Northeast political regions of Brazil consulted in the last 4 decades. This database was developed by one of us (PAC) for use in his laboratory.

Abbreviations used: (m) males, (f) females, (juv) juveniles, (ni) non-identified sex, (CL) carapace length, (CW) carapace width, (St.) station of collection.

Results

A total of 1618 specimens, assigned to 93 species and 35 families, was analyzed. The order Stomatopoda was represented by 3 families and 4 species, while the order Decapoda was represented by 31 families and 89 species. The most important family in regard to number of species was the Alpheidae, with 11 species. Species distribution by station is shown in the Appendix.

Class Malacostraca Latreille, 1802

Subclass Hoplocarida Calman, 1904

Order Stomatopoda Latreille, 1817

Superfamily Squilloidea Latreille, 1802

Family Squillidae Latreille, 1802

Gibbesia neglecta (Gibbes, 1850)

Material examined (N=1). 1m, 19/IX/2000, 13°52'99"S/38°59'59"W (MZUESC#58).

Distribution. Western Atlantic – North Carolina, Gulf of Mexico, and Brazil (from Ceará to Rio Grande do Sul) (Manning 1969; Gomes Corrêa 1986).

Ecological notes. On mud and sand with debris. From shallow waters to 64 m, but usually found in shallow waters (Manning 1969; Gomes Corrêa 1986).

Previous records in Bahia. Gomes Corrêa (1986) (as *Squilla neglecta*), Almeida *et al.* (2007)..

Remarks. This species was transferred to the monotypic genus *Gibbesia* Manning & Heard, 1997, which is characterized by the absence of a mandibular palp (Manning & Heard 1997). Widely recorded along the Brazilian coast as *Squilla neglecta*.

Squilla obtusa Holthuis, 1959

Material examined (N=3). 1f, 25/IV/2004, St. 06 (MZUESC#642); 1f, 25/III/2005, St. 06 (MZUESC#700).

Distribution. Western Atlantic – Puerto Rico, Curaçao, Trinidad and Tobago, Colombia, Venezuela, Surinam, and Brazil (from Amapá to Espírito Santo) (Manning 1969; Gomes Corrêa 1986; Rodrigues & Young 2005).

Ecological notes. On muddy bottoms, between 13 and 182 m, but more frequently at depths less than 90 m (Manning 1969; Gomes Corrêa 1986).

Previous records in Bahia. Manning (1966), Coelho & Koenig (1972), Gomes Corrêa (1986), Rodrigues & Young (2005), Almeida *et al.* (2007).

Superfamily Gonodactyloidea Giesbrecht, 1910

Family Gonodactylidae Giesbrecht, 1910

***Neogonodactylus torus* (Manning, 1969)**

Material examined (N=1). 1f, 24/III/2005, St. 01 (MZUESC#701).

Distribution. Western Atlantic – North Carolina, southeast and northwest Florida, Yucatan, Cuba, Barbados, Panama, and Brazil (from Pará to Bahia) (Manning 1969; Gomes Corrêa 1986).

Ecological notes. In depths between 10 and 364 m (Manning 1969).

Previous records in Bahia. Gomes Corrêa (1986) (as *Gonodactylus torus*).

Remarks. Southern range limit known for this species is Abrolhos Archipelago (Gomes Corrêa 1986).

Family Pseudosquillidae Manning, 1977

***Pseudosquilla ciliata* (Fabricius, 1787)**

Material examined (N=3). 1m, 07/VIII/2005, St. 05 (MZUESC#643).

Distribution. Western Atlantic – from Massachusetts to southern Florida, Mexico, Bermuda, Bahamas, Antilles, Central America, northern South America, and Brazil (from Amapá to São Paulo). Central Atlantic - Ascension Island and Santa Helena. Eastern Atlantic – West Africa (Sierra Leone). Indo-Pacific - from South Africa to Japan, and Hawaii (Manning 1969; Gomes Corrêa 1986).

Ecological notes. From shallow waters to 110 m (Manning 1969).

Previous records in Bahia. Calman (1917), Coelho & Koenig (1972), Gomes Corrêa (1986), Rodrigues & Young (2005).

Remarks. Calman (1917) analyzed immature individuals of *P. ciliata* collected at Abrolhos during the “British Terra Nova Expedition” (1913).

Subclass Eumalacostraca Grobben, 1892

Order Decapoda Latreille, 1802

Suborder Dendrobranchiata Bate, 1888

Superfamily Penaeoidea Rafinesque, 1815

Family Penaeidae Rafinesque, 1815

***Farfantepenaeus* sp.**

Material examined (N=174). 1ni, 19/IX/2000, 13°52'99"S/38°59'59"W (MZUESC#51); 1m, 10f, 13/IX/2003, St. 05 (MZUESC#239); 1m, 10f, 13/IX/2003, St. 05 (MZUESC#240); 2m, 4f, 14/IX/2003, St. 08 (MZUESC#241).

Remarks. Three species of *Farfantepenaeus* are known from Bahia: *F. brasiliensis* (Latreille, 1817) (Pérez-Farfante 1969; Coelho & Ramos 1972; Ramos-Porto *et al.* 1989; Vasques *et al.* 2003), *F. subtilis* (Pérez-Farfante, 1967) (Pérez-Farfante 1967; Coelho & Ramos 1972), and *F. paulensis* (Pérez-Farfante, 1967) (D’Incao, 1995a). The material collected was composed mainly of juvenile specimens that could not be identified to species.

***Metapenaeopsis goodei* (Smith, 1885)**

Material examined (N=1). 1f, 07/IX/2005, St. 04 (MZUESC#702).

Distribution. Western Atlantic – Bermuda, from North Carolina to Florida Keys, Gulf coast of Florida to Pensacola, Yucatan, Bahamas, Caribbean Islands, and coast of Central and South America to Brazil (from Amapá to Espírito Santo) (Pérez-Farfante & Kensley 1997; D’Incao 1998).

Ecological notes. Oceanic, more commonly from shallow waters to 60 m, although a record at 329 m, in Florida, exists (Pérez-Farfante 1971; D’Incao 1998).

Previous records in Bahia. Pérez-Farfante (1971), D’Incao (1995a).

Remarks. Material from Bahia studied by Pérez-Farfante (1971) was collected during the Calypso Expedition in 1961, off Salvador.

***Rimopenaeus constrictus* (Stimpson, 1871)**

Material examined (N=2). 1f, 19/IX/2000, 13°52’99’’S; 38°59’59’’W (MZUESC#640); 1m, 13/IX/2003, St. 04 (MZUESC#644).

Distribution. Western Atlantic – Bermuda, Nova Scotia (Canada), from Chesapeake Bay to Florida Keys, Gulf of Mexico, Caribbean Sea to Brazil (from Amapá to Santa Catarina) (Pérez-Farfante & Kensley 1997; D’Incao 1998).

Ecological notes. Oceanic, demersal species, occurring up to 130 m (D’Incao 1998).

Previous records in Bahia. None.

Remarks. This species is widely known from the Brazilian coast, but no previous records were found from Bahia.

Family Sicyoniidae Ortman, 1898

***Sicyonia dorsalis* Kingsley, 1878**

Material examined (N=15). 2f, 14/IX/2003, St. 06 (MZUESC#645).

Distribution. Western Atlantic – from North Carolina to Florida, Gulf of Mexico, Antilles (Cuba and Puerto Rico), northern South America, and Brazil (from Amapá to Santa Catarina) (D’Incao 1995b).

Ecological notes. Muddy, sandy, organogenic, and calcareous algae bottoms. From 3 to 100 m, but most commonly found around 80 m (D’Incao 1995b).

Previous records in Bahia. Coelho & Ramos (1972), Ramos-Porto *et al.* (1989), D’Incao (1995b), Vasques *et al.* (2003).

***Sicyonia laevigata* Stimpson, 1871**

Material examined (N=22). 1f, 19/IX/2000, 13°57’05’’S/38°59’68’’W (MZUESC#49); 4f, 07/VIII/2005, St. 05 (MZUESC#646).

Distribution. Western Atlantic – from North Carolina to Florida, Gulf of Mexico, Central America, Antilles, Colombia, Venezuela, and Brazil (from Amapá to Rio Grande do Sul). Eastern Pacific – Mexico, Costa Rica, and Panama (D’Incao 1995b).

Ecological notes. Rocky, sandy, shell, and algae or seagrass bottoms, rarely on muddy bottoms. Oceanic, demersal species, occurring from shallow waters to 100 m. Most frequently found around 50 m deep (D’Incao 1995b).

Previous records in Bahia. Almeida *et al.* (2003).

Remarks. This species was first recorded from Bahia and Camamu Bay by Almeida *et al.* (2003).

***Sicyonia parri* (Burkenroad, 1934)**

Material examined (N=4). 1f, 24/IV/2004, St. 01 (MZUESC#647).

Distribution. Western Atlantic – from North Carolina to Florida, Antilles, and Brazil (from Maranhão to São Paulo) (D’Incao 1995b).

Ecological notes. In sandy, organogenic, and algae bottoms. From shallow waters to 87 m, but more frequently found between 14 and 54 m (D’Incao 1995b).

Previous records in Bahia. Ramos-Porto *et al.* (1989), D’Incao (1995b).

***Sicyonia typica* (Boeck, 1864)**

Material examined (N=74). 3f, 19/IX/2000, 13°52’99”S/38°59’59”W (MZUESC#50); 8m, 4f, 12/VII/2003, St. 03 (MZUESC#648).

Distribution. Western Atlantic – from North Carolina to Florida, Gulf of Mexico, Antilles, Venezuela, Surinam, French Guyana, and Brazil (from Pará to Rio Grande do Sul) (D’Incao 1995b).

Ecological notes. On mud, sand, shell, and algae bottoms. From shallow waters to 101 m (D’Incao 1995b).

Previous records in Bahia. Coelho & Ramos (1972), Ramos-Porto *et al.* (1989), D’Incao (1995b), Vasques *et al.* (2003).

Suborder Pleocyemata Burkenroad, 1963

Infraorder Stenopodidea Claus, 1872

Family Stenopodidae Claus, 1872

***Stenopus hispidus* (Olivier, 1811)**

Material examined (N=2). 1f, 24/III/2005, St. 04 (MZUESC#698).

Distribution. Western Atlantic – Bermuda, North Carolina to southern Florida, Gulf of Mexico, and Brazil (Fernando de Noronha, and from Ceará to Espírito Santo). Central Atlantic – Ascension. Central Pacific – Hawaii. Indo-West Pacific – South Africa, Red Sea, Japan, western Australia, eastern Australia through New Caledonia, New Hebrides, Lord Howe, and from northern New Zealand to Tuamotu Archipelago (Williams 1984; Manning & Chace 1990; Coelho & Ramos-Porto 1998a; Nizinski 2003).

Ecological notes. On rocky shores and gravel bottoms; cave-dwelling fish-cleaner species. From shallow waters to 210 m (Coelho & Ramos-Porto 1998a).

Previous records in Bahia. Coelho (1969), Coelho & Ramos (1972).

Infraorder Caridea Dana, 1852

Superfamily Pasiphaeoidea Dana, 1852

Family Pasiphaeidae Dana, 1852

***Leptochela serratorbita* Bate, 1888**

Material examined (N=2). 1m, 07/IX/2005, St. 04 (MZUESC#703); 1ni, 25/III/2005, St. 05 (MZUESC#704).

Distribution. Western Atlantic – from North Carolina to South Carolina, western Gulf of Mexico, Florida Keys to Leeward Islands, Brazil (Amapá to Pernambuco, Bahia, and São Paulo) (Williams 1984; Ramos-Porto & Coelho 1995; Ramos-Porto & Coelho 1998; Cardoso 2006).

Ecological notes. On mud, sand, calcareous algae, and detritus bottoms. From shallow waters to 55 m (Ramos-Porto & Coelho 1995).

Previous records in Bahia. Cardoso (2006).

Superfamily Palaemonoidea Rafinesque, 1815

Family Palaemonidae Rafinesque, 1815

Subfamily Palaemoninae Rafinesque, 1815

***Macrobrachium acanthurus* (Wiegmann, 1836)**

Material examined (N=3). 1f, 25/III/2005, St. 08 (MZUESC#653).

Distribution. From North Carolina to Texas, Mexico, Cuba, Haiti, Dominican Republic, Puerto Rico, Nicaragua, Panama, Colombia, Venezuela, Surinam, and Brazil (from Pará to Rio Grande do Sul) (Melo 2003).

Ecological notes. Freshwater species. In turbid, generally slow waters, with abundant marginal vegetation, and muddy substratum. Sometimes found in brackish waters (Melo 2003).

Previous records in Bahia. von Ihering (1897) (as *Palaemon acanthurus*), Sawaya (1946), Holthuis (1952), Almeida *et al.* (2006).

***Leander paulensis* Ortmann, 1897**

Material examined (N=36). 3ni, 25/IV/2004, St. 08 (MZUESC#649); 1m, 3f, 30/X/2004, St. 01 (MZUESC#732); 2m, 05/IX/2005, St. 08 (MZUESC#733).

Distribution. Western Atlantic – Florida, Antilles, and Brazil (Maranhão, Ceará, Paraíba, Pernambuco, Bahia, and São Paulo). Eastern Pacific (Ramos-Porto 1986; Ramos-Porto & Coelho 1998).

Ecological notes. On sandy bottoms, associated with seagrass. From shallow waters to 16 m (Ramos-Porto 1986; Ramos-Porto & Coelho 1998).

Previous records in Bahia. Ramos-Porto (1986), Ramos-Porto & Coelho (1990), Almeida *et al.* (2006, 2007).

***Leander tenuicornis* (Say, 1818)**

Material examined (N=6). 1m, 1f, 24/IV/2004, St. 01 (MZUESC#650).

Distribution. Western Atlantic – Bermuda, east coast of the United States, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (Fernando de Noronha, and from Maranhão to Bahia). East-

ern Atlantic. Mediterranean. Indo-Pacific (Ramos-Porto 1986). According to Williams (1984), in the western Atlantic this species occurs from Newfoundland (Canada) to the Falklands Islands. Tropical and subtropical waters around the world, except off the west coast of the Americas (Chace 1972; Williams 1984). Li *et al.* (2004) described in detail the distribution of *L. tenuicornis* in the Indo-Pacific: Red Sea, from South Africa to Japan, Philippines, Indonesia, Australia, New Zealand, and South China Sea. According to Li *et al.* (2004), the record from the Falklands is doubtful.

Ecological notes. On gravel and sand bottoms covered with seagrass. From shallow waters to 72 m (Ramos-Porto 1986; Ramos-Porto & Coelho 1998).

Previous records in Bahia. Ramos-Porto (1986), Ramos-Porto & Coelho (1990), Cardoso (2006).

Subfamily Pontoniinae Kingsley, 1878

***Kemponia americana* (Kingsley, 1878)**

Material examined (N=86). 2m, 9f, 12/VI/2004, St. 01 (MZUESC#651); 7m, 10f, 24/III/2005, St. 04 (MZUESC#730); 14m, 5f, 1ni, 25/III/2005, St. 05 (MZUESC#731); 2m, 1f, 1ni, 07/VIII/2005, St. 05 (MZUESC#743).

Distribution. Western Atlantic – from North Carolina to western Gulf of Mexico, Antilles (West Indies to Aruba), and Brazil (Rocas Atoll, oceanic banks off Ceará, and from Amapá to Alagoas, Espírito Santo, and São Paulo) (Williams 1984; Ramos-Porto & Coelho 1998; Calado & Sousa 2003).

Ecological notes. In sand and gravel bottoms, seagrass, tidepools, and in sponges. From shallow waters to 105 m (Ramos-Porto & Coelho 1990; Ramos-Porto & Coelho 1998; Calado & Sousa 2003).

Previous records in Bahia. None.

Remarks. This species was recently transferred from the genus *Periclimenes* Costa, 1844 to *Kemponia* erected by Bruce (2004). Although *K. americana* is known from several states in northern and northeastern Brazil, cited as *P. americanus* (Coelho & Ramos 1972; Ramos-Porto & Coelho 1990; Ramos-Porto & Coelho 1998; Calado & Sousa 2003), we found no literature records between the states of Alagoas and Espírito Santo. Hence, we record the species from Bahia for the first time.

***Periclimenes longicaudatus* (Stimpson, 1860)**

Material examined (N=89). 15m, 4f, 12/VI/2004, St. 01 (MZUESC#652); 2m, 10f, 26/IX/2004, St. 01 (MZUESC#734); 5m, 6f, 18/12/2004, St. 01 (MZUESC#735).

Distribution. Western Atlantic – from North Carolina to southwestern Florida, West Indies to Brazil (from Pará to São Paulo) (Williams 1984; Ramos-Porto & Coelho 1998).

Ecological notes. From shallow waters to 72 m (Ramos-Porto & Coelho 1990).

Previous records in Bahia. Gomes Corrêa (1972), Coelho & Ramos (1972) (as *Periclimenes* sp. B).

Superfamily Alpheoidea Rafinesque, 1815

Family Alpheidae Rafinesque, 1815

***Alpheus* cf. *armillatus* H. Milne Edwards, 1837**

Material examined (N=39). 4f, 25/IV/2004, St. 08 (MZUESC#657); 1m, 2f, 29/IX/2004, St. 08 (MZUESC#658); 3f, 31/X/2004, St. 08 (MZUESC#736); 2f, 24/III/2005, St. 02 (MZUESC#737).

Distribution. Western Atlantic – Bermuda and North Carolina to Brazil (from Ceará to Santa Catarina, Fernando de Noronha) (Christoffersen 1998).

Ecological notes. Under rocks, in oyster banks, and in crevices of coral rocks; also common on seagrass flats. From shallow waters to about 9 m (Chace 1972).

Previous records in Bahia. Smith (1869) (as *A. heterochaelis* Say, 1818), Gomes Corrêa (1972), Almeida *et al.* (2006).

Remarks. Gomes Corrêa (1972) in her list on decapods of the Abrolhos Archipelago listed *A. armillatus* and *A. heterochaelis*. However, the record of *A. heterochaelis* from this archipelago was based on Smith (1869) and should be therefore attributed to *A. armillatus* (Christoffersen 1984).

Alpheus armillatus is a species complex that includes at least seven species in the western Atlantic (A. Anker, personal communication; see also Mathews 2006). The identity of the Brazilian material, including the actual number of species present on the Brazilian coast, remains unknown.

***Alpheus chacei* Carvacho, 1979**

Material examined (N=3). 1m, 1f, 14/IX/2003, St. 06 (MZUESC#654).

Distribution. Guadeloupe and Brazil (Paraíba, Sergipe, Rio de Janeiro, and São Paulo) (Christoffersen 1984; 1998).

Ecological notes. Species restricted to estuarine environments. From shallow water to about 5 m (Christoffersen 1984).

Previous records in Bahia. None.

Remarks. The present record is the first for Bahia, and is also the first known locality between Sergipe and Rio de Janeiro.

***Alpheus estuariensis* Christoffersen, 1984**

Material examined (N=1). 1f, 07/VIII/2005, St. 05 (MZUESC#655).

Distribution. Florida, Mississippi to Texas, Cuba, Dominican Republic, Trinidad and Tobago, Curaçao, and Brazil (from Ceará to Paraná). Eastern Pacific – Concepción Bay (Gulf of California), Costa Rica, Panama, Málaga Bay (Colombia) (Christoffersen 1984; Martínez-Iglesias *et al.* 1996).

Ecological notes. Estuarine species inhabiting sandy and muddy bottoms, in burrows, sometimes found among rocks, oysters, and mangrove roots. Intertidal to 22 m (Christoffersen 1984).

Previous records in Bahia. Almeida *et al.* (2006).

***Alpheus cf. floridanus* Kingsley, 1878**

Material examined (N=2). 1f, 29/VIII/2004, St. 06 (MZUESC#656).

Distribution. Western Atlantic – Bahamas, southern Florida, Mexico (Veracruz and Quintana Roo), Antilles (from Cuba to Curaçao), and Brazil (Rocas Atoll, and from Bahia to Rio Grande do Sul) (Christoffersen 1979; Martínez-Iglesias *et al.* 1996). Records from the eastern Atlantic (from Guinea to Congo, and Principe Island) and the eastern Pacific (Gulf of California, Panama, and Ecuador) refer to other species (A. Anker, personal communication).

Ecological notes. On muddy and silty sand, with seagrass or calcareous algae (*Halimeda*), also in mixed sediments with mud, sand, shells, hydrozoans, and bryozoans. Intertidal to 81 m (Christoffersen 1979).

Previous records in Bahia. Christoffersen (1979).

Remarks. Species complex, with at least four species in the western and eastern Atlantic and eastern Pacific (A. Anker, personal communication).

***Alpheus cf. formosus* Gibbes, 1850**

Material examined (N=2). 1f, 29/VIII/2004, St. 05 (MZUESC#706).

Distribution. Western Atlantic – Bermuda, and from North Carolina through Caribbean to Brazil (Fernando de Noronha, and from Ceará to São Paulo) (Christoffersen 1998).

Ecological notes. Sand flats with *Porites* and other corals, seagrass flats with abundant coral rubble, rock-studded beaches, seawalls, wrecks, exposed and submerged reefs, *Phragmatopoma* reefs; rarely in sponges or bryozoan (*Schizoporella*) colonies, in crevices of corals or coral rubble, under rocks. Intertidal to 42 m (Chace 1972; Christoffersen 1979, 1980; A. Anker, pers. comm.).

Previous records in Bahia. Gomes Corrêa (1972), Christoffersen (1979).

Remarks. Species complex, with at least two species in the western Atlantic (Knowlton & Mills 1992).

***Alpheus intrinsecus* Bate, 1888**

Material examined (N=1). 1f, 06/VIII/2005, St. 03 (MZUESC#705).

Distribution. Western Atlantic – from Puerto Rico to Brazil (from Piauí to Santa Catarina). Eastern Atlantic – from Spanish Sahara to Gabon (Christoffersen 1979).

Ecological notes. Mud, clay, sand, sand with gorgonians, *Halodule* beds, coarse sand with shells, calcareous algae. Intertidal to 40 m (Christoffersen 1979).

Previous records in Bahia. Bate (1888), Moreira (1901), Almeida *et al.* (2006, 2007).

Remarks. The type locality of *A. intrinsecus* is off Salvador, Bahia (Bate 1888).

***Alpheus cf. packardii* Kingsley, 1880**

Material examined (N=40). 1f, 13/VI/2004, St. 07 (MZUESC#659); 1m, 13/VI/2004, St. 08 (MZUESC#660); 4m, 6f, 1juv, 24/III/2005, St. 04 (MZUESC#738); 5m, 10f, 25/III/2005, St. 05 (MZUESC#739).

Distribution. Western Atlantic – Bermuda, from Virginia to South Carolina, Florida, Gulf of Mexico, Bahamas, Mexico (Quintana Roo and Yucatán), Antilles, and Brazil (Rocas Atoll, Fernando de Noronha, and from Amapá to São Paulo) (Christoffersen 1979; 1998; Martínez-Iglesias *et al.* 1996). Records from the eastern Pacific (Gulf of California to Panama, Galapagos) refer to at least two different species, one of them *A. normanni* Kingsley, 1878 (A. Anker, personal communication).

Ecological notes. On mud, sand, calcareous algae, and broken shells, also on seagrass flats (*Thalassia* and *Diplanthera*), oyster banks, and in *Phragmatopoma* reefs. Common in polyhaline zones of estuaries. Intertidal to 73 m (Christoffersen 1979, as *A. normanni*).

Previous records in Bahia. Christoffersen (1979) (as *A. normanni*).

Remarks. Species complex, with at least three species in the western Atlantic and two species in the eastern Pacific (A. Anker, personal communication).

***Salmoneus cf. ortmanni* (Rankin, 1898)**

Material examined (N=1). 1m, 07/VIII/2005, St. 07 (MZUESC#707).

Distribution. Western Atlantic – Bermuda, Bahamas, Yucatan Peninsula, Guadeloupe, and Brazil (Pernambuco, Sergipe, São Paulo, and Paraná) (Christoffersen 1982; Ramos-Porto *et al.* 1994). Records from the

eastern Pacific (Gulf of California, Ríos & Carvacho, 1982) may refer to other species (A. Anker, personal communication).

Ecological notes. Species of the *S. ortmanni* complex occur in various habitats, including bays and estuaries, seagrass and mud flats, tidal pools, and coral reefs. From shallow waters to 22 m (Christoffersen 1982).

Previous records in Bahia. None.

Remarks. Species complex, with at least three species in the western Atlantic and possibly two different species in the eastern Pacific (A. Anker, personal communication). Species of this complex appear to be common in the Caribbean, whereas reports from Brazil are rather rare. Christoffersen (1982) extended the southern boundary of what he believed to be *S. ortmanni* (actually *Salmonesus* n. sp. aff. *ortmanni*, A. Anker, personal communication) from the Caribbean to southeastern Brazil (São Paulo and Paraná). Some specimens examined by Christoffersen were collected on muddy shelf sediments. A further record, the first for northeastern Brazil, was provided by Ramos-Porto *et al.* (1994), who examined material from Pernambuco and Sergipe. All their specimens came from estuarine muddy bottoms and were collected during low tide. The present record reduces the gap in this species' range between Sergipe and São Paulo.

***Synalpheus cf. apioceros* Coutière, 1909**

Material examined (N=1). 1m, 07/VIII/2005, St. 07 (MZUESC#708).

Distribution. Western Atlantic – southern Florida to Surinam, western Gulf of Mexico, and Brazil (Amapá, and from Espírito Santo to Santa Catarina) (Chace 1972; Christoffersen 1998). Brazil – Seamounts of the North Chain, Ceará, Paraíba, and Pernambuco (Coelho Filho 2006).

Ecological notes. Seagrass flats, coral terraces, under rocks, in crevices of coral rubble, also among growth on ships and shipwrecks (Chace 1972).

Previous records in Bahia. None.

Remarks. Species complex, with at least two species in the western Atlantic (A. Anker, personal communication). The true identity of the Brazilian species is presently unknown. Bullis & Thompson (1965) and Christoffersen (1980) reported *S. apioceros* from Pará and Amapá, respectively, and Carvalho *et al.* (1998) recorded it also from Pernambuco. This species was also present at several collection stations of the REVIZEE Program along the outer continental shelf of northeast Brazil, from the Seamounts of the North Chain to Pernambuco (Coelho Filho 2006).

***Synalpheus cf. fritzmuelleri* Coutière, 1909**

Material examined (N=1). 1f, 06–07/VI/2000 (MZUESC#637).

Distribution. Western Atlantic – Bermuda, Carolinas, Florida, northern Gulf of Mexico (Texas), Mexico (Veracruz, Quintana Roo), Colombia (Providencia), Antilles, Venezuela, and Brazil (Pernambuco to Santa Catarina) (Christoffersen 1979; 1998). Central Atlantic – Santa Helena Island, St Paul's Rocks (Holthuis *et al.* 1980), Ascension Island (Manning & Chace 1990). Records from the eastern Pacific (e.g., Tres Mariás Archipelago, Mexico) refer to other species (A. Anker, personal communication).

Ecological notes. In sponges, among ascidians and *Zoanthus* colonies, gorgonians, mangrove roots, among *Halimeda* clumps, calcareous algae, *Schizoporella* and *Phragmatopoma* colonies, corals, rock cavities, calcareous rocks. Intertidal to 75 m (Christoffersen 1979).

Previous records in Bahia. Coutière (1909), Christoffersen (1979), Almeida *et al.* (2006).

Remarks. Possible species complex, with several species in the western Atlantic and eastern Pacific (A. Anker, personal communication). The identity of the Brazilian material requires confirmation.

***Synalpheus cf. pandionis* Coutière, 1909**

(Figs. 3–4)

Material examined (N=2). 1f, 24/III/2005, St. 04 (MZUESC#661); 1f, 30/X/2004, St. 04 (MZUESC#709).

Distribution. Western Atlantic – Florida, Gulf of Mexico, Puerto Rico, Virgin Islands, Barbados, Curaçao, off Panama, and Venezuela (Chace 1972; Dardeau 1984). Brazil (Ceará) (Coelho Filho 2006).

Ecological notes. Under rocks, in seagrass meadows, sponges, and dead and living coral. From shallow waters to 73 m (Dardeau 1984).

Previous records in Bahia. None.

Remarks. *Synalpheus pandionis* is a western Atlantic species complex within the *S. longicarpus* (Herrick, 1891) clade (see Morrison *et al.* 2004).

Dardeau (1984) resurrected *S. pandionis* from the synonymy of *S. longicarpus*, originally proposed by Christoffersen (1979). The morphology of two females (MZUESC#661: 4.0 mm CL, not ovigerous; MZUESC#709: 4.7 mm CL, ovigerous) examined by us agrees well with the diagnosis of *S. pandionis* provided by Dardeau (1984). The orbital hoods and the rostrum are subequal in length; they are also rounded and broader than the rostrum; the space between the orbital teeth and the rostrum is U-shaped (Figs. 3A, B). The antennal scaphocerite and basicerite are subequal in length (Fig. 3A). The palm of the major chela bears a blunt dorsodistal tubercle, which is armed with a secondary, ventrally directed tooth (Figs. 3H, I). The dactylus of the minor first chela is distally bidentate; the fixed finger is simple (Fig. 4C). The pereopods 2–5 are very similar to those illustrated by Dardeau (1984) (Figs. 4D, E, G, I). The uropodal exopod is armed with 5 fixed teeth proximal to the movable spine (Fig. 3F). The dactyli of pereopods 3–5 are biunguiculate, with the tooth on the flexor margin being smaller and slightly divergent from the distal tooth (Figs. 4F, H, J). The main difference between the two females examined by us lies in the rostrum length. A subtle variation was observed in the length of the rostrum relative to the orbital hoods length: in the ovigerous female (MZUESC#709), the rostrum is narrower at base (spine-like in dorsal view) and slightly longer than the orbital hoods (Fig. 3B), whereas in the non-ovigerous female (MZUESC#661), the rostrum and orbital hoods are equal in length and the rostrum has a wider base (more triangular) (Fig. 3A). The herein reported occurrence of *S. cf. pandionis* in Camamu Bay extends the southern range limit of this species complex.

Family Hippolytidae Dana, 1852

***Hippolyte obliquimanus* Dana, 1852**

Material examined (N=13). 2m, 12/VI/2004, St. 01 (MZUESC#662); 3f, 07/V/2004, St. 01 (MZUESC#740); 1m, 1f, 18/XII/2004, St. 01 (MZUESC#741).

Distribution. Western Atlantic – North Carolina, Florida, Antilles, Venezuela, and Brazil (Bahia and Rio de Janeiro) (Udekem d'Acoz 1997).

Habitat: Shallow waters, among algae and seagrass meadows (Udekem d'Acoz 1997).

Previous records in Bahia. Udekem d'Acoz (1997).

Remarks. Udekem d'Acoz (1997) established *H. exilirostratus* Dana, 1852, and *H. curacaoensis* Schmitt, 1924, both previously cited from Brazil (Coelho & Ramos 1972; Christoffersen 1998), as junior synonyms of *H. obliquimanus*.

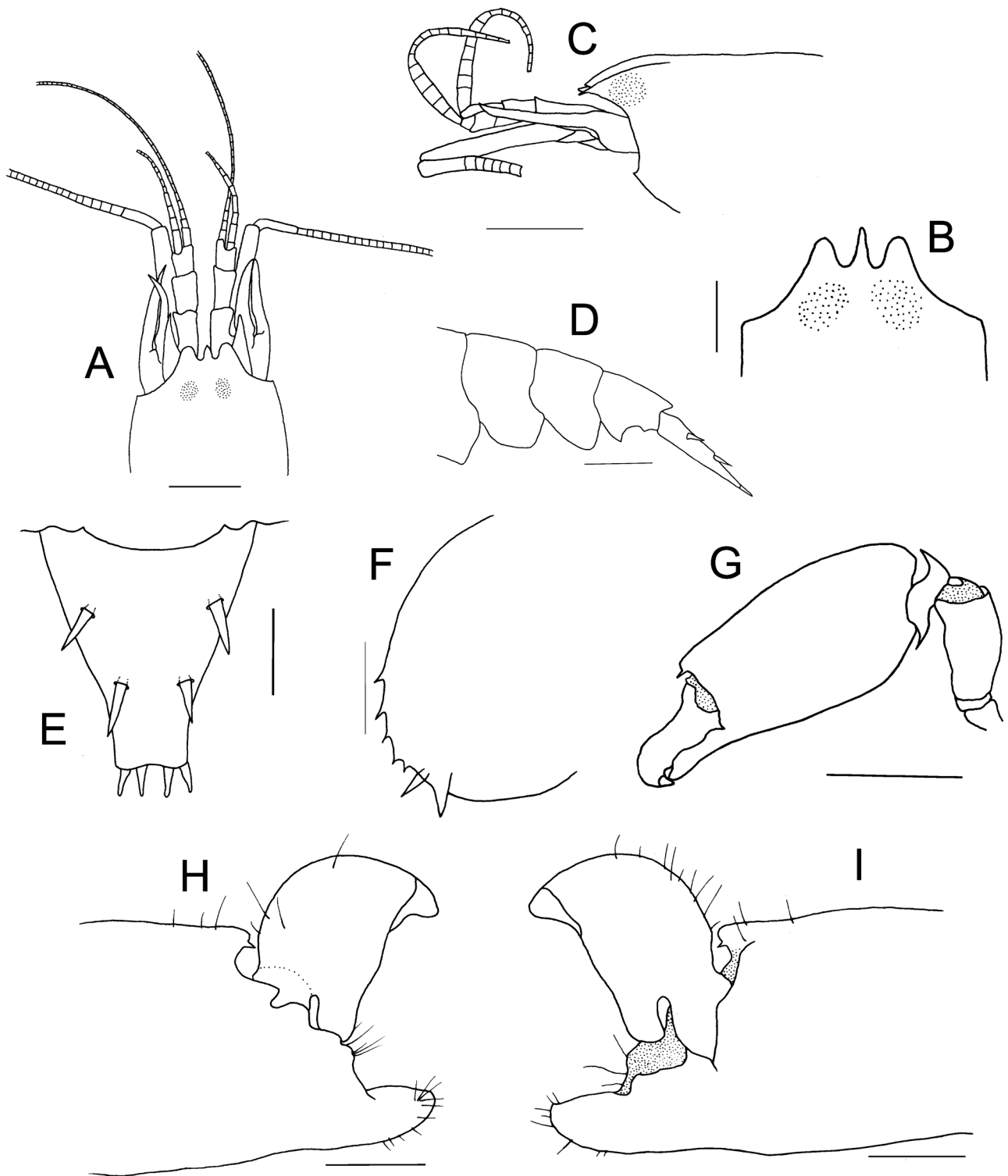


FIGURE 3. *Synalpheus* cf. *pandionis* Coutière, 1909, from Camamu Bay, Bahia, Brazil. A, D–F, H, I: non-ovigerous female (MZUESC#661); B, C, G, ovigerous female (MZUESC#709). A. anterior region of carapace and frontal appendages, dorsal view; B. anterior region of carapace, dorsal view; C. same, lateral view; D. abdomen and telson, lateral view; E. telson, dorsal view; F. uropod, left exopod, dorsal view; G. left major chela, lateral view; H. left major chela, lateral view of distal portion; I. same, mesial view; Figures A, C, E–G — setae omitted. Scale bars: A, C, D, H, I = 1 mm; B, E, F = 0.5 mm; G = 2 mm.

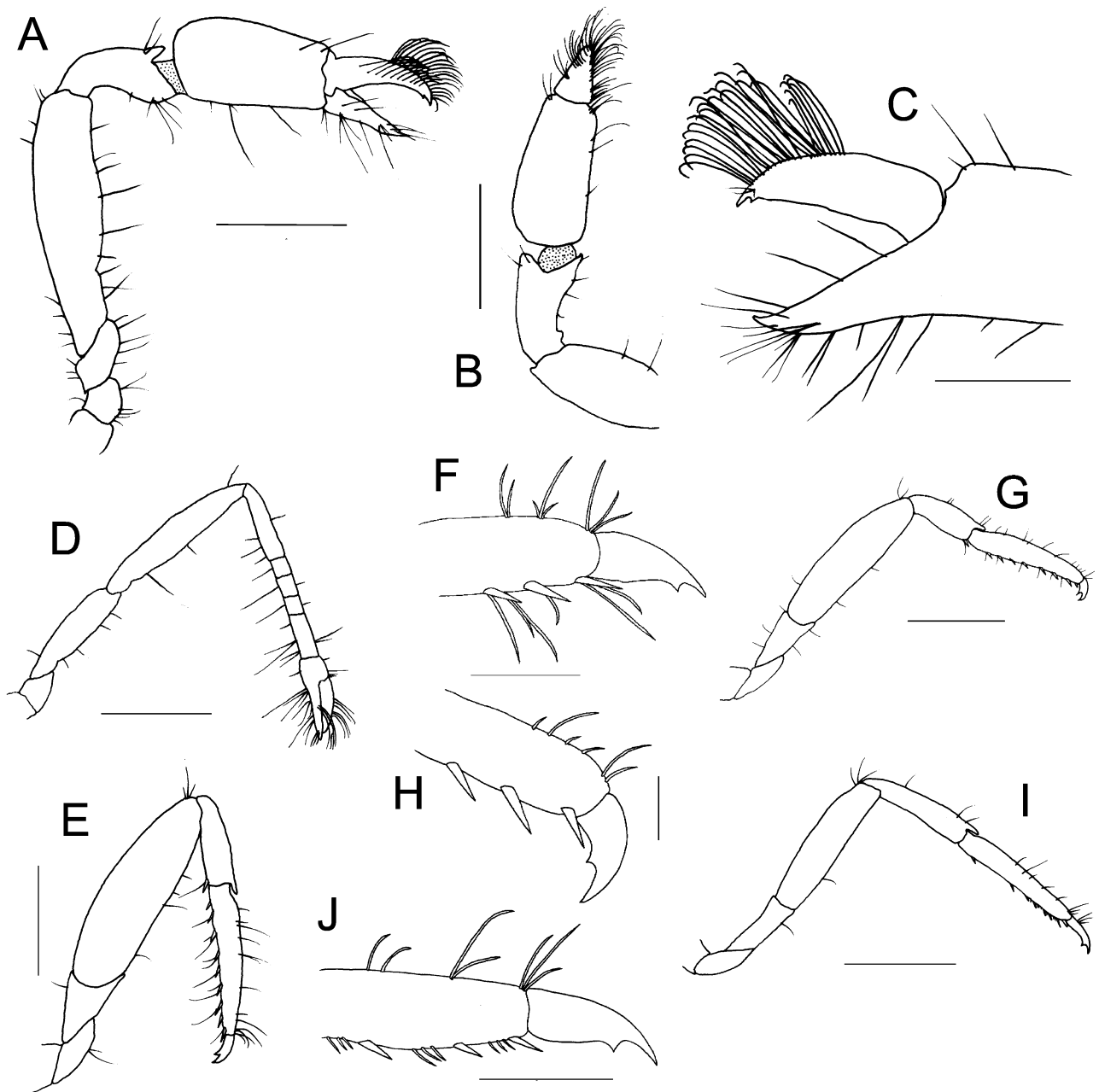


FIGURE 4. *Synalpheus* cf. *pandionis* Coutière, 1909, ovigerous female (MZUESC#709), from Camamu Bay, Bahia, Brazil. A. right minor chela, lateral view; B. same, dorsal view; C. same, detail of chela, mesial view. D. right pereopod 2; E. right pereopod 3; F. same, distal portion; G. right pereopod 4; H. same, distal portion; I. right pereopod 5; J. same, distal portion. Scale bars: A, B, D, E, G, I = 1 mm; C = 0.5 mm; F, H, J = 0.25 mm.

***Latreutes fucorum* (Fabricius, 1798)**

Material examined (N=2). 1f, 12/VI/2004, St. 01 (MZUESC#710); 1ni, 24/III/2005, St. 01 (MZUESC#711).

Distribution. Western Atlantic – from Newfoundland to Brazil (Pernambuco, Alagoas, and Bahia) (Christoffersen 1998). Eastern Atlantic – Azores and Cape Verde (Chace 1972).

Habitat: Almost invariably associated with *Sargassum* in the open sea, but common on seagrass flats (Chace 1972).

Previous records in Bahia. Coelho & Ramos (1972), Cardoso (2006).

***Latreutes parvulus* (Stimpson, 1866)**

Material examined (N=3). 1f, 18/XII/2004, St. 01 (MZUESC#712); 1m, 07/08/2005, St. 01 (MZUESC#713).

Distribution. Western Atlantic – from between New Jersey and Virginia to the province of Buenos Aires, Argentina. Eastern Atlantic – Annobon Islands, and from Spanish Sahara to Congo (Christoffersen 1982).

Habitat: In a wide variety of habitats such as fine mud, clay, fine sand, broken shells, shells associated with foraminiferans and hydroids, seagrass flats, among algae and gorgonians, on polychaete sand reefs and dead coral. From shallow waters to 124 m (Christoffersen 1982).

Previous records in Bahia. Christoffersen (1982).

***Lysmata cf. intermedia* (Kingsley, 1879)**

(Figs. 5–6)

Material examined (N=1). 1f, 24/III/2005, St. 02 (MZUESC#714).

Distribution. Western Atlantic – Florida Keys to Trinidad and Tobago, and Curaçao (Udekem d’Acoz 2000). Brazil – Pernambuco (Ramos-Porto *et al.* 1995), Espírito Santo, and Rio de Janeiro (Christoffersen 1998).

Habitat: In seagrass flats studded with the corals *Porites* and *Pocillopora*, but some associated with algae on rocky shores, and a few with reef corals. From shallow waters to 22 m (Chace 1972).

Previous records in Bahia. None.

Remarks. Another shrimp species rarely recorded from Brazil (Christoffersen 1980; Ramos-Porto *et al.* 1995). Udekem d’Acoz (2000) redescribed *L. intermedia* based on topotypical specimens from the Dry Tortugas, Florida, also reviewing the previous records of this species. Comparison of samples collected in the Azores with the topotypical material, allowed him to establish that Azorean material attributed to *L. intermedia* (Rathbun, 1901) is in fact *L. seticaudata* (Risso, 1816), a similar, warm-water species. According to the author, the records from the Galapagos and Ascension islands (see Chace 1972; Manning & Chace 1990) are also questionable and are based on a misidentifications.

In general appearance, our material (ovigerous female, 7.1 mm CL) agrees with the description provided by Udekem d’Acoz (2000). The rostrum has 7 dorsal (3 behind the orbit) and 2 ventral teeth (Figs. 5A, B). The pleuron of pleonite 4 is rounded in its terminal portion, while pleonite 5 has a developed terminal spine (Fig. 5D). The telson tip has 6 terminal spines, and their position and length are as described by Udekem d’Acoz (2000). The stylocerite overreaches the outer border of the basal antennular peduncle (Fig. 5B). The accessory branch of the outer antennular flagellum consists of 4 segments (Fig. 5C). The merus of pereopod 3 is provided with 5 lateral and 3 ventral spines (Fig. 6C); pereopod 4 with 4 lateral and 1 ventral (Fig. 6D); and pereopod 5 with only 2 lateral spines (Fig. 6F). The propodus of pereopod 3 has 9 ventral spines (Fig. 6C). The dactyli of pereopods 3–5 are armed with 5 spines (Fig. 6E). However, our specimen differs in some important aspects from typical specimens of *L. intermedia*. The merus of pereopod 2 is subdivided in 16 segments, while the carpus has 23 (Figs. 6B). Therefore, the number of segments of the carpus is less than that reported by Udekem d’Acoz (2000): 25–31, more commonly 28–30. Also, only 1 ventral spine is present on the ventral margin of pereopod 4, whereas in the topotypical material examined by that author, 2 (occasionally 3) spines are found. Finally, the telson tip is rounded, not ending in a terminal blunt apical tooth as indicated by Udekem d’Acoz (2000). The closest related species to *L. intermedia* are the warm-temperate *L. seticaudata* and *L. nilita* Dohrn & Holthuis, 1950 from the northeast Atlantic and the Mediterranean. The other species currently recognized in the Atlantic are not closely related. *Lysmata intermedia* can be distinguished from the other two species mainly by the fewer segments in the accessory branch of the outer antennular flagellum (see Udekem d’Acoz 2000 for more details). The differences between our material and those

described for topotypical specimens of *L. intermedia* suggest the possibility that our specimen belongs to a closely related, undescribed species of *Lysmata*.

The occurrence of this species in Camamu Bay partially fills the gap in its range along the northeastern and eastern Brazilian coast, between the states of Pernambuco and Espírito Santo.

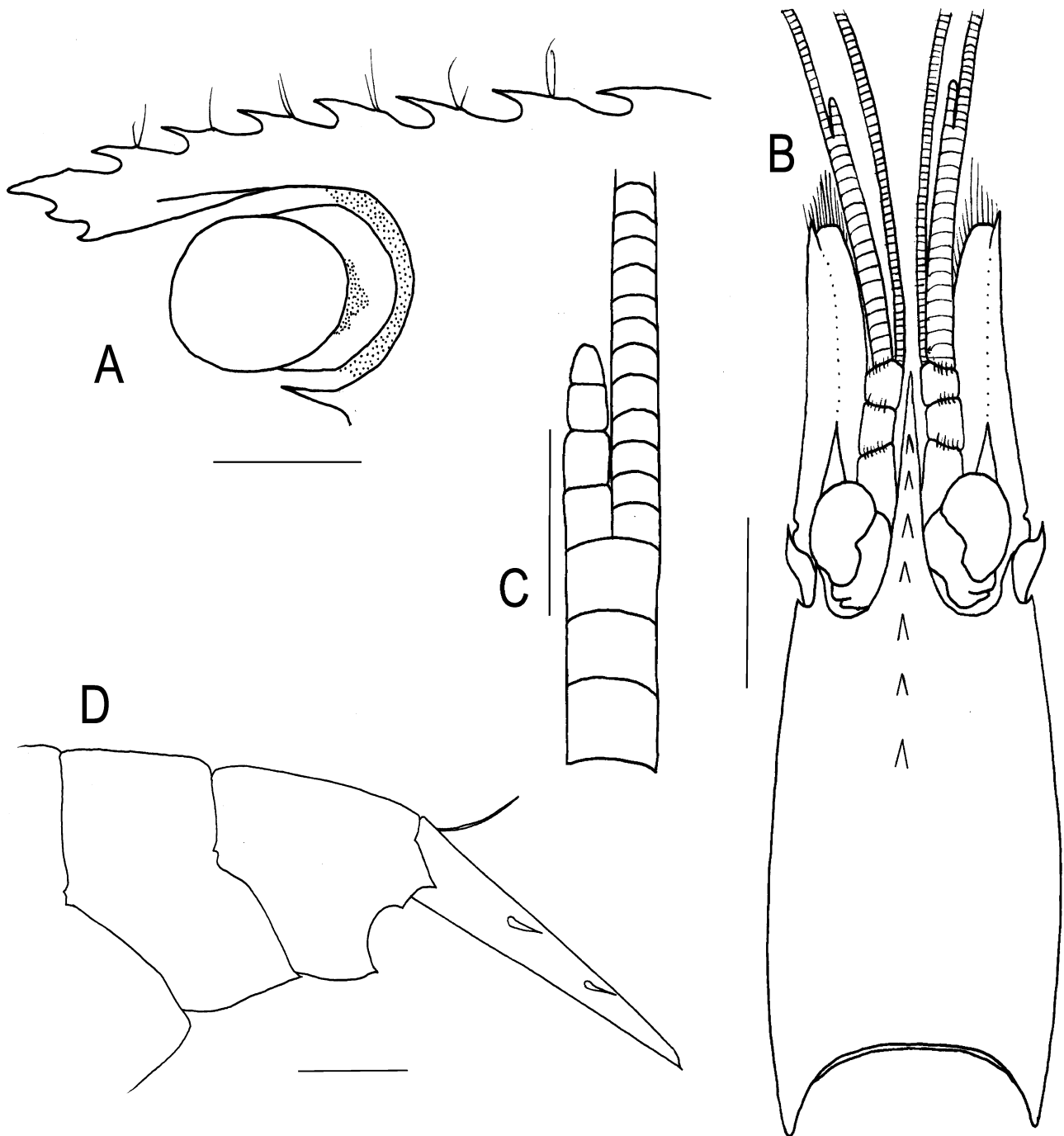


FIGURE 5. *Lysmata intermedia* (Kingsley, 1879), ovigerous (MZUESC#714), from Camamu Bay, Bahia, Brazil. A. anterior region of carapace, lateral view; B. carapace and cephalic appendages, dorsal view; C. right outer antennular flagellum; D. abdomen and telson, lateral view. Scale bars: A, B = 2 mm; C = 0.5 mm; D = 1 mm.

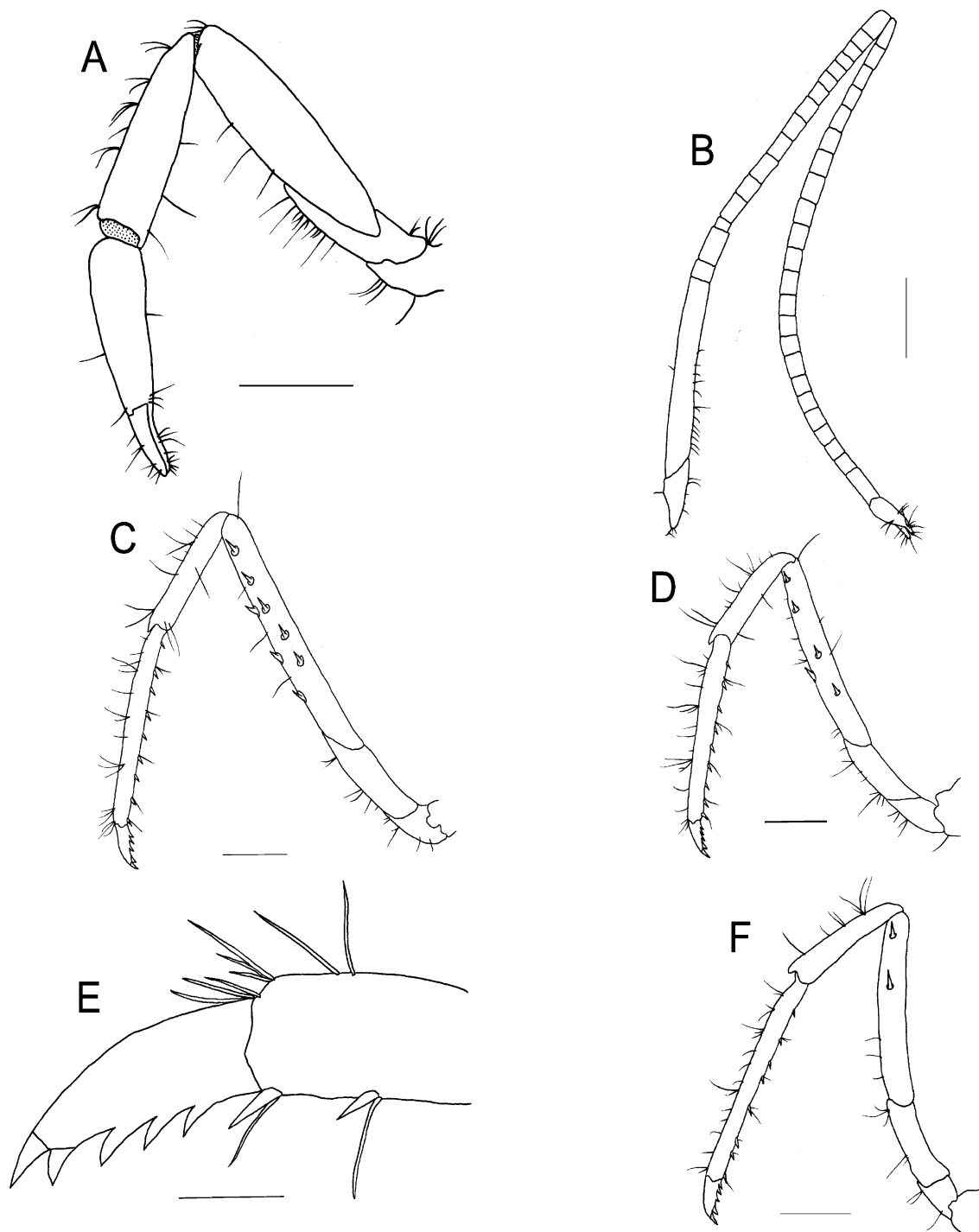


FIGURE 6. *Lysmata intermedia* (Kingsley, 1879), ovigerous (MZUESC#714), from Camamu Bay, Bahia, Brazil. A. left pereiopod 1; B. right pereiopod 2; C. right pereiopod 3; D. right pereiopod 4; E. same, dactyl; F. right pereiopod 5. Scale bars: A–D, F = 1 mm; E = 0.5 mm.

***Tozeuma carolinense* Kingsley, 1878**

Material examined (N=6). 1m, 2f, 12/VI/2004, St. 01 (MZUESC#663).

Distribution. Western Atlantic – from Massachusetts to Panama, including Gulf of Mexico, Antilles, and Brazil (Maranhão, Paraíba, Pernambuco, Alagoas, Bahia, and São Paulo) (Williams 1984; Ramos-Porto & Coelho 1993; Christoffersen 1998).

Ecological notes. On mud, sand with corals and algae, broken shells, seagrass meadows, octocorals, calcareous algae, under rocks. From shallow waters to 58 m (Christoffersen 1980).

Previous records in Bahia. Gomes Corrêa (1972), Coelho & Ramos (1972), Ramos-Porto & Coelho (1993), Christoffersen (1980).

Infraorder Thalassinidea Latreille, 1831

Superfamily Callianassoidea Dana, 1852

Family Upogebiidae Borradaile, 1903

***Upogebia marina* Coelho, 1973**

Material examined (N=1). 1ni, 31/X/2004, St. 08 (MZUESC#699).

Distribution. Western Atlantic – Venezuela and Brazil (from Pará to São Paulo) (Melo 1999).

Ecological notes. On calcareous algae, coral and sand bottoms; also in estuaries. Collected between 11 and 90 m (Coelho 1997a; Melo 1999).

Previous records in Bahia. None.

Remarks. Since its description, *U. marina* has been reported from almost all Brazilian states from Pará to Sergipe (Coelho 1997a). South of Sergipe, there is only one record at present, for São Paulo (Nucci & Melo 1999), which indicates a vast gap with no records between these two states.

Infraorder Palinura Latreille, 1802

Superfamily Palinuroidea Latreille, 1802

Family Palinuridae Latreille, 1802

***Panulirus argus* (Latreille, 1804)**

Material examined (N=5). 2m, 3f, 12/VII/2003, St. 04 (CrUESB#335).

Distribution. Western Atlantic – Bermuda, from North Carolina to Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (Fernando de Noronha, Rocas Atoll, and from Pará to São Paulo) (Melo 1999). Eastern Atlantic – Cape Verde (Freitas & Castro 2005).

Ecological notes. On reefs, among rocks, in sponges and other environments that provide shelter. It can also be found in sand and gravel bottoms. From shallow waters to 90 m (Melo 1999).

Previous records in Bahia. White (1847), Gomes Corrêa (1972), Almeida *et al.* (2007).

***Panulirus echinatus* Smith, 1869**

Material examined: 1m, 03/V/2003 (CrUESB#492).

Distribution. Western Atlantic – Brazil (St Paul's Rocks, Rocas Atoll, Fernando de Noronha, Trindade, and from Ceará to Rio de Janeiro). Central Atlantic – Ascension Island and Santa Helena. Eastern Atlantic – Canary Islands and Cape Verde (Melo 1999).

Ecological notes. In rock cavities, among pebbles and in other environments that provide shelter. Species is nocturnal. From 0 to 35 m, preferentially shallower than 25 m (Melo 1999).

Previous records in Bahia. Coelho & Ramos-Porto (1985), Almeida *et al.* (2007).

***Panulirus laevicauda* (Latreille, 1817)**

Material examined (N=1). 1f, 18/IX/2000, 13°52'37"S/38°57'11"W (MZUESC#55).

Distribution. Western Atlantic – Bermuda, Florida, Gulf of Mexico, Central America, Antilles, northern South America, Guyanas, and Brazil (Fernando de Noronha, and from Maranhão to São Paulo) (Coelho & Ramos-Porto 1980; Coelho & Ramos-Porto 1998b).

Ecological notes. On reefs, rocks, and calcareous algae bottoms. From shallow waters to 50 m (Melo 1999).

Previous records in Bahia. Almeida *et al.* (2007).

Infraorder Anomura MacLeay, 1838

Superfamily Galattheoidea Samouelle, 1819

Family Porcellanidae Haworth, 1825

***Minyocerus angustus* (Dana, 1852)**

Material examined (N=1). 1f, 14/IX/2003, St. 06 (MZUESC#664).

Distribution. Western Atlantic – Central America, Venezuela, Surinam, and Brazil (from Pará to Santa Catarina) (Melo 1999).

Ecological notes. In shallow waters, on sandy bottoms and associated with the starfish *Luidia senegalensis* (Melo 1999).

Previous records in Bahia. Veloso & Melo (1993), Almeida *et al.* (2007).

Remarks. *M. angustus* was included in the Brazilian Red List of threatened species as “vulnerable”, perhaps because its host, the starfish *L. senegalensis*, also figures in this list (Amaral 2005).

***Petrolisthes armatus* (Gibbes, 1850)**

Material examined (N=8). 1m, 25/IV/2004, St. 07 (MZUESC#665); 1m, 25/IX/2004, St. 08 (MZUESC#742).

Distribution. Western Atlantic – from North Carolina to Florida, Gulf of Mexico, Antilles, Colombia, and Brazil (Fernando de Noronha, and from Pará to Santa Catarina). Eastern Atlantic – from Senegal to Angola. Central Atlantic – Ascension Island. Eastern Pacific – Gulf of California, Costa Rica, Ecuador (Galapagos), and Peru (Barros *et al.* 1997b; Melo 1999).

Ecological notes. Under rocks, on corals, mussels, sponges, oysters, and mangrove (*Rhizophora* and *Avicennia*) roots. Intertidal to 60 m (Melo 1999).

Previous records in Bahia. Moreira (1901), Coelho (1963), Veloso & Melo (1993), Almeida *et al.* (2006).

Superfamily Paguroidea Latreille, 1802

Family Diogenidae Ortmann, 1892

***Clibanarius antillensis* Stimpson, 1859**

Material examined (N=1). 1m, 24/IV/2004, St. 04 (MZUESC#666).

Distribution. Western Atlantic – Bermuda, Florida, Gulf of Mexico, Panama, Antilles, northern South America, and Brazil (Rocas Atoll, and from Ceará to Santa Catarina) (Melo 1999).

Ecological notes. In rock cavities, reefs, and *Halodule* meadows. Intertidal (Melo 1999).

Previous records in Bahia. Smith (1869), Moreira (1901), Forest & de Saint Laurent (1967), Coelho & Ramos (1972), Gomes Corrêa (1972), Coelho & Ramos-Porto (1986), Almeida *et al.* (2006).

***Clibanarius sclopetarius* (Herbst, 1796)**

Material examined (N=4). 1f, 25/IV/2004, St. 07 (MZUESC#667).

Distribution. Western Atlantic – Florida, Antilles, Venezuela, northern South America, Guyanas, and Brazil (from Ceará to Santa Catarina) (Melo 1999).

Ecological notes. On sand and reefs, common in estuaries. Occasionally in *Halodule* and *Halophila* meadows. Intertidal (Melo 1999).

Previous records in Bahia. Smith (1869), Moreira (1901), Forest & de Saint Laurent (1967), Coelho & Ramos (1972), Coelho & Ramos-Porto (1986), Almeida *et al.* (2006).

***Clibanarius vittatus* (Bosc, 1802)**

Material examined (N=16). 2f, 19/IX/2000, 13°52'99"S/38°59'59"W (MZUESC#641); 3m, 2f, 13/VI/2004, St. 07 (MZUESC#668).

Distribution. Western Atlantic – east coast of the United States, Gulf of Mexico, Antilles, Venezuela, Surinam, and Brazil (from Pará to Santa Catarina) (Melo 1999).

Ecological notes. Estuaries, coral reefs, sandy bottoms, and *Halodule* meadows. From shallow waters to 22 m (Melo 1999).

Previous records in Bahia. Smith (1869), Moreira (1901), Gomes Corrêa (1972), Almeida *et al.* (2006).

***Dardanus venosus* H. Milne Edwards, 1848**

Material examined (N=1). 1f, 31/X/2004, St. 03 (MZUESC#672).

Distribution. Western Atlantic – east coast of the United States, Florida, Bermudas, Antilles, northern South America, and Brazil (Fernando de Noronha, Rocas Atoll, banks off Ceará and Rio Grande do Norte and from Pará to São Paulo) (Melo 1999; Mantelatto *et al.* 2001).

Ecological notes. Rock, shell, calcareous algae, and coral bottoms, and *Halodule* meadows. From shallow waters to 100 m (Melo 1999).

Previous records in Bahia. Forest & de Saint Laurent (1967), Coelho & Ramos (1972), Coelho & Ramos-Porto (1986), Almeida *et al.* (2007).

***Paguristes erythrops* A. Milne Edwards, 1880**

Material examined (N=2). 1f, 13/VI/2004, St. 07 (MZUESC#669).

Distribution. Western Atlantic – Surinam and Brazil (from Maranhão to São Paulo) (Melo 1999).

Ecological notes. On sand and mud bottoms. From shallow waters to 40 m (Melo 1999).

Previous records in Bahia. Forest & de Saint Laurent (1967).

***Paguristes tortugae* Schmitt, 1933**

Material examined (N=8). 1m, 13/VI/2004, St. 05 (MZUESC#670).

Distribution. Western Atlantic – North Carolina, Florida, Gulf of Mexico, Central America, Antilles, Surinam, and Brazil (Pará, Pernambuco, Bahia, and Rio de Janeiro) (Melo 1999). Santa Catarina (Rieger & Giraldi 1997).

Ecological notes. In intertidal zone, under rocks, also on sand, mud and calcareous algae bottoms, up to 55 m (Melo 1999).

Previous records in Bahia. Forest & de Saint Laurent (1967).

***Petrochirus diogenes* (Linnaeus, 1758)**

Material examined (N=10). 3m, 13/XI/2003, St. 08 (MZUESC#671).

Distribution. Western Atlantic – from North Carolina to Gulf of Mexico, Antilles, Venezuela, Surinam, Brazil (from Amapá to Rio Grande do Sul), and Uruguay (Melo 1999).

Ecological notes. On mud, mud and shell, sand, and *Thalassia* bottoms. From shallow waters to 130 m (Melo 1999).

Previous records in Bahia. Smith (1869) [as *P. granulatus* (Olivier, 1811)], Moreira (1901) (as *P. granulatus*), Forest & de Saint Laurent (1967), Coelho & Ramos (1972), Gomes Corrêa (1972), Coelho & Ramos-Porto (1986), Almeida *et al.* (2007).

Family Paguridae Latreille, 1802

***Pagurus criniticornis* (Dana, 1852)**

Material examined (N=40). 11m, 4f, 13/VI/2004, St. 07 (MZUESC#673).

Distribution. Western Atlantic – Gulf of Mexico, Antilles, northern South America, and Brazil (from Pernambuco to Rio Grande do Sul), Uruguay, and Argentina (Melo 1999).

Ecological notes. On sand and mud bottoms, from shallow waters to 60 m (Melo 1999).

Previous records in Bahia. Forest & de Saint Laurent (1967).

Infraorder Brachyura Latreille, 1802

Section Dromiacea de Haan, 1833

Superfamily Dromioidea de Haan, 1833

Family Dromiidae de Haan, 1833

***Hypoconcha arcuata* Stimpson, 1858**

Material examined (N=2). 1m, 06–07/VI/2000 (MZUESC#636); 1m, 30/X/2004, St. 04 (MZUESC#674).

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

Ecological notes. On sand and shell bottoms, from shallow waters to 80 m (Melo 1996).

Previous records in Bahia. Joly *et al.* (1969), Gomes Corrêa (1972), Barreto *et al.* (1993).

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

Material examined (N=12). 1m, 07/VIII/2005, St. 05 (MZUESC#675); 1m, 28/VIII/2004, St. 03 (MZUESC#715).

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

Ecological notes. Rock, shell, and coral bottoms. Carapace generally covered with ascidians. Intertidal to 330 m (Melo 1996).

Previous records in Bahia. Smith (1869) (as *Dromidia antillensis*), Moreira (1901) (as *D. antillensis*), Rathbun (1937) (as *D. antillensis*), Rodrigues da Costa (1968) (as *D. antillensis*), Joly *et al.* (1969) (as *D. antillensis*), Coelho & Ramos (1972) (as *D. antillensis*), Gomes Corrêa (1972) (as *D. antillensis*), Melo (1985) (as *D. antillensis*), Gouvêa (1986a) (as *D. antillensis*), Coelho & Ramos-Porto (1989) (as *D. antillensis*), Barreto *et al.* (1993) (as *D. antillensis*), Melo & Campos Jr. (1999) (as *Cryptodromiopsis antillensis*), Almeida *et al.* (2007).

Section Eubrachyura de Saint Laurent, 1980

Superfamily Calappoidea Milne Edwards, 1837

Family Calappidae Milne Edwards, 1837

***Calappa ocellata* Holthuis, 1958**

Material examined (N=1). 1m, 07/VIII/2005, St. 05 (CrUESB#231).

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

Ecological notes. On mud, sand, gravel, and stone bottoms. From shallow waters to 80 m (Melo 1996).

Previous records in Bahia. Gomes Corrêa (1972), Barreto *et al.* (1993), Almeida *et al.* (2007).

Family Hepatidae Stimpson, 1871

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

Material examined (N=2). 1f, 06/VIII/2005, St. 04 (MZUESC#676).

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

Ecological notes. Mud, sand, and shell bottoms. From shallow waters to 160 m (Melo 1996).

Previous records in Bahia. Rathbun (1937) [as *H. princeps* (Herbst, 1794)], Coelho & Ramos (1972), Melo (1985), Gouvêa (1986b), Almeida *et al.* (2007).

Superfamily Leucosioidea Samouelle, 1819

Family Leucosiidae Samouelle, 1819

***Persephona lichtensteinii* Leach, 1817**

Material examined (N=4). 2m, 19/IX/2000, 13°52'99"S/38°59'59"W (MZUESC#65).

Distribution. Western Atlantic – Venezuela, Surinam, French Guyana, and Brazil (from Amapá to São Paulo) (Melo 1996).

Ecological notes. On mud, sand, and calcareous algae bottoms. From shallow waters to 70 m (Melo 1996).

Previous records in Bahia. Almeida *et al.* (2007).

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

Material examined (N=2). 1m, 19/IX/2000, 13°52'37"S/38°57'11"W (MZUESC#64).

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

Ecological notes. Occurs on mud, but also present on sand, and shell bottoms. From shallow waters to 50 m (Melo 1996).

Previous records in Bahia. Miers (1886), Coelho & Torres (1980), Almeida *et al.* (2007).

Superfamily Majoidea Samouelle, 1819

Family Epialtidae MacLeay, 1838

***Acanthonyx dissimulatus* Coelho 1993**

Material examined (N=2). 1m, 28/VIII/2004, St. 01 (MZUESC#716).

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

Ecological notes. On rock and sand bottoms. Intertidal to 25 m (Coelho & Torres 1993; Melo 1996).

Previous records in Bahia. Rathbun (1894; 1925) (as *A. petiverii* H. Milne Edwards, 1834), Gouvêa (1986a) (as *A. petiverii*).

Remarks. Coelho & Torres (1993) in their review on genus *Acanthonyx* from Brazil, attributed the material from Bahia examined by Rathbun (1894; 1925) and Gouvêa (1986a) to *A. dissimulatus*.

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

Material examined (N=1). 1m, 12/VI/2004, St. 01 (MZUESC#677).

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

Ecological notes. Shallow water species living on algae and seagrass meadows, on hard bottoms, and tidal pools (Melo 1996).

Previous records in Bahia. Joly *et al.* (1969), Gomes Corrêa (1972), Gouvêa (1986a).

Family Inachidae MacLeay, 1838

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

Material examined (N=1). 1ni, 19/IX/2000, 13°52'99"S/38°59'59"W (MZUESC#53).

Distribution. Western Atlantic – Colombia and Brazil (from Maranhão to São Paulo) (Melo 1996).

Ecological notes. On sand and calcareous algae bottoms. From 24 to 90 m (Melo 1996).

Previous records in Bahia. Coelho (1971) (as *Podochela riisei* Stimpson, 1860), Coelho & Ramos (1972) (as *P. algicola*), Barreto *et al.* (1993) (as *P. algicola*), Coelho (2006), Almeida *et al.* (2007).

Remarks. Coelho (2006) recorded this species from Camamu Bay in his recent review of the genus *Podochela* Stimpson, 1860, in the Caribbean and Atlantic coast of South America. The main difference between the species of the genera *Coryrhynchus* Kingsley, 1879 and *Podochela*, is in the shape of the rostrum, rounded and triangular, respectively, never ending in a spine, as is the case with some other inachid genera (Coelho 2006).

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

Material examined (N=4). 1f, 19/IX/2000, 13°52'99"S/38°59'59"W (MZUESC#54); 1m, 07/VIII/2005, St. 05 (MZUESC#678).

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

Ecological notes. On coral, rocks, hydroids, and oysters. From shallow waters to 90 m (Melo 1996).

Previous records in Bahia. Miers (1886) (as *M. forficulatus* A. Milne Edwards, 1878), Moreira (1901) (as *M. forficulatus*), Joly *et al.* (1969), Gomes Corrêa (1972), Almeida *et al.* (2003, 2007).

Remarks. This species was recorded from Camamu Bay by Almeida *et al.* (2003). In Northeast Brazil, it ranges from Rio Grande do Norte to Abrolhos (Miers 1886; Joly *et al.* 1969; Ferreira & Sankarankutty 2002).

***Podochela brasiliensis* Coelho, 1972**

Material examined (N=2). 1m, 1f, 06/VI/2000, 13°52'37"S/38°57'11"W (MZUESC#48).

Distribution. Western Atlantic – Brazil (from Ceará to Bahia) (Melo 1996).

Ecological notes. On calcareous algae bottoms, from 20 to 50 m (Melo 1996).

Previous records in Bahia. Gomes Corrêa (1972) (as *P. riisei*), Barreto *et al.* (1993), Almeida *et al.* (2003), Coelho (2006).

Remarks. Gomes Corrêa (1972) recorded *P. riisei* from Abrolhos Archipelago, southern Bahia. Nevertheless, the material examined by him, deposited in the Crustacea Collection of the Museu Nacional in Rio de Janeiro is not *P. riisei*, but *P. brasiliensis*, as verified by one of us (P. A. Coelho). Abrolhos is the southern range known for this species. Almeida *et al.* (2003) and Coelho (2006) reported the occurrence of *P. brasiliensis* in Camamu Bay.

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

Material examined (N=22). 1m, 2f, 19/IX/2000, 13°57'05"S/38°59'68"W (MZUESC#52); 2f, 12/VII/2003, St. 03 (MZUESC#679).

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

Ecological notes. Rock, coral, calcareous algae, sand, and shell bottoms. From shallow waters to great depths (Melo 1996).

Previous records in Bahia. A. Milne Edwards (1878) [as *Leptopodia sagittaria* (Fabricius, 1793)], Miers (1886) (as *L. sagittaria*), Rathbun (1925), Joly *et al.* (1969), Coelho (1971), Coelho & Ramos (1972), Gomes Corrêa (1972), Gouvêa (1986a), Barreto *et al.* (1993), Almeida *et al.* (2007).

Family Inachoididae Dana, 1851

Collodes inermis A. Milne Edwards, 1878

Material examined (N=2). 1f, 19/IX/2000, 13°57'05'S/38°59'68'W (MZUESC#639).

Distribution. Western Atlantic – Antilles and Brazil (from Amapá to Rio de Janeiro) (Melo 1996).

Ecological notes. On sand and calcareous algae bottoms. From shallow waters to 40 m (Melo 1996).

Previous records in Bahia. A. Milne Edwards & Bouvier (1923), Rathbun (1925), Joly *et al.* (1969), Coelho & Ramos (1972), Gomes Corrêa (1972), Gouvêa & Leite (1980), Barreto *et al.* (1993).

Inachoides forceps A. Milne Edwards, 1879

Material examined (N=4). 1m, 12/VII/2003, St. 04 (MZUESC#680).

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

Ecological notes. On sand, gravel, and coral bottoms, occasionally on calcareous algae. From shallow waters to 70 m (Melo 1996).

Previous records in Bahia. Coelho (1971), Coelho & Ramos (1972), Barreto *et al.* (1993).

Family Mithracidae Balss, 1929

Macrocoeloma laevigatum (Stimpson, 1860)

Material examined (N=1). 1f, 28/VIII/2004, St. 01 (MZUESC#717).

Distribution. Western Atlantic – East coast of the United States, Antilles, and Brazil (from Pará to Alagoas) (Melo 1996).

Ecological notes. On sand, rock, and algae bottoms. From shallow waters to 30 m (Melo 1996).

Previous records in Bahia. None.

Remarks. The present record extends the southern distributional limit known for *M. laevigatum*, formerly represented by Alagoas State, Brazil (Coelho 1971; Melo 1996), to Camamu Bay (13° S).

Mithraculus forceps (A. Milne Edwards, 1875)

Material examined (N=2). 1m, 12/VI/2004, St. 01 (MZUESC#681).

Distribution. Western Atlantic – from North Carolina to southern Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (Fernando de Noronha, and from Maranhão to São Paulo) (Melo 1996). St. Paul's Rocks (Holthuis *et al.* 1980). Brazil – Santa Catarina (Rieger & Giraldo 1996).

Ecological notes. On hard bottoms, also on sand, coral, or algae, or associated with sponges. Shallow waters to 90 m (Melo 1996).

Previous records in Bahia. Miers (1886) (as *Mithrax forceps*), Moreira (1901) (as *Mithrax forceps*), Rathbun (1925) (as *Mithrax (Mithraculus) forceps*), Coelho (1971) (as *Mithrax (Mithraculus) forceps*), Coelho & Ramos (1972) (as *Mithrax (Mithraculus) forceps*), Melo (1985) (as *Mithrax (Mithraculus) forceps*), Gouvêa (1986a) (as *Mithrax forceps*), Coelho & Torres (1990), Barreto *et al.* (1993).

Family Pisidae Dana, 1851

Notolopas brasiliensis Miers, 1886

Material examined (N=27). 2f, 13/IX/2003, St. 05 (MZUESC#682).

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

Ecological notes. On sand and calcareous algae bottoms, occasionally in sand and broken shells. Shallow waters to 30 m (Melo 1996).

Previous records in Bahia. Miers (1886), Moreira (1901), Barreto *et al.* (1993), Almeida *et al.* (2007).

Pelia rotunda A. Milne Edwards, 1875

Material examined (N=10). 2m, 30/X/2004, St. 04 (MZUESC#683).

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

Ecological notes. On sand and calcareous algae bottoms. Shallow waters to 190 m (Melo 1996)

Previous records in Bahia. Coelho & Ramos (1972), Melo (1985), Barreto *et al.* (1993).

Family Tychidae Dana, 1851

Pitho lherminieri (Schramm, 1867)

Material examined (N=5). 1m, 3f, 07/VI/2000, 13°52'37"S/38°57'11"W (MZUESC#63).

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).

Ecological notes. On mud, sand, shell, rock, and coral bottoms. From shallow waters to 28 m, exceptionally to 200 m (Melo 1996).

Previous records in Bahia. Rodrigues da Costa (1968), Coelho (1971), Coelho & Ramos (1972), Gomes Corrêa (1972), Gouvêa & Leite (1980), Melo (1985), Barreto *et al.* (1993).

Superfamily Hymenosomatoidea MacLeay, 1838

Family Hymenosomatidae MacLeay, 1838

Elamena gordonae Monod, 1956

(Fig. 7)

Material examined (N=2). 1f, 25/IX/2004, St. 05 (MZUESC#718); 1f, 29/VIII/2004, St. 05 (MZUESC#719).

Distribution. Western Atlantic – Brazil (Sergipe). Eastern Atlantic – from Guinea to Sierra Leone. Pacific – Northeast Australia (Monod 1956; Lucas 1980; Coelho Filho & Coelho 2002).

Ecological notes. Known from few specimens around the world, and very little is known about its ecology. Type material was collected between 30–40 m off the West Africa coast (Monod 1956). Australian material was collected at 10 fathoms in Queensland (Lucas 1980). Material from Sergipe, Brazil, was obtained at a depth of 13 m, on hard bottom associated with sponges and hydrocorals (Coelho Filho & Coelho 2002).

Previous records in Bahia. None.

Remarks. The material examined by us was composed of two ovigerous females, which show some morphological variation from to each other. One of the specimens (3.4 x 2.9 mm CL x CW) (MZUESC#719) (Fig. 7A) has a general morphology in agreement with the diagnosis provided by Lucas (1980). The dorsal carapace surface is convex, and its shape is very similar to the holotype and paratype carapaces represented by Monod (1956). This author noted the existence of a medial longitudinal ridge in the middle of the carapace, whereas Lucas (1980) mentioned the existence of a faint gastro-cardiac groove in this region. We observed in the above specimen a very indistinct ridge in the middle of the carapace (Fig. 7A). A tuft with a few small curved setae is present in the gastric region, at the beginning of the medial longitudinal ridge (Fig. 7A). The rostrum is triangular (Fig. 7A), bordered by short small curved setae on its entire contour. The margins of both the carapace and the rostrum are marked by a thick carena. The postocular lobes are undeveloped, and one prominent lobe is present in the pterygostomial region. The chelipeds (Fig. 7D, E) and walking legs (Figs. 7F–J) are slender, with small and sparse setae, except on the ventral face of the dactyli, which has a row of setae along its entire length. The dactyli of pereopods 2–5 are provided with two subterminal teeth (Figs. 7F–J). The female abdomen is conspicuous at the posterior end of the carapace in dorsal view, resembling the specimen represented by Lucas (1980) in figure 2B. As observed by the author, the abdomen is slightly broader than the carapace width (3.1: 2.9 mm). The abdominal female segments 1–4 are visible in dorsal view; segments 1 and 2 are very short compared to segments 3–5 and the telson.

The other specimen (3.3 x 2.8 mm CLxCW) (MZUESC#718) (Figs. 7B, C) resembles the first one except: the dorsal carapace surface is concave, with the margin of the carapace distinctly higher than the middle of the carapace; and the basis of the rostrum is shorter than that of the other analyzed female and Monod's (1956) figures 629 and 630, and Lucas' (1980) figure 2B (Fig. 7B, C). The anterior region of this specimen is similar in shape to the anterior region of *E. umerata* Lucas, 1980, from Australia, especially in the shape of rostrum; but the anterior lateral angles are more prominent in the Australian species. Another difference in relation to the other analyzed female was found in the abdomen. Only the small segments 1–2 are visible in dorsal view, as observed in figure 630 (holotype) provided by Monod (1956). However, Lucas (1980), in personal communication with Dr. Jacques Forest, was informed that the abdomen of the holotype of *E. gordonae*, deposited at the Muséum National d'Histoire Naturelle, Paris, is like that of the Australian species. In the present individual, the abdomen was firmly attached under the cephalothorax, like a closed chamber, in an opposite situation to what was represented by Lucas (1980) in his figure 2B. These differences in the abdomen, free or attached, are perhaps related to the brooding stage.

The majority of hymenosomatid species occur in tropical and subtropical waters of the Indo-Pacific Ocean. Because of their brief larval development and low fecundity, the false spider crabs are unsuited to disperse over long distances. In fact, they have not dispersed eastward across the Pacific (Lucas 1980). Although wide distribution is very uncommon in this family, the occurrence of *Elamena gordonae* in western Atlantic suggests a circum-tropical distribution. Because of its tiny size, the species has possibly escaped being noticed and collected previously.

Superfamily Parthenopoidea MacLeay, 1838

Family Parthenopidae MacLeay, 1838

***Heterocrypta lapidea* Rathbun, 1901**

Material examined (N=2). 1f, 08/IX/2005, St. 05 (MZUESC#684).

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

Ecological notes. On sand, mud, and shell bottoms. Shallow waters to 180 m (Melo 1996).

Previous records in Bahia. Gomes Corrêa (1972), Barreto *et al.* (1993).

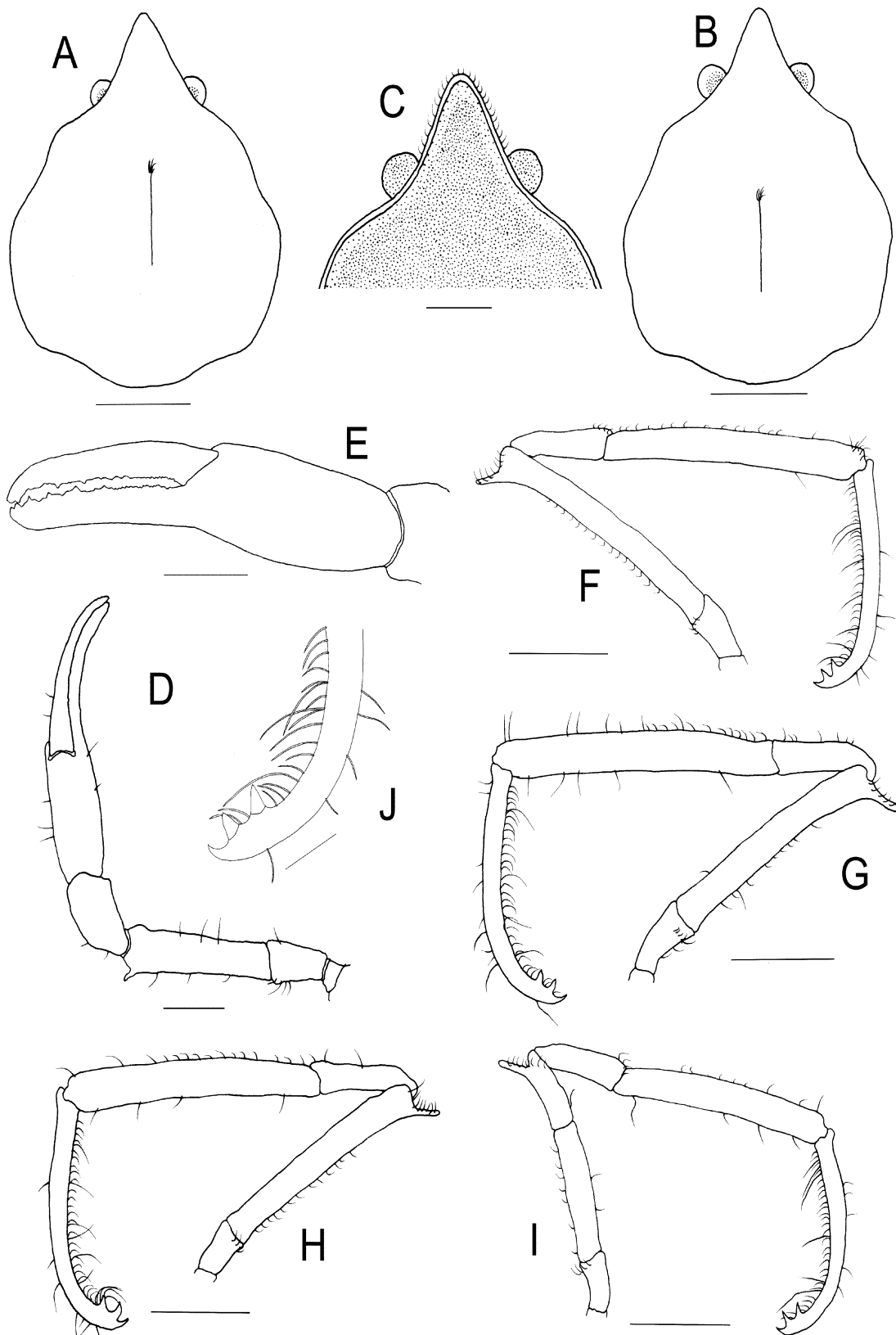


FIGURE 7. *Elamena gordonae* Monod, 1956, from Camamu Bay, Bahia, Brazil. A, D–J, ovigerous female (MZUESC#719); B, C, ovigerous female (MZUESC#718). A, B, carapace, dorsal view; C, anterior region with rostrum and eyes, dorsal view; D, left pereopod 1, dorsal view; E, same, detail of chela; F, right pereopod 2; G, left pereopod 3; H, left pereopod 4; I, right pereopod 5; J, same, dactyl. Scale bars: A, B, F–I = 1 mm; C–E = 0.5 mm; J = 0.25 mm.

Superfamily Portunoidea Rafinesque, 1815

Family Portunidae Rafinesque, 1815

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

Material examined (N=1). 1f, 07/VIII/2005, St. 08 (MZUESC#685).

Distribution. Western Atlantic – east coast of the United States, Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul) (Melo 1996; Santos *et al.* 2000).

Ecological notes. Estuarine species, more common in low-salinity waters. Also in polluted waters. Shallow waters to 20 m (Melo 1996).

Previous records in Bahia. Moreira (1901), Rathbun (1930), Williams (1974), Melo (1985), Almeida *et al.* (2006).

***Callinectes danae* Smith, 1869**

Material examined (N=423). 2f, 19/IX/2000, 13°52'99"S/38°59'59"W (MZUESC#61).

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

Ecological notes. Occurs in brackish to high-salinity waters, in mangroves, and muddy estuaries. Also in sandy beaches and the open sea. Intertidal to 75 m (Melo 1996).

Previous records in Bahia. Smith (1869), Moreira (1901), Rathbun (1930), Williams (1974), Melo (1985), Almeida *et al.* (2006).

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

Material examined (N=8). 1f, 19/IX/2000, 13°57'05"S/38°59'68"W (MZUESC#57); 1f, 30/X/2004, St. 04 (MZUESC#686).

Distribution. Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, Colombia, Venezuela, and Brazil (from Pará to Santa Catarina) (Melo 1996; Barros & Pimentel 2001).

Ecological notes. In high-salinity and estuarine waters near river mouths and mangroves. Shallow waters to 8 m (Melo 1996).

Previous records in Bahia. Moreira (1901), Rathbun (1930), Williams (1974), Melo (1985), Almeida *et al.* (2006).

***Callinectes larvatus* Ordway, 1863**

Material examined (N=58). 2m, 06–07/VI/2000 (MZUESC#59); 1f, 18/IX/2000, 13°52'37"S/38°57'11"W (MZUESC#62).

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

Ecological notes. On sand and mud bottoms and in mangroves, also in brackish water. Rarely in the open sea. Shallow waters to 25 m (Melo 1996).

Previous records in Bahia. Smith (1869), Moreira (1901) [as *C. marginatus* A. Milne Edwards, 1861)], Rathbun (1930) (as *C. marginatus*), Williams (1974) (as *C. marginatus*), Melo (1985), Almeida *et al.* (2006).

***Callinectes ornatus* Ordway, 1863**

Material examined (N=105). 1m, 06–07/VI/2000, 13°52'99"S/38°59'59"W (MZUESC#56); 8m, 7f, 18–19/IX/2000, 13°57'05"S/38°59'68"W (MZUESC#60).

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

Ecological notes. On sand and mud bottoms, up to 75 m (Melo 1996).

Previous records in Bahia. Smith (1869), Gouvêa & Leite (1980), Melo (1985), Gouvêa (1986b), Coelho & Ramos-Porto (1992), Barreto *et al.* (1993), Almeida *et al.* (2006, 2007).

***Charybdis hellerii* A. Milne Edwards, 1867**

Material examined (N=16). 1m, 19/IX/2000, 13°57'05"S/38°59'68"W (MZUESC#09); 1m, 1f, 25/III/2005, St. 05 (MZUESC#687); 1f, 28/VIII/2004, St. 05 (MZUESC#720).

Distribution. Red Sea, Djibouti, Somalia, South Africa, Madagascar, Persian Gulf, Hong Kong, Singapore, Sri Lanka, India, China, Japan, Indonesia, Philippines, New Caledonia, Australia, and Hawaii. Eastern Mediterranean – Egypt and Israel. Western Atlantic – Florida, Cuba, Colombia, Venezuela, French Guyana, and Brazil (from Ceará to Santa Catarina) (Dineen *et al.* 2001; Tavares & Amouroux 2003; Bezerra & Almeida 2005).

Ecological notes. This species has a preference for soft bottoms, but there are records from hard substrata such as rocks and corals (Lemaitre 1995). Mantelatto & Souza-Carey (1998) found juveniles in association with the bryozoan *Schizoporella unicornis* (Johnston, 1874). Campos & Türkay (1989) and Dineen *et al.* (2001) reported individuals collected in mangrove roots (*Rhizophora mangle*). Intertidal to 51 m (Lemaitre 1995).

Previous records in Bahia. Carqueija & Gouvêa (1996), Almeida *et al.* (2003, 2006).

Remarks. *C. hellerii* is a non-indigenous portunid crab of Indo-West Pacific origin. The occurrence of this species in Bahia was first reported by Carqueija & Gouvêa (1996), in Todos os Santos Bay. A further report, from Camamu Bay, was provided by Almeida *et al.* (2003). See Bezerra & Almeida (2005) for a summary of the Brazilian records of *C. hellerii*.

***Cronius tumidulus* Stimpson, 1871**

Material examined (N=49). 1m, 1f, 13/VI/2004, St. 05 (MZUESC#688).

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

Ecological notes. On sand, rock, coral, and algae bottoms. From shallow waters to 75 m (Melo 1996).

Previous records in Bahia. Rathbun (1930), Barreto *et al.* (1993), Almeida *et al.* (2007).

***Portunus anceps* (Saussure, 1858)**

Material examined (N=3). 2m, 24/IV/2005, St. 02 (MZUESC#689).

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

Ecological notes. On sand, mud, shell, algae, and rock bottoms. From 14 to 125 m (Melo 1996).

Previous records in Bahia. A. Milne Edwards (1879) (as *Neptunus sulcatus* A. Milne Edwards, 1879), Rathbun (1930), Barreto *et al.* (1993), Almeida *et al.* (2007).

***Portunus spinimanus* Latreille, 1819**

Material examined (N=3). 1m, 24/IV/2004, St. 05 (MZUESC#690).

Distribution. Western Atlantic – Bermuda, from New Jersey to southern Florida, Gulf of Mexico, Antilles, Venezuela, Guyanas, and Brazil (from Pernambuco to Rio Grande do Sul) (Melo 1996).

Ecological notes. In brackish water from bays and channels, on sand, mud, and broken-shell bottoms. From shallow waters to 200 m (Melo 1996).

Previous records in Bahia. Smith (1869) (as *Achelous spinimanus*), Rathbun (1930), Barreto *et al.* (1993), Almeida *et al.* (2007).

Superfamily Xanthoidea MacLeay, 1838

Family Goneplacidae MacLeay, 1838

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

Material examined (N=57). 3m, 3f, 06–07/VI/2000 (MZUESC#232); 5m, 9f, 25/IV/2003, St. 06 (MZUESC#696).

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

Ecological notes. On sand and mud bottoms, from 21 to 75 m (Coelho Filho & Coelho 1998).

Previous records in Bahia. Coelho Filho & Coelho (1998).

Remarks. Coelho Filho & Coelho (1998) described 3 new species of *Chasmocarcinus* Rathbun, 1898 from the Brazilian coast: *C. hirsutipes*, *C. meloi*, and *C. arcuatus*. The two latter have been reported from Bahia. Material of *C. arcuatus* from this state was collected in 1962 during the Calypso Expedition, at two stations (1823 and 1826) around Abrolhos, southern Bahia. These specimens were discovered in lots of the material analyzed by Rodrigues da Costa (1968) when describing another species, *C. peresi* (see Coelho Filho & Coelho 1998).

***Euryplax nitida* Stimpson, 1859**

Material examined (N=1). 1f, 08/IX/2005, St. 05 (MZUESC#695).

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

Ecological notes. On sand, shell, rock, and coral bottoms. From shallow waters to 90 m (Melo 1996).

Previous records in Bahia. Gomes Corrêa (1972), Melo (1985), Barreto *et al.* (1993).

Family Eriphiidae MacLeay, 1838

***Menippe nodifrons* Stimpson, 1859**

Material examined (N=1). 1juv, 25/IX/2004, St. 04 (MZUESC#724).

Distribution. Western Atlantic - east coast of the United States, Central America, Antilles, northern South America, and Brazil (from Maranhão to Santa Catarina). Eastern Pacific - from Cape Verde to Angola (Melo 1996).

Ecological notes. In intertidal pools, under rocks, and jetties. Shallow waters (Melo 1996).
Previous records in Bahia. Joly *et al.* (1969), Gomes Corrêa (1972), Melo (1985).

Family Panopeidae Ortmann, 1893

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

Material examined (N=2). 2m, 25/III/2005, St. 06 (MZUESC#725).

Distribution. Western Atlantic. East coast of the United States, Antilles, and Brazil (from Pernambuco to Santa Catarina) (Melo 1996).

Ecological notes. On sand, mud, shell, and gravel bottoms. From shallow waters to 140 m (Melo 1996).

Previous records in Bahia. Melo (1985).

***Hexapanopeus caribbaeus* (Stimpson, 1871)**

Material examined (N=70). 8m, 8f, 13/VII/2003, St. 08 (MZUESC#691).

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

Ecological notes. On sand bottoms. Shallow waters to 55 m (Melo 1996).

Previous records in Bahia. Almeida *et al.* (2006).

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

Material examined (N=1). 1m, 06–07/VI/2000 (MZUESC#638).

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

Ecological notes. On rock, coral, sand, and broken-shell bottoms. From shallow waters to 180 m (Melo 1996).

Previous records in Bahia. Gouvêa & Leite (1980), Gouvêa (1986a), Barreto *et al.* (1993).

***Panopeus harttii* Smith, 1869**

Material examined (N=6). 4m, 1f, 12/VI/2004, St. 01 (MZUESC#693); 1f, 25/IX/2004, St. 04 (MZUESC#726).

Distribution. Western Atlantic – east coast of the United States, Antilles, and Brazil (from Maranhão to São Paulo) (Melo 1996). Central Atlantic – Ascension Island (Manning & Chace 1990).

Ecological notes. Under rocks, on rock and coral reefs. Shallow waters to 25 m (Melo 1996).

Previous records in Bahia. Smith (1869), Moreira (1901), Rathbun (1930), Joly *et al.* (1969), Gomes Corrêa (1972), Barreto *et al.* (1993).

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

***Panopeus lacustris* Desbonne, 1867**

Material examined (N=1). 1f, 16/XII/2004, St. 08 (MZUESC#692).

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

Ecological notes. Under rocks, in estuaries, bays, and channels. It can be found in areas affected by pollution (Melo 1996).

Previous records in Bahia. Melo (1985) (as *P. herbstii* H. Milne Edwards, 1834), Almeida *et al.* (2006).

***Panopeus rugosus* A. Milne Edwards, 1880**

Material examined (N=1). 1f, 24/IV/2004, St. 08 (MZUESC#694).

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

Ecological notes. On sand, shell, rock, and coral bottoms (Melo 1996), and on mud, among mangrove roots (Calado & Sousa 2003).

Previous records in Bahia. A. Milne Edwards (1881), Moreira (1901), Rathbun (1930), Melo (1985), Almeida *et al.* (2006).

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

Family Pilumnidae Samouelle, 1819

***Pilumnus caribaeus* Desbonne & Schramm, 1867**

Material examined (N=1). 1m, 31/X/2004, St. 06 (MZUESC#721).

Distribution. Western Atlantic – East coast of the USA, Antilles, northern South America, and Brazil (from Pará to Santa Catarina) (Melo 1996).

Ecological notes. On sand, mud and shell bottoms. Intertidal to 55 m (Melo 1996).

Previous records in Bahia. Rathbun (1930), Joly *et al.* (1969), Gomes Corrêa (1972), Melo (1985), Barreto *et al.* (1993).

***Pilumnus reticulatus* Stimpson, 1860**

Material examined (N=7). 1m, 31/X/2004, St. 06 (MZUESC#722); 1f, 28/VIII/2004, St. 05 (MZUESC#723).

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

Ecological notes. On mud and shell bottoms. Intertidal to 75 m (Melo 1996).

Previous records in Bahia. Rathbun (1930), Joly *et al.* (1969), Gomes Corrêa (1972), Gouvêa (1986a), Barreto *et al.* (1993).

Superfamily Pinnotheroidea de Haan, 1833

Family Pinnotheridae de Haan, 1833

***Parapinnixa hendersoni* Rathbun, 1918**

Material examined (N=2). 1m, 24/IV/2004, St. 04 (MZUESC#697).

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

Ecological notes. On sand and broken-coral bottoms, or free-swimming. From 40 to 60 m (Melo 1996).

Previous records in Bahia. Righi (1967), Barreto *et al.* (1993).

Remarks. This species seems to be common in the northern hemisphere (Powers 1977; Williams 1984; Nizinski 2003). Records in Brazil are rare: Maranhão (Coelho & Ramos 1972), Bahia (Righi 1967), Espírito Santo (Barreto *et al.* 1993), and Paraná (Melo *et al.* 1989). The material from Bahia analyzed by Righi (1967) was collected at Abrolhos.

***Pinnixa sayana* Stimpson, 1860**

Material examined (N=11). 5m, 2f, 07/VIII/2005, St. 05 (MZUESC#727).

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

Ecological notes. On mud and sand bottoms, often in *Chaetopterus* tubes. It occurs in areas influenced by river discharge. From shallow waters to 80 m (Coelho 1997b)

Previous records in Bahia. Coelho (1997).

Superfamily Grapsoidea de Haan, 1833

Family Grapsidae de Haan, 1833

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

Material examined (N=2). 1m, 1f, 29/VIII/2004, St. 07 (MZUESC#728).

Distribution. Western Atlantic – Texas, Caribbean, French Guiana, Brazil (Trindade Island, and from Pará to Rio Grande do Sul), and Argentina. Eastern Atlantic – from Senegal to Angola (Melo 1996; Barros *et al.* 1997a; Poupin *et al.* 2005).

Ecological notes. On rocky bottoms, in the intertidal zone. Under rocks or jetties, among mangrove roots, and on sandy beaches. Also in estuaries and reefs (Melo 1996).

Previous records in Bahia. Rathbun (1918), Gouvêa (1986b), Almeida *et al.* (2006).

Family Sesarmidae Dana, 1851

***Aratus pisonii* (H. Milne Edwards, 1837)**

Material examined (N=1). 1juv, 29/VIII/2004, St. 07 (MZUESC#729).

Distribution. Western Atlantic – Florida, Gulf of Mexico, Antilles, northern South America, Guyanas, and Brazil (from Piauí to São Paulo) (Melo 1996). Eastern Pacific – from Magdalena Bay, Baja California, and the southwestern Gulf of California, to Peru (Hendrickx 1995). Brazil – Pará (Barros *et al.* 1997a).

Ecological notes. Adults are supratidal. Very common in estuaries, where it is found on rocks and jetties, or climbing on mangrove trees (Melo 1996).

Previous records in Bahia. Rathbun (1918), Almeida *et al.* (2006).

Remarks. The material consists of only one juvenile crab, which explains the presence of this species in a collection made by trawling.

Discussion

Of the total of 93 species cited herein, 88 are reported from Camamu Bay for the first time. The following species are first records from the coast of Bahia: *Rimapenaeus constrictus*, *Kemponia americana*, *Alpheus chacei*, *Synalpheus* cf. *apioceros*, *S.* cf. *pandionis*, *Salmoneus* cf. *ortmanni*, *Lysmata* cf. *intermedia*, *Upogebia marina*, *Elamena gordonae*, and *Macrocoeloma laevigatum*. For three of these, the known range in the western Atlantic is extended to Camamu Bay: *S.* cf. *pandionis*, *M. laevigatum*, and *E. gordonae*.

Regarding the patterns of species distribution, according to Melo (1985), five of the species are circum-tropical: *Pseudosquilla ciliata*, *Stenopus hispidus*, *Leander tenuicornis*, *Petrolisthes armatus*, and *Elamena gordonae*. *Alpheus* cf. *floridanus* and *Synalpheus* cf. *fritzmulleri* were not included in this list because they are probably species complexes. Seven species occur on both sides of the Atlantic (amphi-atlantic), *Alpheus intrinsecus*, *Latreutes fucorum*, *L. parvulus*, *Panulirus argus*, *P. echinatus*, *Menippe nodifrons*, and *Pachygrapsus gracilis*; whereas four occur in the western Atlantic and in the eastern Pacific (amphi-american). *Sicyonia laevigata*, *Alpheus estuariensis*, *Pilumnus reticulatus*, and *Aratus pisonii*. *Salmoneus* cf. *ortmanni* was not added to this list because it probably represents a species complex. The portunid crab *Charybdis hellerii* is an introduced species of Indo-West Pacific origin (Campos & Turkay 1989; Lemaitre 1995). The remaining 72 species are western Atlantic species, of which only two are known to be endemic in Brazil: *Podochela brasiliensis*, typical species endemic to the Brazilian Province, and *Chasmocarcinus arcuatus*, distributed in the Guyanas and Brazilian provinces (classification based on Coelho & Ramos 1972; Coelho *et al.* 1978). Finally, *Moreiradromia antillensis*, *Portunus anceps*, and *Panopeus harttii* are represented in the western and central Atlantic (Ascension) (Manning & Chace 1990; Melo 1996).

For seven species (about 7.5%), the coast of Bahia is the southernmost limit of their known ranges in the western Atlantic: *Neogonodactylus torus*, *Synalpheus* cf. *pandionis*, *Latreutes fucorum*, *Podochela brasiliensis*, *Macrocoeloma laevigatum*, *Elamena gordonae*, and *Chasmocarcinus arcuatus*. Their presence suggests that this area may be a transition zone between the Brazilian and Paulista zoogeographic provinces (classification based on Coelho & Ramos 1972; Coelho *et al.* 1978; Palacio 1982).

The coast of Bahia represents a significant portion of the entire Brazilian coast. The large number of previously unrecorded species (about 11% of the total cited herein) and the three range extensions reported in this contribution show that the fauna of the coast of Bahia remains poorly known, especially the shallow-water fauna. For this reason, it is difficult at present to assess the zoogeographic characteristics of this region, because several important and still well-preserved areas remain to be more thoroughly investigated.

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Appendix. List of species by station of collection in Camamu Bay, Bahia, Brazil

- St. 01. 13°53'04"S; 38°57'06"W – *Neogonodactylus torus*, *Sicyonia parri*, *Kemponia americana*, *Leander paulensis*, *L. tenuicornis*, *Periclimenes longicaudatus*, *Hippolyte obliquimanus*, *Latreutes fucorum*, *L. parvulus*, *Tozeuma carolinense*, *Pagurus criniticornis*, *Acanthonyx dissimulatus*, *Epialtus bituberculatus*, *Macrocoeloma laevigatum*, *Mithraculus forceps*, *Pitho lherminieri*, *Callinectes larvatus*, *C. ornatus*, *Cronius tumidulus*, *Panopeus harttii*, *Pilumnus reticulatus*.
- St. 02. 13°53'21"S; 38°57'49"W – *Sicyonia parri*, *Leander paulensis*, *Periclimenes longicaudatus*, *Alpheus* cf. *formosus*, *Lyasmata* cf. *intermedia*, *Hippolyte obliquimanus*, *Pagurus criniticornis*, *Callinectes danae*, *C. ornatus*, *Portunus anceps*.
- St. 03. 13°54'25"S; 38°59'14"W – *Sicyonia typica*, *Periclimenes longicaudatus*, *Alpheus intrinsecus*, *A.* cf. *packardii*, *Tozeuma carolinense*, *Dardanus venosus*, *Petrochirus diogenes*, *Pagurus criniticornis*, *Moreiradromia antillensis*, *Stenorhynchus seticornis*, *Mithraculus forceps*, *Pelia rotunda*, *Notolopas brasiliensis*, *Callinectes danae*, *C. larvatus*, *C. ornatus*, *Charybdis hellerii*, *Cronius tumidulus*.
- St. 04. 13°54'06"S; 39°00'22"W – *Pseudosquilla ciliata*, *Farfantepenaeus* sp., *Metapenaeopsis goodei*, *Rimapenaeus constrictus*, *Sicyonia dorsalis*, *S. laevigata*, *S. parri*, *S. typica*, *Stenopus hispidus*, *Leptochela serratorbita*, *Kemponia americana*, *Leander paulensis*, *Periclimenes longicaudatus*, *Alpheus* cf. *armillatus*, *A.* cf. *packardii*, *Synalpheus* cf. *pandionis*, *Tozeuma carolinense*, *Panulirus argus*, *Clibanarius antillensis*, *Paguristes erythropros*, *Petrochirus diogenes*, *Hypoconcha arcuata*, *Moreiradromia antillensis*, *Hepatus pudibundus*, *Metoporphaphis calcarata*, *Stenorhynchus seticornis*, *Inachoides forceps*, *Pelia rotunda*, *Notolopas brasiliensis*, *Callinectes danae*, *C. exasperatus*, *C. larvatus*, *C. ornatus*, *Charybdis hellerii*, *Cronius tumidulus*, *Menippe nodifrons*, *Hexapanopeus caribbaeus*, *Panopeus harttii*, *Pilumnus reticulatus*, *Parapinnixa hendersoni*, *Pinnixa sayana*.
- St. 05. 13°54'14"S; 39°00'34"W – *Pseudosquilla ciliata*, *Farfantepenaeus* sp., *Sicyonia dorsalis*, *S. laevigata*, *S. typica*, *Leptochela serratorbita*, *Kemponia americana*, *Periclimenes longicaudatus*, *Alpheus* cf. *armillatus*, *A. chacei*, *A. estuariensis*, *A.* cf. *packardii*, *A. formosus*, *Hippolyte obliquimanus*, *Paguristes tortugae*, *Petrochirus diogenes*, *Pagurus criniticornis*, *Moreiradromia antillensis*, *Calappa ocellata*, *Hepatus pudibundus*, *Persephona punctata*, *Metoporphaphis calcarata*, *Stenorhynchus seticornis*, *Collodes inermis*, *Inachoides forceps*, *Notolopas brasiliensis*, *Pelia rotunda*, *Heterocrypta lapidea*, *Elamena gordonae*, *Callinectes danae*, *C. larvatus*, *C. ornatus*, *Charybdis hellerii*, *Cronius tumidulus*, *Portunus anceps*, *P. spinimanus*, *Hexapanopeus caribbaeus*, *Pilumnus reticulatus*, *Chasmocarcinus arcuatus*, *Euryplax nitida*, *Pinnixa sayana*.
- St. 06. 13°55'21"S; 39°02'13"W – *Squilla obtusa*, *Farfantepenaeus* sp., *Sicyonia dorsalis*, *S. laevigata*, *Leander paulensis*, *Periclimenes longicaudatus*, *Alpheus* cf. *armillatus*, *A. chacei*, *A.* cf. *floridanus*, *A.* cf. *packardii*, *Latreutes parvulus*, *Minyocerus angustus*, *Persephona lichtensteinii*, *Inachoides forceps*, *Notolopas brasiliensis*, *Callinectes danae*, *C. exasperatus*, *C. ornatus*, *Cronius tumidulus*, *Hexapanopeus angustifrons*, *H. caribbaeus*, *Pilumnus caribbaeus*, *Chasmocarcinus arcuatus*.
- St. 07. 13°56'19"S; 39°03'57"W – *Sicyonia dorsalis*, *Farfantepenaeus* sp., *Kemponia americana*, *Leander paulensis*, *Macrobrachium acanthurus*, *Periclimenes longicaudatus*, *Alpheus* cf. *armillatus*, *A.* cf. *packardii*, *Salmoneus* cf. *ortmanni*, *Synalpheus* cf. *apioceros*, *Petrolisthes armatus*, *Clibanarius sclopetarius*, *C. vittatus*, *Paguristes erythropros*, *Pagurus criniticornis*, *Callinectes danae*, *C. larvatus*, *C. ornatus*, *Charybdis hellerii*, *Hexapanopeus caribbaeus*, *Chasmocarcinus arcuatus*, *Pachygrapsus gracilis*, *Aratus pisonii*.
- St. 08. 13°56'24"S; 39°05'04"W – *Farfantepenaeus* sp., *Kemponia americana*, *Leander paulensis*, *Macrobrachium acanthurus*, *Alpheus* cf. *armillatus*, *A.* cf. *packardii*, *Upogebia marina*, *Petrolisthes armatus*, *Petrochirus diogenes*, *Clibanarius sclopetarius*, *C. vittatus*, *Callinectes bocourti*, *C. danae*, *C. exasperatus*, *C. larvatus*, *Charybdis hellerii*, *Hexapanopeus caribbaeus*, *Panopeus lacustris*, *P. rugosus*.

