

Review

Shallow-water anomuran and brachyuran crabs (Crustacea: Decapoda) from southern Bahia, Brazil

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ABSTRACT. The objective of this study was to determine the taxonomic composition and ecological aspects of decapod crustacean species belonging to the infraorders Anomura and Brachyura in shallow marine and estuarine waters from southern Bahia, a coastline about 640 km in extent, corresponding to approximately 7% of the Brazilian coast. Sixteen species of the infraorder Anomura and 68 of the infraorder Brachyura are reported for the study area. The most important families in terms of number of species were the Panopeidae with 11 species, and the Ocypodidae and Portunidae with 9. Among the Brachyura, the southern distribution of the species *Austinixa leptodactyla* Coelho, 1997 (Pinnotheridae), endemic to Brazil, is extended from the coast of Sergipe to Bahia (Prado, Cumuruxatiba Beach, 17°06'18.6"S, 39°10'50.4"W). The ocypodid *Uca* (*Leptuca*) *cumulanta* Crane, 1943 and also the pinnotherids *Austinixa aidae* (Righi, 1967) and *Fabia byssomiae* (Say, 1818) are reported for the first time from the Bahia coast. The specimen of *F. byssomiae* examined was collected in the mantle cavity of the clam *Macoma constricta* (Bruchière, 1792) (Bivalvia: Tellinidae), a new host record for the species.

Keywords: diversity, marine biota, Anomura, Brachyura, southwestern Atlantic, Brazil.

Cangrejos anomuros y braquiuros (Crustacea: Decapoda) de aguas someras del sur de Bahia, Brasil

RESUMEN. El objetivo del presente estudio fue determinar la composición taxonómica y aspectos ecológicos de los crustáceos decápodos pertenecientes a los infraórdenes Anomura y Brachyura, en aguas someras, marinas y estuarinas del sur de Bahia, Brasil, una línea costera con cerca de 640 km de extensión, que corresponde aproximadamente al 7% de la costa brasileña. Para esta área de estudio se registraron 16 especies del infraorden Anomura y 68 del infraorden Brachyura. Las familias más representativas en términos de número de especies fueron Panopeidae, con 11 especies, y Ocypodidae y Portunidae, ambas con nueve especies. Entre los Brachyura, la distribución meridional de *Austinixa leptodactyla* Coelho, 1997 (Pinnotheridae), endémica del Brasil, se extiende desde la costa de Sergipe hasta la costa de Bahia (Municipalidad de Prado, Playa de Cumuruxatiba, 17°06'18.6"S, 39°10'50.4"W). Se reportó por primera vez para Bahia el ocipódido *Uca* (*Leptuca*) *cumulanta* Crane, 1943, al igual que los pinotéridos *Austinixa aidae* (Righi, 1967) y *Fabia byssomiae* (Say, 1818). El único espécimen de *F. byssomiae* fue recolectado al interior de la cavidad paleal del molusco *Macoma constricta* (Bruchière, 1792) (Bivalvia: Tellinidae), representando un nuevo huésped para esta especie.

Palabras clave: diversidad, biota marina, Anomura, Brachyura, Atlántico suroccidental, Brasil.

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INTRODUCTION

The southern Bahia coast, between the cities of Valença and Mucuri, is approximately 640 km long

and represents about 7% of the Brazilian coast (Ferreira, 1976). This long tropical coastline includes one of the largest bays in Brazil (Camamu) (Oliveira *et al.* 1998, 2002) and the most extensive reef complex

in the South Atlantic (Abrolhos) (Leão, 2002), in addition to estuaries of several major rivers (Contas, Pardo, Jequitinhonha, and Mucuri), comprising a great diversity of coastal environments that supposedly shelter high species richness, which is incompletely described. Until 2003, no projects had aimed to survey, intensively and systematically, the decapod crustacean fauna in this area; the previous records were few and intermittent. As a result, this area constitutes a gap in the distribution of many decapods (Almeida *et al.*, 2007a), which impedes the analysis of the geographical distributions of species.

Between 2003 and 2008, several projects sponsored by the Universidade Estadual de Santa Cruz (UESC), Ilhéus, Bahia, Brazil, were carried out to survey the crustacean fauna in coastal areas of the southern part of the state. Another project on species inventory, linked to the Universidade Estadual do Sudoeste da Bahia (Jequié Campus) was carried out in Camamu Bay. These studies allowed the documentation of new records of decapods in Bahia and the extension of the known southern distributions for some species (Almeida *et al.*, 2006, 2007a, 2007b, 2008a, Almeida & Coelho, 2008), as well as the description of a new species (Fransen & Almeida, 2009). To group the material collected in these inventories, a crustacean collection was established at UESC in 2003, which currently contains just over 1,300 lots.

The objective of this study was to determine the taxonomic composition and ecological aspects of the decapod crustacean fauna belonging to the infraorders Anomura and Brachyura in shallow marine and estuarine waters of southern Bahia. Because of their abundance and ecological importance, these crabs are important members of tropical benthic communities. In addition, some species [e.g., *Callinectes* spp., *Cardisoma guanhumi* Latreille, 1825, *Goniopsis cruentata* (Latreille, 1803), and *Ucides cordatus* (Linnaeus, 1763)] have great socio-economic importance in the study area, being exploited by the artisanal fishery and providing a livelihood for many families.

MATERIAL AND METHODS

The material examined in this study was collected on the southern coast of Bahia, especially during the projects "Inventariamento da Fauna de Crustáceos Decápodos do Município de Ilhéus, Bahia" (2003-2005) and "Diversidade de Crustáceos do Sudeste e Sul da Bahia, Brasil: I. Ambientes Costeiros" (2006-2008). The sampling methods for the material obtained during the first project in estuaries of Ilhéus

were described by Almeida *et al.* (2006). The study area in the second project extended from Cairú (13°34'S, 38°54'W) to Mucuri (18°05'S, 39°33'W) in the southernmost part of the state, on the border with Espírito Santo (Fig. 1). Collection activities were approximately trimestral and covered almost all the coastal municipalities, with the exception of Ilhéus (the target of the first project). The sampling stations were distributed along this coastline in order to cover the largest possible number of coastal habitats such as sand beaches and sand-mud flats, mangroves, rocky shores, and sandstone and coral reefs (Fig. 2). Samples were qualitative, with no standardization effort, and conducted in the intertidal and shallow subtidal zones during the low water of spring tides. Manual capture was the most common method used. Crustaceans were sought in micro-habitats of marine and estuarine environments, such as burrows in sand and mud, decomposing leaves and twigs, among roots and trunks of mangrove trees, on and under rocks, on artificial substrata, and in association with algae and marine invertebrates. Traps such as the "siripóia" (a type of handmade crab trap) were frequently used to catch crustaceans in the shallow sublittoral (e.g., *Callinectes* spp.). All stations sampled in this project were geo-referenced. At the time of capture, data on bottom type, salinity (measured with the aid of an optical refractometer), and host (when possible) were recorded.

The list of species at each sampling station between 2003 and 2008, including all the projects mentioned above, is given in Appendix 1. The specimens are deposited in the carcinological collection of the Museu de Zoologia of the Universidade of Santa Cruz (MZUESC), Ilhéus. For each species examined, the geographical distribution, ecological notes (when possible, derived from field observations), and previous records in Bahia, including the synonyms (if any) under which the species was mentioned for the study area are given. The list of material examined reports the municipalities from north to south. When more than one lot refers to a given municipality, the order increases according to the number of the lot in the MZUESC collection. The survey of the previous records of decapod species from Bahia was based on an exhaustive analysis of the literature effectively published through 2009. Thus, restricted information sources such as monographs, dissertations, theses, and meeting communications were not included, nor were publications on biology and fisheries. Comments on taxonomy (including recent taxonomic changes), geographical distribution, and historical aspects were added when appropriate. For Brachyura, the classifi-

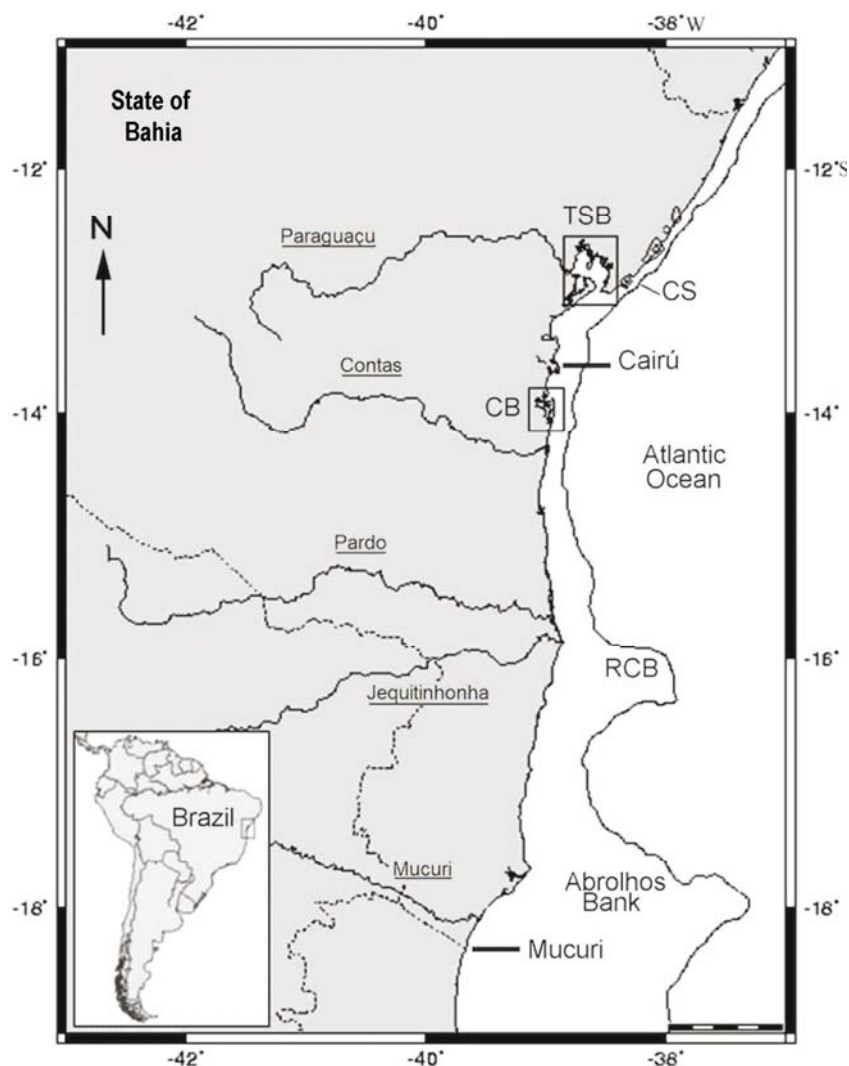


Figure 1. Location of the study area, southern Bahia, eastern Brazilian coast. The horizontal bars indicate the northern (Cairú) and southern (Mucuri) limits. CB: Camamu Bay, RCB: Royal Charlotte Bank, TSB: Todos os Santos Bay, CS: outer border of the continental shelf. The main rivers are underlined. Scale bar = 100 km.

Figura 1. Ubicación del área de estudio, sur de Bahia, costa de Brasil. Las barras horizontales indican su límite norte (Cairú) y sur (Mucuri). CB: Bahía de Camamu, RCB: Banco Royal Charlotte, TSB: Bahía de Todos os Santos, CS: Límite externo de la plataforma continental. Los nombres de los principales ríos están subrayados. Escala = 100 km.

cation proposed by Ng *et al.* (2008) was followed, and for other Decapoda the system of Martin & Davis (2001) was used, to the family level. The order of species within each family (or subfamily if applicable) is alphabetical.

The longitudinal and latitudinal distribution patterns were classified based on the proposal of Melo (1985). Melo (1985) recognized that some species from the Virginian, Carolinian, and Antillean patterns have northern and southern populations (in southeastern Brazil) separated by 30°, 45°, and 50°, respectively. Here, the species are treated as having disjunct distributions, following the work of Coelho &

Ramos (1972), where the gap in the distribution corresponds at least to the Guyana region (Guyanas, Amapá, and Pará).

Abbreviations used:

- (St.) – Station.
- (T) – Transect.
- (f) – female (s).
- (juv) – juvenile (s).
- (m) – male (s).
- (ni) – sex not identified.
- (CL) – carapace length.
- (CW) – carapace width.

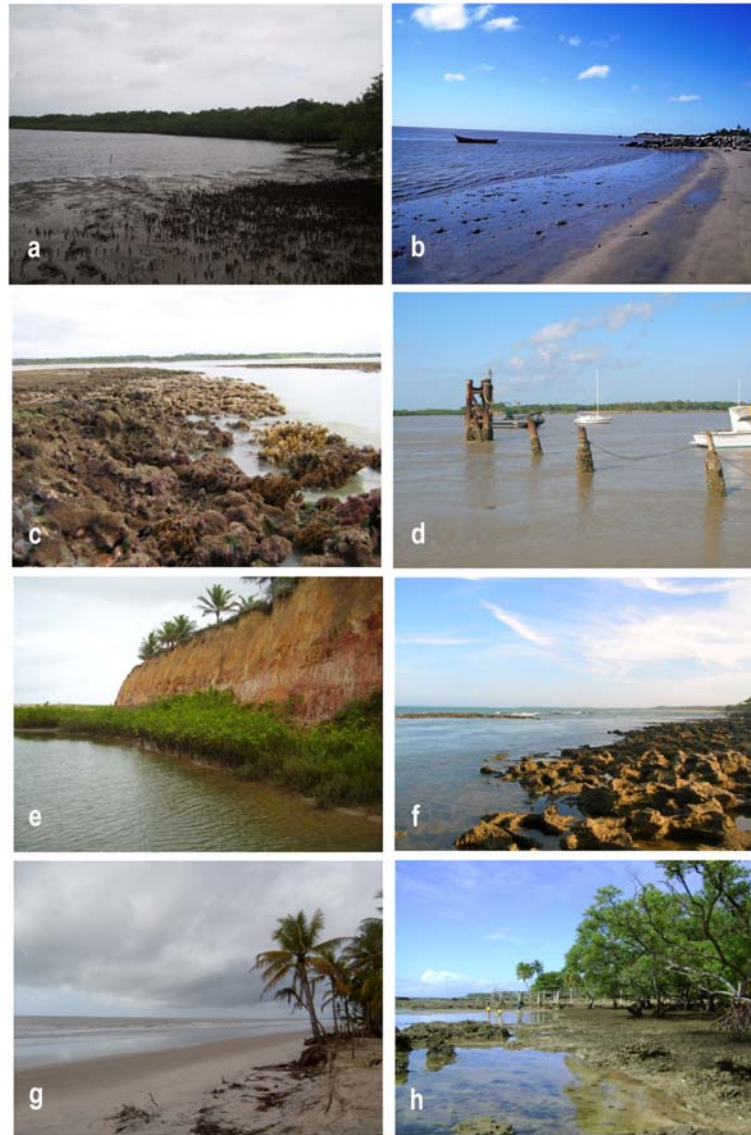


Figure 2. Collection sites of estuarine and marine anomuran and brachyuran crabs in southern Bahia, Brazil. a) Mangrove and mudflat at the locality of Taipús de Dentro, Maraú Peninsula, municipality of Maraú*, b) Sand-mud substratum in the intertidal zone of Pontal da Barra Beach, municipality of Nova Viçosa*, c) Coral reef at Mutá Beach, municipality of Porto Seguro**, d) Hard artificial substratum in the estuary of Caravelas River, municipality of Caravelas*, e) Estuary of the Cahy River, bordered by a sea cliff formed by sediments of the Barreiras Group, municipality of Prado***, f) Sandstone reef near the mouth of João de Tiba River, municipality of Santa Cruz Cabrália*, g) Sand beach on Atalaia Island, municipality of Canavieiras*, and h) Mangrove vegetation near the reef at Moreré Beach, Boipeba Island, municipality of Cairú***. *Photo by AO Almeida, **Photo by LEA Bezerra, ***Photo by GBG Souza.

Figura 2. Lugares de recolecta de cangrejos anomuros y braquiuros, marinos y estuarinos, en el sur de Bahia, Brasil. a) Manglar y planicie de marea en la localidad de Taipús de Dentro, Península de Maraú, Municipalidad de Maraú*, b) Substrato areno-arcilloso en la región intermareal de la Playa del Pontal da Barra, Municipalidad de Nova Viçosa*, c) Arrecife coralino en la Playa de Mutá, Municipalidad de Porto Seguro**, d) Substrato duro artificial en el estuario del Río Caravelas, Municipalidad de Caravelas*, e) Estuario del Río Cahy con un acantilado formado por sedimentos del Grupo Barreiras en su margen, Municipalidad de Prado***, f) Arrecife rocoso en la desembocadura del Río João de Tiba, Municipalidad de Santa Cruz Cabrália*, g) Playa arenosa en la Isla de Atalaia, Municipalidad de Canavieiras*, y h) Vegetación de manglar próxima del arrecife de la Playa de Moreré, Isla de Boipeba, Municipalidad de Cairú***. *Foto de AO Almeida, **Foto de LEA Bezerra, ***Foto de GBG Souza.

RESULTS

Taxonomy

Infraorder Anomura MacLeay, 1838
 Superfamily Galatheoidea Samouelle, 1819
 Family Porcellanidae Haworth, 1825

Megalobrachium mortenseni Haig, 1962

Material examined: 8m, 15f, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 989.

Distribution: Western Atlantic: Central America, West Indies, Colombia, and Brazil (Pará to São Paulo). Eastern Pacific: Gulf of California to Panama (Melo, 1999).

Ecological notes: From shallow waters to 30 m, mainly on rocky bottoms (Melo, 1999). In the study area it was collected under rocks, rubble, and wood, at salinity 37.

Previous records in Bahia: Haig (1962), "Harbor of Bahia" (= Salvador Harbor) (material from Copenhagen Museum) and Abrolhos; Veloso & Melo (1993), Prado and Abrolhos.

Megalobrachium roseum (Rathbun, 1900)

Material examined: 1m, 1f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 876; 1f, 18.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 935; 9m, 14f, 07.III.2008, Santa Cruz Cabrália, João de Tiba River mouth (reef), MZUESC 1155; 1m, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 3, MZUESC 832.

Distribution: Western Atlantic: Central America Colombia, Venezuela, and Brazil (Maranhão to São Paulo) (Melo, 1999).

Ecological notes: In the intertidal zone in reef areas. Specimens collected in crevices of dead coral, under rocks covered by hydrozoans and algae, and among barnacles in a jetty. Salinity range: 31-39.

Previous records in Bahia: Veloso & Melo (1993), Itaparica Island (Todos os Santos Bay) and Imbaçuaba (Prado).

Megalobrachium soriatum (Say, 1818)

Material examined: 1m, 1f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 873; 2m, 1f, 07.III.2008, Santa Cruz Cabrália, João de Tiba River mouth (reef), MZUESC 1156.

Distribution: Western Atlantic: North Carolina to Florida, Gulf of Mexico, Mexico, Central America, and Brazil (Ceará to São Paulo). Eastern Pacific: California to Panama (Melo, 1999).

Ecological notes: Shallow waters to 170 m, on coral, sponges, and calcareous algae (Melo, 1999). In reefs, under rocks covered with hydrozoans and algae. Salinity range: 36-39.

Previous records in Bahia: Veloso & Melo (1993), Abrolhos.

Minyocerus angustus (Dana, 1852) (Fig. 3)

Material examined: 1m, 18.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach, MZUESC 936.

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

Ecological notes: In shallow waters, on sand bottoms and associated with the sea-star *Luidia senegalensis* (Lamarck, 1816) (Asteroidea: Luidiidae) (Melo, 1999). The material from Coroa Vermelha Beach was collected on the tube feet of a specimen of *L. senegalensis*, at a salinity of 39 (Fig. 3).

Previous records in Bahia: Veloso & Melo (1993), Itacuruçá (doubtful locality: Itacuruçá, Rio de Janeiro?) and Itapagipe Peninsula (Salvador); Almeida *et al.* (2007a, 2007b), Camamu Bay and Ilhéus (15-16 m), respectively.

Pachycheles greeleyi (Rathbun, 1900)

Material examined: 1m, 1f, 09.III.2008, Belmonte, Mojiçuçaba Beach, MZUESC 1187; 1m, 3f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 874; 1f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 875; 1ni, 18.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 937; 4m, 07.III.2008, Santa Cruz Cabrália, João de Tiba River mouth (reef), MZUESC 1157; 1ni, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 3, MZUESC 833.

Distribution: Western Atlantic: Brazil (Pará to Espírito Santo) (Melo, 1999).

Ecological notes: In reefs, under rocks covered by hydrozoans and algae, in crevices of dead coral, and among barnacles on a jetty. Salinity range: 31-41.

Previous records in Bahia: Veloso & Melo (1993), Itaparica Island and Ponta do Mutá (Santa Cruz Cabrália) (doubtful locality: Ponta do Mutá – Maraú?; Mutá Beach – Porto Seguro?, near Santa Cruz Cabrália).

Petrolisthes armatus (Gibbes, 1850)

Material examined: 1f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1301; 1m, 1f, 1ni, 11.XI.2006, Maraú, Taipus de Dentro, MZUESC 745; 1f, 13.XI.2006, Maraú, Ponta do Mutá, MZUESC 772; 1f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 877; 2m, 1f, 08.III.2008, João

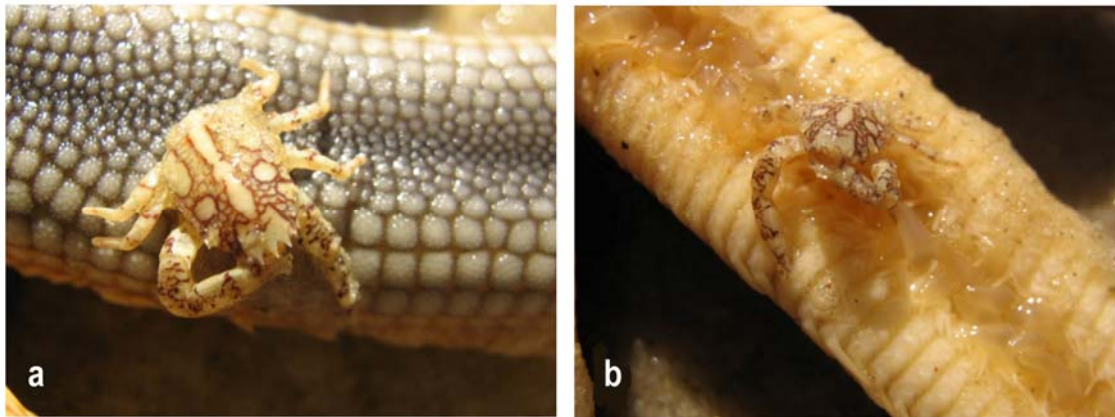


Figure 3. a) *Minyocerus angustus* (Dana, 1852), male (Carapace width = 3.2 mm) from Coroa Vermelha Beach, Santa Cruz Cabrália, Bahia, Brazil (MZUESC 936), b) Specimen of *Minyocerus angustus* (Dana, 1852) on the tube feet of its echinoderm host *Luidia senegalensis* (Lamarck, 1816) on Coroa Vermelha Beach, Santa Cruz Cabrália, Bahia, Brazil (MZUESC 936). Photos by LEA Bezerra.

Figura 3. a) *Minyocerus angustus* (Dana, 1852), macho (ancho del caparazón = 3,2 mm) de la Playa de Coroa Vermelha, Santa Cruz Cabrália, Bahia, Brasil (MZUESC 936), b) Especímenes de *Minyocerus angustus* (Dana, 1852), en los pies tubulares de su hospedero equinoderma *Luidia senegalensis* (Lamarck, 1816) en la Playa de Coroa Vermelha, Santa Cruz Cabrália, Bahia, Brasil (MZUESC 936). Fotos de LEA Bezerra.

de Tiba River, Santa Cruz Cabrália, near Santo André Beach, MZUESC 1176; 1f, 17.V.2007, Porto Seguro, Buranhem River, Municipal Pier of Porto Seguro, MZUESC 925; 7m, 1f, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1071; 1f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 973; 3f, 1juv, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 974; 5m, 5f, 1juv, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 975; 1m, 1f, 1juv, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 990; 1m, 6f, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 991; 1m, 1f, 29.VII.2007, Caravelas, Caravelas River, Ponta de Areia, St. 3, MZUESC 999; 1m, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 1009; 2m, 1ni, 30.VIII.2007, Caravelas, Pontal do Sul, MZUESC 1020; 6m, 23f, 15juv, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, near St. 2, MZUESC 819; 5m, 5f, 1juv, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 2, MZUESC 823; 3m, 2f, 6juv, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 3, MZUESC 834; 4m, 8f, 1juv, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, near St. 3, MZUESC 841; 1m, 1f, 2juv, 19.III.2007, Nova Viçosa, Peruípe River, MZUESC 844. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: North Carolina to Florida, Gulf of Mexico, West Indies, Colombia, and Brazil (Fernando de Noronha, and from Pará to Santa Catarina). Eastern Atlantic: Senegal to Angola.

Central Atlantic: Ascension. Eastern Pacific: Gulf of California, Costa Rica, Ecuador (Galapagos), and Peru (Barros *et al.*, 1997a; Melo, 1999).

Ecological notes: Intertidal to 60 m, under rocks, corals, mussel beds, sponges, oysters, and on roots of mangrove trees (*Rhizophora* and *Avicennia*) (Melo, 1999). In the intertidal, under rocks on mud and sand, under wood, on reefs, associated with beds of *Crassostrea rhizophorae* Guilding, 1828 (Mollusca: Ostreidae), in crevices of dead coral and rotten wood, on polychaete sand reefs (probably Sabellariidae), and among barnacles in a jetty. Salinity range: 19-39.

Previous records in Bahia: Moreira (1901); Coelho (1964a), Salvador; Veloso & Melo (1993), Salvador, Nova Viçosa, and Mucuri; Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively.

Remarks: Widely distributed species with high morphological variability; possibly a species complex (Werding *et al.*, 2003; Rodriguez *et al.*, 2005).

Pisidia brasiliensis Haig in Rodrigues da Costa, 1968

Material examined: 1f, 24.IX.2004, Ilhéus, Cachoeira River, trawling, St. 8, MZUESC 432; 2m, 6f, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1072; 4m, 4f, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 992; 1f, 29.VIII.2007, Caravelas, Caravelas River, Ponta de Areia, St. 3, MZUESC 1000; 3m, 5f, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 1010; 11m, 4f, 29.VIII.2007, Caravelas, Caravelas River, Barra de

Caravelas, St. 4, MZUESC 1011; 18m, 7f, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 1012; 4m, 1f, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 1013; 7m, 5f, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 1014; 1m, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 1015; 1m, 2f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, near St. 2, MZUESC 820; 1m, 3f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 3, MZUESC 835.

Distribution: Western Atlantic: Brazil (Pará to São Paulo) (Melo, 1999; Coelho *et al.*, 2007).

Ecological notes: Under rocks, tree trunks, wood, on polychaete sand reefs (probably Sabelliariidae), associated with *Crassostrea rhizophorae* beds, on the octocoral *Carijoa riisei* (Duchassaing & Michelotti, 1860) (Anthozoa: Clavulariidae), on red algae tufts, and among barnacles on a jetty. Salinity range: 28-38.

Previous records in Bahia: Veloso & Melo (1993), Itaparica.

Superfamily Hippoidea Latreille, 1825
Family Albuneidae Stimpson, 1858

Albunea paretii Guérin-Ménéville, 1853

Material examined: 1f, no date available, Ilhéus, Milionários Beach, MZUESC 195; 1f, 24.IX.2004, Ilhéus, Milionários Beach, MZUESC 455.

Distribution: Western Atlantic: Bermuda, Florida Keys, West Indies, Central America to Brazil (Amapá to Rio Grande do Sul) (Melo, 1999; Boyko, 2002).

Ecological notes: Intertidal to 100 m, on sand and mud (Melo, 1999).

Previous records in Bahia: Coelho & Ramos (1972); Calado *et al.* (1990).

Lepidopa richmondi Benedict, 1903

Material examined: 1f, Ilhéus, Olivença, Sirihyba Beach, MZUESC 193; 10ni, 06.VII.2003, Ilhéus, Milionários Beach, MZUESC 196; 2f, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, near to Hotel Village Back-door, MZUESC 214; 1ni, 07.IX.2004, Ilhéus, Milionários Beach, MZUESC 489.

Distribution: Western Atlantic: Nicaragua, Haiti, Puerto Rico, Barbados, Colombia, Venezuela, and Brazil (Ceará to Santa Catarina) (Melo, 1999).

Ecological notes: Intertidal to 10 m, on sand bottoms (Melo, 1999).

Previous records in Bahia: Boyko (2002), Itacaré.

Family Hippidae Latreille, 1825

Emerita portoricencis Schmitt, 1935

Material examined: 7f, 13.VI.2003, Ilhéus, Olivença, Batuba Beach, MZUESC 184; 2f, 06.VII.2003, Ilhéus, Milionários Beach, MZUESC 197; 2f, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, near Hotel Village Back-door, MZUESC 213; 2ni, 06.V.2008, Canavieiras, Atalaia Beach, southern Atalaia Island, MZUESC 1234; 8f, 3ni, 18.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 1, MZUESC 817; 10f, 1ni, 19.III.2007, Mucuri, Mucuri Beach, MZUESC 816.

Distribution: Western Atlantic: Florida, West Indies, northern South America, and Brazil (Maranhão to Bahia) (Calado, 1998; Melo, 1999).

Ecological notes: Intertidal, on sand bottoms. Salinity range: 38-39.

Previous records in Bahia: Calado (1998).

Remarks: Calado (1998) reported Bahia as the southern limit for this species in the western Atlantic, but did not mention the locality. Mucuri, the southernmost limit of the study area (18°05'20.7"S, 39°33'14.6"W), may represent the southernmost collection locality of *E. portoricencis* to the present.

Superfamily Paguroidea Latreille, 1802
Family Diogenidae Ortmann, 1892

Calcinus tibicen (Herbst, 1791)

Material examined: 1 m, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1302; 7m, 2f, 13.XI.2006, Maraú, Ponta do Mutá, MZUESC 773; 1m, 1f, 06.VI.2003, Ilhéus, Olivença, Sirihyba Beach, MZUESC 176; 1m, 1f, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 210; 7m, 5f, 18.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 229; 6m, 1f, 10.VII.2004, Ilhéus, Olivença, Sirihyba Beach, MZUESC 477; 10m, 1f, 07.V.2004, Ilhéus, Olivença, Back-door Beach, MZUESC 480; 3m, 2f, 28.IV.2005, Ilhéus, Olivença, Batuba Beach, MZUESC 509; 1m, 1f, 09.III.2008, Belmonte, Mojiquiçaba Beach, MZUESC 1188.

Distribution: Western Atlantic: Bermuda, Florida, Gulf of Mexico, West Indies, Panama, northern South America, and Brazil (Fernando de Noronha, and from Ceará to Santa Catarina) (Rieger & Giraldi, 1997; Melo, 1999).

Ecological notes: Intertidal to 30 m (Melo, 1999). On rocky bottoms, including dead coral rubble, common in tide pools. Salinity range: 35-41.

Previous records in Bahia: *Calcinus sulcatus* (H. Milne Edwards, 1836) – Smith (1869) and Moreira

(1901), Abrolhos. *Calcinus tibicen* – Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos; Coelho & Ramos-Porto (1986).

Clibanarius antillensis Stimpson, 1859

Material examined: 1m, 4f, 1juv, 01.VIII.2008, Cairú, Boipeba Island, Velha Boipeba Harbor, MZUESC 1260; 1m, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1303; 1m, 1f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1304; 2m, 1f, 03.VIII.2008, Cairú, Boipeba Island, Tassimirim Beach, MZUESC 1327; 3m, 3f, 13.XI.2006, Maraú, Ponta do Mutá, MZUESC 774; 1f, 17.VIII.2007, Maraú, Tanque Island, T1, MZUESC 1118; 16m, 5f, 06.VI.2003, Ilhéus, Olivença, Sirihyba Beach, MZUESC 174; 11m, 7f, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 211; 15m, 3f, 18.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 230; 13m, 5f, 10.VII.2004, Ilhéus, Olivença, Sirihyba Beach, MZUESC 479; 6m, 07.V.2004, Ilhéus, Olivença, Back-door Beach, MZUESC 481; 17m, 1f, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 484; 4m, 06.V.2004, Ilhéus, Olivença, Sirihyba Beach, MZUESC 487; 20m, 4f, 28.IV.2005, Ilhéus, Batuba Beach, MZUESC 510; 3m, 16.V.2007, Santa Cruz Cabralia, Coroa Vermelha Beach (reef), MZUESC 878; 7m, 7f, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 909; 1m, 1f, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1117. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: In the intertidal, on reefs, tide pools, on and under rocks, on dead coral rubble and calcareous algae, also in river mouths where hard substratum is available. Also in *Halodule* meadows (Melo, 1999). Depth range: 0-0.5 m. Salinity range: 32-39.

Previous records in Bahia: *Clibanarius antillensis* (sic) – Smith (1869), Abrolhos. *Clibanarius antillensis* – Moreira (1901), Abrolhos; Forest & de Saint Laurent (1967), “Bahia” (material deposited in the Muséum National d’Histoire Naturelle, Paris) and St. 84 (R/V *Calypso*); Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos; Coelho & Ramos-Porto (1986); Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively.

Clibanarius sclopetarius (Herbst, 1796)

Material examined: 3m, 01.VIII.2008, Cairú, Boipeba Island, Triana River, MZUESC 1274; 8m, 1f,

11.XI.2006, Maraú, Taipus de Dentro, MZUESC 746; 1m, 1ni, 12.IX.2006, Maraú, Maraú River, Tanque Island, MZUESC 1116; 1m, 17.VIII.2007, Maraú, Tanque Island, T3, MZUESC 1119; 2m, 2f, 05.V.2008, Itacaré, Concha Beach, mouth of Contas River, MZUESC 1207; 2f, 05.V.2008, Itacaré, Contas River, MZUESC 1216; 1m, 4f, 06.VI.2003, Ilhéus, Olivença, Sirihyba Beach, MZUESC 175; 1m, 2f, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 212; 1m, 1f, 18.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 228; 16m, 4f, 10.VII.2004, Ilhéus, Olivença, Sirihyba Beach, MZUESC 478; 1m, 1f, 18.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 483; 8m, 3f, 06.V.2004, Ilhéus, Olivença, Sirihyba Beach, MZUESC 486; 2m, 1f, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 488; 1m, 27.V.2004, Ilhéus, Malhado Beach, MZUESC 634; 1m, 06.V.2008, Canavieiras, Pardo River, MZUESC 1221; 1m, 18.V.2007, Santa Cruz Cabralia, Coroa Vermelha Beach (reef), MZUESC 938; 1m, 17.V.2007, Porto Seguro, Mutá Beach, near Sabacuzinho River mouth, MZUESC 910; 1m, 4f, 17.V.2007, Porto Seguro, Buranhem River, Municipal Pier of Porto Seguro, MZUESC 926; 2m, 1f, 29.VIII.2007, Caravelas, Caravelas River, Ponta de Areia, St. 3, MZUESC 1001; 1m, 30.VIII.2007, Caravelas, Pontal do Sul, MZUESC 1021. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Florida, West Indies, northern South America, and Brazil (Ceará to Santa Catarina) (Melo, 1999).

Ecological notes: In the intertidal, in estuaries and beaches (frequently in areas under the influence of freshwater discharge), in tide pools, on sand and mud, on and under rocks, on *Rhizophora mangle* roots, and associated with *Crassostrea rhizophorae* beds. Salinity range: 19-39. Occasionally in *Halodule* and *Halophila* meadows (Melo, 1999).

Previous records in Bahia: Smith (1869), Caravelas; Moreira (1901); Forest & de Saint Laurent (1967), St. 61 and 84 (R/V *Calypso*); Coelho & Ramos (1972); Coelho & Ramos-Porto (1986); Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively.

Clibanarius vittatus (Bosc, 1802)

Material examined: 2m, 05.V.2008, Itacaré, Contas River, MZUESC 1217; 4m, 1f, 08.III.2008, Santa Cruz Cabralia, João de Tiba River, near Santo André Beach, MZUESC 1177; 1m, 17.V.2007, Porto Seguro, Buranhem River, near harbor, MZUESC 933; 1m, 18.V.2007, Porto Seguro, Buranhem River, Arraial

d'Ajuda, MZUESC 946; 5m, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 976; 4f, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 993; 4m, 30.VIII.2007, Caravelas, Pontal do Sul, MZUESC 1022; 5m, 5f, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 1120; 15m, 1f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 2, MZUESC 824; 6m, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 3, MZUESC 836; 1m, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, near St. 3, MZUESC 842; 1m, 19.III.2007, Nova Viçosa, Peruípe River, MZUESC 845. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: east coast of the USA (from Virginia south), Gulf of Mexico, West Indies, Venezuela, Surinam, and Brazil (Pará to Santa Catarina) (Melo, 1999).

Ecological notes: Intertidal to 22 m (Melo, 1999). Mainly in estuaries, on sand, mud, and sand with gravel and shells, on and under rocks, and under tree trunks. Salinity range: 10-38.

Previous records in Bahia: Smith (1869), Caravelas; Moreira (1901); Gomes Corrêa (1972), Abrolhos; Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively.

Family Paguridae Latreille, 1802

Pagurus brevidactylus (Stimpson, 1859)

Material examined: 2f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 879.

Distribution: Western Atlantic: Bermuda, Florida, Gulf of Mexico, West Indies, Central America, northern South America, and Brazil (Fernando de Noronha, and from Pernambuco to Santa Catarina) (Melo, 1999).

Ecological notes: Shallow waters to 50 m, on sand bottoms, on algae and rocks (Melo, 1999). The specimens were collected in a reef area where they were found on a colony of fire coral, *Millepora alcicornis* Linnaeus, 1758 (Hydrozoa: Milleporidae), at a salinity of 39.

Previous records in Bahia: *Pagurus miamensis* Provenzano, 1959 – Coelho (1964b), Barra Beach (Salvador). *Pagurus miamensis miamensis* – Coelho & Ramos (1972). *Pagurus brevidactylus* – Coelho & Ramos-Porto (1986); Nucci & Melo (2007), Alcobaça.

Remarks: The records by Coelho (1964b) and Coelho & Ramos (1972) as *P. miamensis* and *P.*

miamensis miamensis, respectively, were attributed to *P. brevidactylus*, its senior synonym (see McLaughlin, 1975; Nucci & Melo, 2007).

Pagurus criniticornis (Dana, 1852)

Material examined: 1f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1305; 1m, 13.XI.2006, Maraú, Ponta do Mutá, MZUESC 775; 1f, 17.VIII.2007, Maraú, Tanque Island, T1, MZUESC 1122; 1m, 18.VIII.2007, Maraú, Tanque Island, T2, MZUESC 1123; 2m, 3f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 880; 1m, 2f, 18.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 939; 1m, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 911; 3f, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 1121.

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

Ecological notes: Shallow waters to 60 m, on sand and mud bottoms (Melo, 1999). In reefs, on rocks, on sand mixed with shells, among drifted algae on a sand bottom. Depth range: 0-1.2 m. Salinity range: 31-39.

Previous records in Bahia: Forest & de Saint Laurent (1967), St. 58 (R/V *Calypso*, 44-60 m); Almeida *et al.* (2007a), Camamu Bay.

Infraorder Brachyura Linnaeus, 1758
Section Podotremata Guinot, 1977
Superfamily Dromioidea De Haan, 1833
Family Dromiidae De Haan, 1833
Subfamily Dromiinae De Haan, 1833

Moreiradromia antillensis (Stimpson, 1858)

Material examined: 1f, 07.V.2004, Ilhéus, Olivença, Back-door Beach, MZUESC 470.

Distribution: Western Atlantic: Bermuda, North Carolina, Florida, Gulf of Mexico, West Indies, northern South America, and Brazil (Amapá to Rio Grande do Sul). Central Atlantic: Ascension (Manning & Chace, 1990, as *Dromidia antillensis*; Melo, 1996, as *Cryptodromiopsis antillensis*).

Ecological notes: Intertidal to 330 m, on rocky, coral, and shell bottoms (Melo, 1996, as *Cryptodromiopsis antillensis*). The single juvenile specimen was collected in a tide pool.

Previous records in Bahia: *Dromidia Antillensis* (sic) – Smith (1869), Abrolhos. *Dromidia antillensis* – Henderson (1888), off Salvador (*Challenger* Exp.);

Moreira (1901); Rathbun (1937); Rodrigues da Costa (1968), Abrolhos (R/V *Calypso*, St. 1816-1818, 19-21 m); Joly *et al.*, (1969) & Gomes Corrêa (1972), Abrolhos; Coelho & Ramos (1972), “Bahia” and seamounts off Bahia; Gouvêa (1986a), Salvador; Coelho & Ramos-Porto (1989); Barreto *et al.* (1993). *Cryptodromiopsis antillensis* – Melo & Campos Jr. (1999), Salvador, Itagi (doubtful locality, possibly misspelled), Itapegipe (misspelled = Itapagipe Peninsula, Salvador) and Abrolhos (R/V *Calypso*, St. 1818, 21 m, and R/V Almirante Saldanha, St. 1966, 47 m). *Moreiradromia antillensis* – Serejo *et al.* (2006), St. C5-7R (REVIZEE Program, Central Score, 40 m); Almeida *et al.* (2007a, 2007b), Camamu Bay and Ilhéus, respectively; Almeida & Coelho (2008).

Remarks: *M. antillensis* is the type species of the new genus *Moreiradromia*, erected by Guinot & Tavares (2003). A detailed comparison with the genus *Dromidia* Stimpson, 1858 was provided by Guinot & Tavares (2003).

Section Eubrachyura Saint Laurent, 1980
Subsection Heterotremata Guinot, 1977
Superfamily Aethroidea Dana, 1851
Family Aethridae Dana, 1851

Hepatus pudibundus (Herbst, 1785)

Material examined: 2m, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 966.

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

Ecological notes: Shallow waters to 160 m, on mud, sand, and shell bottoms (Melo, 1996). The material from Caravelas was collected in the mouth of the Caravelas River, where the specimens were found buried in the mud substratum during low tide, at a salinity of 38.

Previous records in Bahia: *Hepatus princeps* (Herbst, 1794) – Rathbun (1937), Plataforma (Salvador, Hartt Explorations). *Hepatus pudibundus* – Coelho & Ramos (1972); Gouvêa (1986b), Salvador, Candeias, and Itaparica Island; Almeida *et al.* (2007a, 2007b), Camamu Bay and Ilhéus (15-16 m), respectively; Almeida & Coelho (2008).

Superfamily Eriphioidea MacLeay, 1838
Family Eriphiidae MacLeay, 1838

Eriphia gonagra (Fabricius, 1781)

Material examined: 1f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1310; 1f, 02.VIII.

2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1311; 2f, 13.XI.2006, Maraú, Ponta do Mutá, MZUESC 779; 1m, 06.VI.2003, Ilhéus, Olivença, Sirihya Beach, MZUESC 181; 3m, 1f, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 209; 1m, 18.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 226; 3m, 1f, 07.V.2004, Ilhéus, Milionários Beach, Morro dos Navegantes, MZUESC 380; 1f, 07.V.2004, Ilhéus, Olivença, Back-door Beach, MZUESC 383; 1m, 4f, 28.IV.2005, Ilhéus, Olivença, Batuba Beach, MZUESC 502; 2f, 27.IV.2005, Ilhéus, Malhado Beach, MZUESC 506; 1m, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 953.

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

Ecological notes: Intertidal to 5 m (Melo, 1996). In reefs, rocky shores, tide pools, and in crevices of dead coral. Salinity range: 35-39. According to Melo (1996) it also occurs in oyster beds and on sponges and hydrozoans.

Previous records in Bahia: Smith (1869), Abrolhos; Rathbun (1898, 1930), “Bahia” and Abrolhos (*Albatross* Exp.), Plataforma, and Rio Vermelho (both localities in Salvador), and Abrolhos (Hartt Explorations); Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Türkay (1976); Gouvêa (1986a), Lauro de Freitas, Salvador, and Itaparica Island; Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008).

Family Menippidae Ortmann, 1893

Menippe nodifrons Stimpson, 1859

Material examined: 2f, 10.VIII.2002, Ilhéus, Olivença, Jairí Beach, MZUESC 33; 1f, 07.V.2004, Ilhéus, Olivença, Back-door Beach, MZUESC 384; 1f, 07.III.2008, Santa Cruz Cabralia, João de Tiba River mouth (reef), MZUESC 1125; 1f, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 965; 1m, 2f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 3, MZUESC 838.

Distribution: Western Atlantic: Florida, Central America, West Indies, northern South America, and Brazil (Pará to Santa Catarina). Eastern Atlantic: Cape Verde to Angola (Melo, 1996; Barros & Pimentel, 2001).

Ecological notes: In shallow waters, close to the beach (Melo, 1996). On reefs, rocky shores, tide pools, among barnacles on a jetty, under rocks and tree trunks, on sand, and on sediment with mixed mud, coarse sand, and biogenic material. Salinity range: 31-40.

Previous records in Bahia: Joly *et al.* (1969) & Gomes Corrêa (1972), Abrolhos; Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Superfamily Goneplacoidea MacLeay, 1838
Family Chasmocarcinidae Serène, 1964
Subfamily Chasmocarcininae Serène, 1964

Chasmocarcinus arcuatus Coelho Filho & Coelho, 1998

Material examined: 1m, 18.VII.2007, Maraú, Tanque Island, T2, MZUESC 1104; 1m, 1f, 18.VIII.2007, Maraú, Tanque Island, T2, MZUESC 1107; 1f, 18.VIII.2007, Maraú, Tanque Island, T2, MZUESC 1109.

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

Ecological notes: From 2 to 75 m, on sand and mud bottoms (Coelho Filho & Coelho, 1998; this study). The material from Tanque Island was collected at 2 m depth and salinity of 31.

Previous records in Bahia: Coelho Filho & Coelho (1998), Abrolhos (R/V *Calypso*, St. 1823 and St. 1826, 24 and 20 m, respectively); Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Remarks: A taxonomic discussion of *C. arcuatus* and its relative species *C. peresi* is provided by Coelho Filho & Coelho (1998).

Superfamily Majoidea Samouelle, 1819
Family Epiplatidae MacLeay, 1838
Subfamily Epiplatinae MacLeay, 1838

Acanthonyx dissimulatus Coelho, 1993

Material examined: 1m, 13.XI.2006, Maraú, Ponta do Mutá, MZUESC 776; 1m, 07.V.2004, Ilhéus, Olivença, Back-door Beach, MZUESC 426; 3m, 10.VII.2004, Ilhéus, Olivença, Sirihya Beach, MZUESC 511; 1m, 4f, 09.III.2008, Belmonte, Mojiquiçaba Beach, MZUESC 1189; 4m, 1f, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 912; 2m, 1f, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 913; 2m, 2f, 1juv, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 914; 1m, 2f, 2juv, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1073.

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

Ecological notes: Intertidal to 25 m (Melo, 1996). *Acanthonyx dissimulatus* was always collected in

association with algae, such as red algae, *Sargassum* sp., unidentified brown algae, and on drifted algae on sand bottoms. Salinity range: 35-41.

Previous records in Bahia: *Acanthonyx petiverii* H. Milne Edwards, 1834 – Rathbun (1894, 1925), Mar Grande, “Bay of Bahia” (= Todos os Santos Bay) (Hartt Explorations); Moreira (1901); Gouvêa (1986a), Salvador. *Acanthonyx dissimulatus* – Young & Serejo (2005), Abrolhos Bank (RAP, St. 17); Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Epiplatys bituberculatus H. Milne-Edwards, 1834

Material examined: 1m, 13.XI.2006, Maraú, Ponta do Mutá, MZUESC 777; 1m, 14.XI.2006, Maraú, Barra Grande (Barra Grande Pier), MZUESC 784; 1m, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 915.

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

Ecological notes: In shallow waters, associated with *Sargassum* sp. and on algae and drifted seagrass on a sand bottom. Salinity range: 35-39.

Previous records in Bahia: Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Gouvêa (1986a), Salvador; Serejo *et al.* (2006), St. C5-4F and C5-10R (REVIZEE Program, Central Score, 50 m) (erroneous stations, see “Remarks”); Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Remarks: Dr. Cristiana Serejo (Museu Nacional do Rio de Janeiro) informed us that *E. bituberculatus* was collected on the coast of Bahia during the REVIZEE Program, between 20-67 m depth, instead of stations C5-4F (1200 m) and C5-10R (50 m) as she originally reported (Serejo *et al.*, 2006).

Subfamily Pisinae Dana, 1851

Notolopas brasiliensis Miers, 1886

Material examined: 2f, 07.III.2008, Santa Cruz Cabralia, João de Tiba River mouth (reef), MZUESC 1160; 1f, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 1016.

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

Ecological notes: Shallow waters to 30 m, on sand and calcareous algae bottoms, occasionally on sand and broken shells (Melo, 1996). In the study area it was collected on the octocoral *Carijoa riisei* and

under rocks covered by hydrozoans and algae on a sandstone reef. Salinity range: 36-38.

Previous records in Bahia: Miers (1886), off Salvador (*Challenger* Exp.); Moreira (1901); Barreto *et al.* (1993); Almeida *et al.* (2007a, 2007b), Camamu Bay and Ilhéus (20 m), respectively; Almeida & Coelho (2008).

Remarks: Miers (1886) described *N. brasiliensis* based on specimens collected in Bahia, off Salvador, during the *Challenger* Expedition.

Pelia rotunda A. Milne-Edwards, 1875

Material examined: 2m, 07.III.2008, Santa Cruz Cabralia, João de Tiba River mouth (reef), MZUESC 1161; 1ni, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 1089.

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

Ecological notes: Shallow waters to 190 m, on sand and calcareous algae bottoms (Melo, 1996). Specimens were collected in a reef, under rocks covered by algae and hydrozoans, as well as on the octocoral *Carijoa riisei*, at a salinity of 36.

Previous records in Bahia: Coelho & Ramos (1972); Barreto *et al.* (1993); Almeida *et al.* (2007b), Camamu Bay; Almeida & Coelho (2008).

Subfamily Tychinae Dana, 1851

Pitho lherminieri (Desbonne, in Desbonne & Schramm, 1867)

Material examined: 1m, 16.V.2007, Santa Cruz Cabralia, Coroa Vermelha Beach (reef), MZUESC 886.

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

Ecological notes: Shallow waters to 28 m (exceptionally at 200 m), on mud, sand, shells, rocks, and coral bottoms (Melo, 1996). The single specimen was obtained at a salinity of 39.

Previous records in Bahia: Rodrigues da Costa (1968), Abrolhos (R/V *Calypso*, St. 1815, 1817, 1818, 1827, 13.5-24 m); Coelho (1971), Abrolhos; Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos; Gouvêa & Leite (1980), Salvador; Barreto *et al.* (1993); Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Family Hymenosomatidae MacLeay, 1838

Elamena gordonae Monod, 1956

Material examined: 2f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 1090; 1f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 3, MZUESC 837.

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

Ecological notes: Shallow waters to 40 m (Monod, 1956; Almeida *et al.*, 2007a; present study). The specimens were found among barnacles in a jetty and on the octocoral *Carijoa riisei*. Salinity range: 31-36.

Previous records in Bahia: Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008), Nova Viçosa.

Remarks: *E. gordonae* is a tiny and rare species, of which only female specimens are known to the present. Its occurrence in the western Atlantic suggests a circumtropical distribution, which is uncommon among the hymenosomatid crabs because of their abbreviated development and low fecundity (Lucas, 1980; Almeida *et al.*, 2007a; Almeida & Coelho, 2008).

Family Inachoididae Dana, 1851

Inachoides forceps A. Milne-Edwards, 1879

Material examined: 1m, 1f, 07.III.2008, Santa Cruz Cabralia, João de Tiba River mouth (reef), MZUESC 1158.

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

Ecological notes: Shallow waters to 70 m, on sand, gravel, coral, and occasionally calcareous algae (Melo, 1996). The few specimens examined were obtained in the intertidal, on a sandstone reef, under rocks covered by algae and hydrozoans at a salinity of 36.

Previous records in Bahia: Coelho (1971), Abrolhos; Coelho & Ramos (1972); Barreto *et al.* (1993); Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Family Majidae Samouelle, 1819

Subfamily Mithracinae MacLeay, 1838

Macrocoeloma trispinosum (Latreille, 1825)

Material examined: 1m, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 916.

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

Ecological notes: Shallow waters to 80 m, on sand, rocks, broken shells, and *Sargassum* bottoms (Melo, 1996). The only specimen obtained was found in a reef area, on a probably drifted coral (Anthozoa: Plexaurellidae: *Plexaurella* sp.), at a salinity of 39.

Previous records in Bahia: *Macrocoeloma trispinosa* – Miers (1886), off Salvador (*Challenger* Exp.). *Macrocoeloma trispinosum* – Moreira (1901); Coelho & Ramos (1972); Barreto *et al.* (1993); Almeida & Coelho (2008).

Microphrys bicornutus (Latreille, 1825)

Material examined: 1f, 01.VIII.2008, Cairú, Boipeba Island, Velha Boipeba Harbor, MZUESC 1261; 2m, 4f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1306; 2m, 2f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1307; 1m, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1308; 2m, 1f, 03.VIII.2008, Cairú, Boipeba Island, Tassimirim Beach, MZUESC 1328; 1f, 07.V.2004, Ilhéus, Olivença, Back-door Beach, MZUESC 473; 1m, 01.I.2005, Ilhéus, Milionários Beach, sandstone reef in front of Opaba Hotel, MZUESC 853; 2f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 881; 3f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 882; 1m, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 917; 2m, 1f, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1074.

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

Ecological notes: Intertidal to 70 m (Melo, 1996). In reefs, on dead coral rubble (including crevices) and calcareous algae blocks, under rocks, and on *Halimeda* sp. Salinity range: 33-39.

Previous records in Bahia: *Milnia bicornuta* Stimpson, 1860 – Smith (1869), Abrolhos. *Microphrys bicornutus* – Rathbun (1898), Abrolhos (*Albatross* Exp.); Rathbun (1925), Abrolhos (*Albatross* Exp.), Plataforma (Salvador, Hartt Explorations) and Porto Seguro (Thayer Exp., St. 102); Coelho (1971), Salvador; Coelho & Ramos (1972); Gomes Corrêa (1972), Abrolhos; Gouvêa & Leite (1980), Itaparica Island; Gouvêa (1986a), Salvador and Itaparica Island; Almeida & Coelho (2008).

Mithraculus forceps (A. Milne-Edwards, 1875)

Material examined: 1m, 4f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 883; 1m, 1f, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 918.

Distribution: Western Atlantic: North Carolina to Florida, Gulf of Mexico, West Indies, Venezuela, and Brazil (São Pedro and São Paulo Archipelago, Fernando de Noronha, Rocas Atoll, and from Maranhão to Santa Catarina) (Holthuis *et al.*, 1980; Melo, 1996; Rieger & Giraldi, 1996).

Ecological notes: Shallow waters to 90 m, on hard bottoms and also on sand, corals, algae, or associated with sponges (Melo, 1996). In reefs, on dead coral rubble, at a salinity of 39.

Previous records in Bahia: *Mithrax forceps* – Miers (1886), off Salvador (*Challenger* Exp.); Rathbun (1898), Abrolhos (*Albatross* Exp.); Moreira (1901); Gouvêa (1986a), Salvador. *Mithrax (Mithraculus) forceps* – Rathbun (1925), Abrolhos (*Albatross* Exp.) and Plataforma (Salvador, Hartt Explorations); Coelho (1971), Salvador; Coelho & Ramos (1972). *Mithraculus forceps* – Coelho & Torres (1990), Salvador and Abrolhos; Barreto *et al.* (1993); Young & Serejo (2005), Abrolhos Bank (RAP, St. 30 and 38); Serejo *et al.* (2006), St. C5-5R (REVIZEE Program, Central Score, 20 m); Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Mithrax braziliensis Rathbun, 1892

Material examined: 2juv, 09.III.2008, Belmonte, Mojiçuiçaba Beach, MZUESC 1190; 1juv, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 884; 1m, 8f, 3ni, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 885; 1f, 18.V.2007, Coroa Vermelha Beach (reef), Santa Cruz Cabrália, MZUESC 940; 1m, 07.III.2008, Santa Cruz Cabrália, João de Tiba River mouth (reef), MZUESC 1159; 1f, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 919.

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

Ecological notes: Intertidal to 8 m (Melo, 1996). In reefs, on rocks, under rocks covered by algae and hydrozoans, and on the surface of a living coral (not identified). Salinity range: 36-41.

Previous records in Bahia: *Mithrax braziliensis* – Rathbun (1892), Mar Grande, “Bay of Bahia” (= Todos os Santos Bay, Hartt Explorations); Moreira (1901); Gouvêa (1986a), Itaparica Island; Almeida & Coelho (2008). *Mithrax (Mithrax) braziliensis* –

Rathbun (1925), Mar Grande, “Bay of Bahia” (= Todos os Santos Bay, Hartt Explorations).

Remarks: The type locality of *M. braziliensis* is Mar Grande, “Bay of Bahia” (Itaparica Island, in Todos os Santos Bay) (Rathbun, 1892).

Mithrax hemphilli Rathbun, 1892

Material examined: 1m, 09.III.2008, Belmonte, Mojiçuçaba Beach, MZUESC 1191.

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

Ecological notes: Intertidal to 60 m, on reefs and calcareous algae, under rocks, and in *Thalassia* meadows (Melo, 1996). Collected on rocky substrata at a salinity of 41.

Previous records in Bahia: *Mithrax hemphilli* – Rathbun (1898), Abrolhos (*Albatross* Exp.); Moreira (1901); Coelho (1971), Salvador; Barreto *et al.* (1993); Serejo *et al.* (2006), St. C5-2R (REVIZEE Program, Central Score, 55 m). *Mithrax (Mithrax) hemphilli* – Rathbun (1925), Abrolhos (*Albatross* Exp.); Gomes Corrêa (1972), Abrolhos. *Mithrax hemphilli* (misspelled) – Gouvêa (1986a), Salvador.

Superfamily Pilumnoidea Samouelle, 1819

Family Pilumnidae Samouelle, 1819

Subfamily Pilumninae Samouelle, 1819

Pilumnus dasypodus Kingsley, 1879

Material examined: 1f, 03.VIII.2008, Cairú, Boipeba Island, Tassimirim Beach, MZUESC 1331; 5m, 1f, 16.V.2007, Coroa Vermelha Beach (reef), Santa Cruz Cabrália, MZUESC 889; 1f, 16.V.2007, Coroa Vermelha Beach (reef), Santa Cruz Cabrália, MZUESC 890; 1f, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1076.

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

Ecological notes: Intertidal to 30 m, on sand, shell, and coral bottoms (Melo, 1996). In reefs, on rocks and calcareous algae blocks. Salinity range: 33-39.

Previous records in Bahia: Rathbun (1930), Bonfim (Salvador, Hartt Explorations); Gouvêa & Leite (1980), Salvador and Itaparica Island; Gouvêa (1986a), Salvador; Barreto *et al.* (1993); Almeida & Coelho (2008).

Pilumnus reticulatus Stimpson, 1860

Material examined: 1m, 1f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 891; 1m, 1f, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 921; 1m, 18.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 942; 1ni, 07.III.2008, Santa Cruz Cabrália, João de Tiba River mouth (reef), MZUESC 1164; 1m, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 996; 3f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 1093; 1f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 3, MZUESC 840.

Distribution: Western Atlantic: Central America, West Indies, northern South America, Brazil (Pará to Rio Grande do Sul), and Argentina. Eastern Pacific: Gulf of California to Gulf of Panama (Hendrickx, 1995; Melo, 1996; Spivak, 1997).

Ecological notes: Intertidal to 75 m, on mud and shell bottoms (Melo, 1996). In reefs, on dead coral rubble and also on the surface of a living coral (not identified), under rocks and wood, under rocks in a tide pool (on sediment with mixed mud, coarse sand, and biogenic material), on the octocoral *Carijoa riisei*, and among barnacles on a jetty. Salinity range: 31-40.

Previous records in Bahia: Rathbun (1930), Mapele (Simões Filho, Hartt Explorations) and “Bay of Bahia” (= Todos os Santos Bay, material deposited in the Copenhagen Museum); Joly *et al.* (1969) & Gomes Corrêa (1972), Abrolhos; Gouvêa (1986a), Salvador; Barreto *et al.* (1993); Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Superfamily Portunoidea Rafinesque, 1815

Family Portunidae Rafinesque, 1815

Subfamily Portuninae Rafinesque, 1815

Achelous tumidulus Stimpson, 1871

Material examined: 1juv, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1309.

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

Ecological notes: Shallow waters to 75 m, on sand, rock, coral, and algae bottoms (Melo, 1996). The single specimen was collected in the intertidal, on *Halimeda* sp., at a salinity of 39.

Previous records in Bahia: *Cronius bispinosus* Miers, 1886 – Miers (1886), off Salvador (*Challenger* Exp.); Moreira (1901). *Cronius tumidulus* – Rathbun (1930), “Bahia” (*Hassler* Exp., 21-30 m) and Porto Seguro; Barreto *et al.* (1993); Serejo *et al.* (2006), St.

C5-2R, C5-4R, and C5-5R (REVIZEE Program, Central Score, 20-55 m); Almeida *et al.* (2007a, 2007b), Camamu Bay and Ilhéus, respectively; Almeida & Coelho (2008).

Remarks: *C. bispinosus*, described by Miers (1886) based on material obtained during the *Challenger* Expedition on the coast of Bahia, was considered a junior synonym of *C. tumidulus* by Rathbun (1930). Based on molecular data, Mantelatto *et al.* (2009) resurrected the genus *Achelous* De Haan, 1833 for *Cronius tumidulus* and nine American species treated under *Portunus* Weber, 1795.

Arenaeus cribrarius (Lamarck, 1818)

Material examined: 2m, 1f, 10.VIII.2002, Acuípe Beach, Ilhéus, MZUESC 3; 1m, 18.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 231; 4m, 03.III.2004, Ilhéus, Sargi River (Sargi Beach), MZUESC 318; 1m, 2f, 07.V.2004, Ilhéus, Milionários Beach, Morro dos Navegantes, MZUESC 378; 1m, 28.IV.2005, Ilhéus, Olivença, Batuba Beach, MZUESC 508.

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

Ecological notes: Intertidal to 70 m, well adapted to live on sand beaches, rarely recorded in estuaries or lagoons (Melo, 1996).

Previous records in Bahia: Gouvêa (1986b), Salvador; Almeida & Coelho (2008).

Callinectes bocourti A. Milne-Edwards, 1879

Material examined: See material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: North Carolina, Florida, Mississippi, West Indies, northern South America, and Brazil (Amapá to Rio Grande do Sul) (Williams, 1984a; Melo, 1996; Santos *et al.*, 2000).

Ecological notes: Intertidal to 20 m. Estuarine species living in low-salinity waters, also present in polluted waters (Melo, 1996).

Previous records in Bahia: Moreira (1901); Rathbun (1930), Cannavieiras (sic) (= Canavieiras); Williams (1974), Ilhéus; Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively; Almeida *et al.* (2008b), Ilhéus (in fresh water); Almeida & Coelho (2008).

Callinectes danae Smith, 1869

Material examined: 1m, 02.VIII.2008, Cairú, Boipeba Island, Oritiba River, MZUESC 1282; 4m, 10.X.2003,

Maraú, Taipus de Fora Beach, MZUESC 249; 6m, 1f, 11.XI.2006, Maraú, Taipus de Dentro, MZUESC 747; 1f, 05.V.2008, Itacaré, Contas River, MZUESC 1218; 1f, 17.V.2007, Porto Seguro, Buranhem River, Municipal Pier of Porto Seguro, MZUESC 927; 1f, 18.V.2007, Porto Seguro, Buranhem River, Arraial d'Ajuda, MZUESC 947; 4f, 1ni, 17.V.2007, Porto Seguro, Mutá Beach, near Sabacuzinho River mouth, MZUESC 952; 2m, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 958; 3m, 29.VIII.2007, Caravelas, Caravelas River, Ponta de Areia, St. 3, MZUESC 962; 1f, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 967; 1f, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 994. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: Intertidal to 75 m (Melo, 1996). In estuaries, mainly on mud bottoms, but also on sand, sand-mud beaches, buried in the sediment during low tide, rarely under rocks. Salinity range: 4-38.

Previous records in Bahia: *Callinectes Danae* (sic) – Smith (1869). *C. danai* (misspelled) – Moreira (1901). *Callinectes danae* – Rathbun (1930); Williams (1974), Itaparica Island, Madre de Deus, and Ilhéus; Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively; Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008).

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

Callinectes exasperatus (Gerstaecker, 1856)

Material examined: 2f, 22.XI.2007, Prado, Barra do Cahy, St. 2, MZUESC 1044; 2f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 959; 1f, 29.VIII.2007, Caravelas, Caravelas River, Ponta de Areia, St. 3, MZUESC 963; 3m, 2f, 17-18.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 791. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Bermuda, Florida, Gulf of Mexico, West Indies, northern South America, and Brazil (Pará to Santa Catarina) (Melo, 1996; Barros & Pimentel, 2001).

Ecological notes: Intertidal to 8 m, in marine and estuarine waters close to river mouths and mangroves (Melo, 1996). Very common under rocks and trunks, on mud and sand bottoms, during low tide. Salinity range: 4-38.

Previous records in Bahia: Moreira (1901); Rathbun (1930), Cannaveiras (= Canavieiras) (St. 090) and Porto Seguro (St. 102) (both localities sampled by the Thayer Exp.); Williams (1974), Ilha Madre de Deus and Ilhéus; Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively; Almeida & Coelho (2008).

Callinectes marginatus (A. Milne-Edwards, 1861)

Material examined: 2m, 11.XI.2006, Marau, Taipus de Dentro, MZUESC 748; 1m, 13.XI.2006, Marau, Ponta do Mutá, MZUESC 778; 1m, 1f, 10.VIII.2002, Ilhéus, Olivença, Jairí Beach, MZUESC 7; 1m, 06.VI.2003, Ilhéus, Olivença, Sirihya Beach, MZUESC 171; 2m, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 208; 1m, 07.V.2004, Ilhéus, Milionários Beach, Morro dos Navegantes, MZUESC 379; 2m, 07.V.2004, Ilhéus, Olivença, Back-door Beach, MZUESC 382; 1f, 10.VII.2004, Ilhéus, Olivença, Sirihya Beach, MZUESC 472; 1m, 27.IV.2005, Ilhéus, Malhado Beach, MZUESC 503; 1m, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1046. See also material cited by Almeida *et al.* (2006) as *C. larvatus* Ordway, 1863.

Distribution: Western Atlantic: Bermuda, North Carolina to Florida, Gulf of Mexico, West Indies, northern South America, and Brazil (Pará to São Paulo) (Melo, 1996, as *C. larvatus*; Barros *et al.*, 1997b, as *C. larvatus*).

Ecological notes: Intertidal to 25 m (Melo, 1996, as *C. larvatus*). In beaches, on sand or rocky bottoms, also in areas close to river mouths. Salinity range: 24-35.

Previous records in Bahia: *Callinectes larvatus* – Smith (1869); Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively; Almeida & Coelho (2008). *Callinectes marginatus* – Moreira (1901); Rathbun (1930), Porto Seguro (Thayer Exp., St. 102) and Rio Vermelho (Salvador, Hartt Explorations); Rodrigues da Costa (1968), St. 1831 (R/V Calypso, 20 m); Williams (1974), Plataforma (Salvador, Hartt Explorations), Madre de Deus Island and Ilhéus. *Callinectes danae* – Rathbun (1930) (in part), material from Plataforma (Salvador) (see Williams, 1974).

Callinectes ornatus Ordway, 1863

Material examined: 1f, 18.V.2007, Santa Cruz Cabralia, Coroa Vermelha Beach, manual trawl, MZUESC 954; 1m, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 960. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: Shallow waters to 75 m, on sand and mud bottoms (Melo, 1996). The species was collected in shallow waters in estuaries, near river mouths. Salinity range: 36-39.

Previous records in Bahia: Smith (1869), Caravelas; Gouvêa & Leite (1980), Salvador; Gouvêa (1986b), Salvador; Coelho & Ramos-Porto (1992); Barreto *et al.* (1993); Almeida *et al.* (2006), Ilhéus, in estuaries; Almeida *et al.* (2007a, 2007b), Camamu Bay and Ilhéus (15-20 m), respectively; Almeida & Coelho (2008).

Callinectes sapidus Rathbun, 1896

Material examined: See material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Massachusetts southwards, Central America, West Indies, Venezuela, Brazil (Alagoas to Rio Grande do Sul) to Argentina. Eastern Atlantic: Mediterranean, Adriatic, and Black seas. Western Pacific: Japan (Williams, 1984a; Melo, 1996; Calado, 2000).

Ecological notes: In estuaries, lagoons, bays, and fresh water (Melo, 1996).

Previous records in Bahia: *Callinectes sapidus acutidens* Rathbun, 1896 – Rathbun (1896, 1930), Santa Cruz (Thayer Exp.). *Callinectes sapidus* – Almeida *et al.* (2006), Ilhéus; Almeida *et al.* (2008b), Ilhéus and Itacaré (in fresh water); Almeida & Coelho (2008).

Remarks: Rathbun (1896) described the subspecies *C. sapidus acutidens* from material collected in Santa Cruz (= Santa Cruz Cabralia, near Porto Seguro) during the Thayer Expedition. However, the subspecies status of this form was invalidated by Williams (1974).

Subfamily Thalamitinae Paul'son, 1875

Charybdis hellerii (A. Milne-Edwards, 1867)

Material examined: 2m, 01.VIII.2008, Cairú, Boipeba Island, Triana River, MZUESC 1275; 2m, 1f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 961; 8m, 4f, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 964; 5m, 4f, 29.VIII.2007, Caravelas, Caravelas River, Barra de Caravelas, St. 4, MZUESC 968; 1f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 1091. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Florida, Cuba, Colombia, Venezuela, French Guyana, and Brazil (Maranhão to Santa Catarina). Eastern Mediterranean: Egypt and Israel. Widely distributed in the Indo-Pacific (Mantelatto & Dias, 1999; Tavares & Amouroux, 2003; Feres *et al.*, 2007).

Ecological notes: Intertidal to 51 m. Mainly on soft bottoms, but also on hard substrata such as rocks and coral (Lemaitre, 1995). In the southern Bahia, the species was collected in estuaries, on a mud bottom, on a sand-mud bottom with broken shells, under tree trunks and rubble, and on the octocoral *Carijoa riisei* on a jetty. Salinity range: 24-38.

Previous records in Bahia: Carqueija & Gouvêa (1996), Todos os Santos Bay; Almeida *et al.* (2003, 2007a), Camamu Bay; Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Remarks: Invasive swimming-crab, a native of the Indo-Pacific (Campos & Turkay, 1989; Lemaitre, 1995), a good example of a successful introduced marine species in the western Atlantic (Tavares & Amouroux, 2003). It was recorded for the first time on the coast of Bahia by Carqueija & Gouvêa (1996), in Todos os Santos Bay. Later, Almeida *et al.* (2003) obtained a specimen in Camamu Bay. A juvenile crab was collected in the estuary of Cachoeira River, Ilhéus (Almeida *et al.* 2006). Almeida *et al.* (2007a) reported the collection of 16 specimens at five stations, from July 2003 to September 2005, at Camamu Bay. Here we report the occurrence of *C. hellerii* at two additional localities, Boipeba Island and Caravelas. It appears that this crab is extremely abundant in the estuary of the Caravelas River, where it was found in a wide variety of microhabitats, including on the octocoral *C. riisei*. On the coast of Bahia the species has been reported only in bays and estuaries with wide mouths, with a strong marine influence.

Superfamily Xanthoidea MacLeay, 1838

Family Panopeidae Ortmann, 1893

Subfamily Panopeinae Ortmann, 1893

Acantholobulus bermudensis (Benedict & Rathbun, 1891)

Material examined: 1m, 17.VIII.2007, Maraú, Tanque Island, T1, MZUESC 1099; 44m, 37f, 12ni, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 1092; 3m, 3f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, near St. 2, MZUESC 821; 4m, 2f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 2, MZUESC 825; 18m, 11f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 3, MZUESC 839.

Distribution: Western Atlantic: Bermuda, Florida, Gulf of Mexico, West Indies, northern South America, and Brazil (Ceará to Santa Catarina) (Melo, 1996, as *Panopeus bermudensis*; Felder & Martin, 2003).

Ecological notes: Intertidal to 15 m, in tide pools on rocky substrata, under rocks, and on oyster beds (Melo, 1996, as *P. bermudensis*). On sand and rocks, on polychaete sand reefs (probably Sabellariidae), among barnacles on a jetty, and on the octocoral *Carijoa riisei*. Depth range: 0-0.5 m. Salinity range: 28-36.

Previous records in Bahia: *Panopeus bermudensis* – Rathbun (1930), Bonfim (Salvador, Hartt Explorations); Joly *et al.* (1969), Abrolhos. *Acantholobulus bermudensis* – Almeida & Coelho (2008).

Remarks: Felder & Martin (2003) designated *Panopeus bermudensis* the type species of the genus, *Acantholobulus*.

Acantholobulus caribbaeus (Stimpson 1871)

Material examined: 1m, 3f, 01.VIII.2008, Cairú, Boipeba Island, Triana River, MZUESC 1276; 3m, 12.IX.2006, Maraú, Maraú River, MZUESC 1112; 1ni, 04.III.2004, Ilhéus, Acuípe River, St. 4, MZUESC 338; 4m, 1juv, 07.V.2008, Canavieiras, Patipe River, MZUESC 1241; 4juv, 09.III.2008, Belmonte, Mojiquicaba River, MZUESC 1184. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: Intertidal to 55 m (Melo, 1996). On sand and mud bottoms, on decomposing material in general (leaves, tree trunks, and plants) in the intertidal and subtidal, on dead algae and fluid mud in the shallow subtidal, under rubble, and on *Crassostrea rhizophorae* beds. Salinity range: 3-36.

Previous records in Bahia: *Hexapanopeus caribbaeus* – Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Remarks: The molecular phylogenetic analysis performed by Thoma *et al.* (2009) strongly supported the inclusion of *H. caribbaeus* within the genus *Acantholobulus*.

Acantholobulus schmitti (Rathbun, 1930)

Material examined: 1m, 1f, 16.V.2007, Santa Cruz Cabralia, Coroa Vermelha Beach (reef), MZUESC 887; 2m, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 920; 1m, 17.V.2007, Porto Seguro, Buranhem River, Municipal Pier of Porto Seguro,

MZUESC 928; 1m, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1075; 1m, 1f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 2, MZUESC 826. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Brazil (Ceará to Santa Catarina), Uruguay, and Argentina (Melo, 1996, as *Hexapanopeus schmitti*; Williams & Boschi, 1990, as *Panopeus margentus* Williams & Boschi, 1990).

Ecological notes: Intertidal to 25 m, on sand, mud, and shell bottoms (Melo, 1996, as *H. schmitti*). In reefs, on sand and rocks, also on *Sargassum* sp. Salinity range: 19-39.

Previous records in Bahia: *Hexapanopeus schmitti* – Rathbun (1930), Bonfim (Salvador, Hartt Explorations); Gouvêa & Leite (1980), Itaparica Island; Gouvêa (1986a), Salvador. *Acantholobulus schmitti* – Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Remarks: *H. schmitti* was included in the new genus *Acantholobulus*, together with *Panopeus bermudensis* (Felder & Martin, 2003).

Eurypanopeus abbreviatus (Stimpson, 1860)

Material examined: 1m, 3f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1312; 1m, 13.XI.2006, Maráu, Ponta do Mutá, MZUESC 780; 5m, 4f, 05.V.2008, Itacaré, Concha Beach, mouth of Contas River, MZUESC 1209; 1m, 06.VI.2003, Ilhéus, Olivença, Sirihya Beach, MZUESC 182; 2m, 2f, 06.VI.2003, Ilhéus, Olivença, Sirihya Beach, MZUESC 183; 1m, 27.IV.2005, Ilhéus, Malhado Beach, MZUESC 504; 1m, 1f, 14.III.2007, Ilhéus, River Cachoeira, Maramata Beach, MZUESC 854. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: South Carolina, Gulf of Mexico, West Indies, northern South America, and Brazil (Ceará to Rio Grande do Sul) (Williams, 1984a; Melo, 1996).

Ecological notes: Intertidal to 5 m (Melo, 1996). In reefs, in tide pools, under rocks, and in crevices of dead coral. Also in estuaries, close to river mouths, always on hard substrata. Salinity range: 25-39.

Previous records in Bahia: *Panopeus politus* Smith, 1869 – Smith (1869), Abrolhos. *Eurypanopeus abbreviatus* – Rathbun (1930) (Hartt Explorations); Joly *et al.* (1969), Abrolhos; Gouvêa (1986a); Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Remarks: First recorded from Bahia as *P. politus* (type locality Abrolhos) (Smith, 1869), a junior synonym of *E. abbreviatus* (see Rathbun, 1930).

Eurytium limosum (Say, 1818)

Material examined: 1m, 12.XI.2006, Maráu, Campinho Island, St. 2, MZUESC 762; 1m, 08.V.2008, Una, Comandatuba Village, MZUESC 1251; 1m, 06.V.2008, Canavieiras, Pardo River, MZUESC 1222; 1f, 19.III.2007, Nova Viçosa, Peruípe River, MZUESC 846. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: Intertidal and shallow subtidal. On mud beaches and mainly in mangroves (Melo, 1996). Generally under rocks and tree trunks on mud bottoms, rarely on fine sand. Salinity range: 7-35.

Previous records in Bahia: *Eurytium limosum* – Rathbun (1930), Plataforma (Salvador, Hartt Explorations) and Ilhéus; Gomes Corrêa (1972), Abrolhos; Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008). *Erytium limosum* (misspelled) – Joly *et al.* (1969), Abrolhos.

Hexapanopeus angustifrons (Benedict & Rathbun, 1891)

Material examined: 1m, 17.VIII.2007, Maráu, Tanque Island, T1, MZUESC 1100.

Distribution: Western Atlantic: Massachusetts to Florida, Gulf of Mexico, West Indies, and Brazil (Pernambuco to Santa Catarina) (Powers, 1977; Melo, 1996).

Ecological notes: Shallow waters to 140 m, on sand, mud, shell, and gravel bottoms (Melo, 1996). The specimen analyzed was collected at 0.5 m depth and a salinity of 32.

Previous records in Bahia: Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Panopeus americanus Saussure, 1857

Material examined: 2m, 2f, 2juv, 05.V.2008, Itacaré, Concha Beach, mouth of Contas River, MZUESC 1210; 1m, 18.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 941; 1f, 08.III.2008, Santa Cruz Cabrália, João de Tiba River, near Santo André Beach, MZUESC 1178.

Distribution: Western Atlantic: Florida, Gulf of Mexico, West Indies, northern South America, and Brazil (Pará to Rio Grande do Sul) (Melo, 1996; Barros *et al.*, 1997b; Barutot *et al.*, 1998).

Ecological notes: Intertidal to 25 m, under rocks, on mud beaches and in mangroves, on sand, mud, and shell bottoms (Melo, 1996). Salinity range: 25-39.

Previous records in Bahia: Rathbun (1930), Plataforma and Bonfim (Salvador, Hartt Explorations); Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos; Gouvêa (1986b), Candeias; Almeida & Coelho (2008).

Panopeus harttii Smith, 1869

Material examined: 2m, 6f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1313; 2m, 3f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1314; 1m, 3f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1315; 9m, 9f, 03.VIII.2008, Cairú, Boipeba Island, Tassimirim Beach, MZUESC 1329; 2f, 03.VIII.2008, Cairú, Boipeba Island, Tassimirim Beach, MZUESC 1330; 1m, 2f, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 888; 1f, 07.III.2008, Santa Cruz Cabrália, João de Tiba River mouth (reef), MZUESC 1163.

Distribution: Western Atlantic: Florida, West Indies, and Brazil (Maranhão to São Paulo). Central Atlantic: Ascension (Manning & Chace, 1990; Melo, 1996).

Ecological notes: Shallow waters to 25 m (Melo, 1996). In reefs, under rocks in tide pools (on sediment with mixed mud, coarse sand, and biogenic material), in crevices of rocks and dead coral, on calcareous algae blocks, and on *Halimeda* sp. Salinity range: 33-40.

Previous records in Bahia: *Panopeus Harttii* (sic) – Smith (1869), Abrolhos. *Panopeus harttii* – Moreira (1901); Rathbun (1930), Plataforma (Salvador, Hartt Explorations) and Abrolhos; Coelho Filho & Coelho (1996); Barreto *et al.* (1993); Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008). *Panopeus hartii* (misspelled) – Joly *et al.* (1969), Abrolhos.

Remarks: The type-locality of this species is the Abrolhos Archipelago, Bahia (Smith, 1869).

Panopeus lacustris Desbonne, *in* Desbonne & Schramm, 1867

Material examined: 1juv, 02.VIII.2008, Cairú, Boipeba Island, Oritiba River, MZUESC 1283; 1m, 1f, 11.XI.2006, Maraú, Taipus de Dentro, MZUESC 749; 1m, 09.XI.2006, Maraú, Maraú River, MZUESC 1114; 1m, 2f, 05.V.2008, Itacaré, Concha Beach, mouth of Contas River, MZUESC 1211; 4m, 2f, 14.III.2007, Ilhéus, Cachoeira River, Maramata Beach, MZUESC 855; 1f, 08.V.2008, Una, Coman-

datuba Village, MZUESC 1252; 1m, 2f, 06.V.2008, Canavieiras, Pardo River, MZUESC 1223; 6m, 6f, 9juv, 16.V.2007, Santa Cruz Cabrália, João de Tiba River, MZUESC 859; 2m, 4f, 08.III.2008, Santa Cruz Cabrália, João de Tiba River, near Santo André Beach, MZUESC 1179; 4m, 4f, 17.V.2007, Porto Seguro, Buranhem River, Municipal Pier of Porto Seguro, MZUESC 929; 10m, 9f, 18juv, 17.V.2007, Porto Seguro, Buranhem River, Municipal Pier of Porto Seguro, MZUESC 930; 3m, 3f, 22.XI.2007, Prado, Barra do Cahy, MZUESC 1051; 1m, 30.VIII.2007, Alcobaça, Itanhem River, St. 1, MZUESC 1028; 9m, 5f, 30.VIII.2007, Alcobaça, Itanhem River, St. 2, MZUESC 1031; 1m, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 977; 1m, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 978; 1f, 30.VIII.2007, Caravelas, Pontal do Sul, MZUESC 1023; 1m, 1f, 19.III.2007, Nova Viçosa, Peruípe River, MZUESC 847; 1f, 18.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 802. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: Under rocks and rubble (on mud and fine sand) and inside decayed tree trunks in the intertidal and shallow-subtidal. *Panopeus lacustris* and the grapsid *Pachygrapsus gracilis* (Saussure, 1858) are the two most abundant decapods on *Crassostrea rhizophorae* beds attached to tree trunks, rocks, jetties, and on *Rhizophora mangle* roots. Salinity range: 4-37.

Previous records in Bahia: *Panopeus Herbstii* (sic) *granulosus* A. Milne-Edwards, 1880 – A. Milne-Edwards (1880a). *Panopeus Herbstii* (sic) H. Milne-Edwards, 1834 – A. Milne-Edwards (1880b). *Panopeus crassus* A. Milne-Edwards (1880) – A. Milne-Edwards (1880b, 1881). *Panopeus herbstii* forma *crassa* – Rathbun (1930), Plataforma (Salvador) and Mapele (Simões Filho) (Hartt Explorations). *Panopeus herbstii* forma *obesa* – Rathbun (1930), Ilhéus. *Panopeus herbstii* – Joly *et al.* (1969) and Gomes Corrêa (1972), Abrolhos. *Panopeus lacustris* – Williams (1984b); Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively; Almeida & Coelho (2008).

Remarks: Williams (1984b) analyzed photographs of a syntype of *P. crassus* collected in Bahia (A. Milne-Edwards, 1880b, 1881), deposited in the Muséum National d'Histoire Naturelle, Paris, concluding that this individual is, in fact, a specimen of *P. lacustris*. Thus, the two species were considered synonyms. Williams (1984b) also attributed to *P.*

lacustris the records of *P. Herbstii* var. *granulosus*, *P. Herbstii*, and *P. herbstii* forma *crassa* from Bahia (A. Milne-Edwards, 1880a, 1880b; Rathbun, 1930).

Panopeus occidentalis Saussure, 1857

Material examined: 1m, 10.VII.2004, Ilhéus, Olivença, Sirihyba Beach, MZUESC 476. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: North Carolina, Florida, Central America, West Indies, northern South America, and Brazil (Pernambuco to Rio Grande do Sul) (Powers, 1977; Melo, 1996).

Ecological notes: Intertidal to 18 m. On sand, shell, rock, and gravel bottoms; also among ascidians, sponges, and seaweed (Powers, 1977; Melo, 1996).

Previous records in Bahia: Gouvêa (1986b), Salvador and Candeias; Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Panopeus rugosus A. Milne-Edwards, 1880

Material examined: 1m, 30.VIII.2007, Alcobaça, Itanhem River, St. 2, MZUESC 1032. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: In estuaries, in the intertidal and shallow subtidal, under tree trunks, rocks, and rubble, and inside decaying tree trunks. Salinity range: 25. Also found in fresh water (Almeida *et al.* 2008b).

Previous records in Bahia: A. Milne-Edwards (1881); Moreira (1901); Rathbun (1930), Cannaveiras (= Canavieiras) (Thayer Exp., St. 090); Almeida *et al.* (2006, 2007a), Ilhéus and Camamu Bay, respectively; Almeida *et al.* (2008b), Ilhéus (in fresh water); Almeida & Coelho (2008).

Remarks: The type locality of this species is "Bahia" (A. Milne-Edwards, 1881).

Family Xanthidae MacLeay, 1838
Subfamily Xanthinae MacLeay, 1838

Cataleptodius floridanus (Gibbes, 1850)

Material examined: 3m, 2f, 02.VIII.2008, Cairú, Boipeba Island, Moreré Beach, MZUESC 1316; 1f, 03.VIII.2008, Cairú, Boipeba Island, Tassimirim Beach, MZUESC 1332; 3m, 13.XI.2006, Marau, Ponta do Mutá, MZUESC 781; 1m, 05.V.2008, Itacaré, Concha Beach, mouth of Contas River, MZUESC 1208; 1m, 18.VII.2003, Ilhéus, Olivença,

Back-door Beach, MZUESC 234; 1f, 06.VI.2003, Ilhéus, Olivença, Sirihyba Beach, MZUESC 242; 1m, 10.VII.2004, Ilhéus, Olivença, Sirihyba Beach, MZUESC 475.

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

Ecological notes: Shallow waters to 100 m (Melo, 1996). Always on hard substrata, in tide-pools, under rocks, in crevices of dead coral, and in calcareous algae blocks. Salinity range: 25-39.

Previous records in Bahia: *Chlorodius Floridanus* (sic) – Smith (1869), Abrolhos. *Leptodius floridanus* – Rathbun (1898), Abrolhos (*Albatross* Exp.); Moreira (1901); Rathbun (1930), Bonfim and Plataforma (both localities in Salvador, Hartt Explorations); Gomes Corrêa (1972), Abrolhos; Gouvêa (1986a), Lauro de Freitas, Salvador, and Itaparica Island; Gouvêa (1986b), Salvador and Itaparica Island. *Cataleptodius floridanus* – Almeida & Coelho (2008).

Xanthodius denticulatus (White, 1848)

Material examined: 1f, 07.V.2004, Ilhéus, Olivença, Back-door Beach, MZUESC 471.

Distribution: Western Atlantic: Bermuda, Florida, Gulf of Mexico, West Indies, Venezuela, and Brazil (São Pedro and São Paulo Archipelago, and from Ceará to São Paulo). Central Atlantic: Ascension. Eastern Atlantic: Ghana and some islands in the Gulf of Guinea (Manning & Chace, 1990; Melo, 1996; Alves *et al.*, 2006).

Ecological notes: Intertidal to 15 m, in tide pools, on coral reefs, and under rocks (Melo, 1996).

Previous records in Bahia: *Xantho denticulata* – Smith (1869), Abrolhos. *Cycloxanthops denticulatus* – Rathbun (1898), Abrolhos (*Albatross* Exp.). *Xanthodius denticulatus* – Rathbun (1930), Abrolhos (*Albatross* Exp.); Gomes Corrêa (1972), Abrolhos; Coelho Filho & Coelho (1996); Almeida & Coelho (2008).

Subsection Thoracotremata Guinot, 1977
Superfamily Cryptochiroidea Paul'son, 1875
Family Cryptochiridae Paul'son, 1875

Troglocarcinus corallicola Verrill, 1908 (Fig. 4)

Material examined: 1m, 1f, 16.V.2007, Santa Cruz Cabralia, Coroa Vermelha Beach (reef), MZUESC

892; 1m, 17.V.2007, Porto Seguro, Mutá Beach (reef), MZUESC 922.

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

Ecological notes: Shallow waters to 75 m, in corals of the families Astrocoeniidae, Siderastreidae, Faviidae, Oculinidae, Meandrinidae, Mussidae, and Caryophylliidae (Kropp & Manning, 1987; Melo, 1996). The specimens were collected in reef areas, forming galls in the coral *Mussismilia hispida* (Verrill, 1901) (Anthozoa: Mussidae) (Fig. 4b), at a salinity of 39.

Previous records in Bahia: Utinomi (1944); Coelho (1966); Coelho & Ramos (1972); Barreto *et al.* (1993); Almeida & Coelho (2008).

Remarks: Some records of *T. corallicola* in hosts of the family Agariciidae in northeastern Brazil are doubtful (Coelho, 1966; Coelho & Ramos, 1972). The species involved is probably another cryptochirid known from the Brazilian coast, *Opecarcinus hypostegus* (Shaw & Hopkins, 1977) (see Kropp & Manning, 1987). The association of this gall-crab with *M. hispida* was documented by Coelho (1966) (as *M. cf. tenuisepta*, see Kropp & Manning, 1987 and Nogueira, 2003).

Superfamily Grapsoidea MacLeay, 1838
Family Gecarcinidae MacLeay, 1838

Cardisoma guanhum Latreille, 1825

Material examined: See material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Bermuda, Florida, Gulf of Mexico, West Indies, northern South America, and Brazil (Amapá to São Paulo) (Melo, 1996; Lima *et al.*, 2009).

Ecological notes: Semi-terrestrial species, found in the upper tidal zone of estuarine channels, in burrows in sand-mud substrata (Melo, 1996, Calado & Sousa, 2003). Burrows of *G. guanhum* were observed in the upper tidal zone in several estuaries visited. Some specimens were seen in a burrow opening or close to it, in parts of the river with no tidal influence.

Previous records in Bahia: Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008).

Remarks: *G. guanhum* has been known from Bahia since the book “Tratado Descritivo do Brasil em 1587”, literally “Descriptive Treatise of Brazil in 1587”, by Gabriel Soares de Sousa, first published in 1851. Sousa’s work intended mainly to bring to the attention of the Portuguese authorities the richness of the land of Bahia, the risks of its occupation by foreigners, and the benefits of an expedition to better explore Brazil. The book includes detailed information on diverse themes such as physical geography, mineralogy, ethnology, zoology, and botany. Several decapods, including freshwater, estuarine, and marine species are mentioned. Sousa mentioned *Cardisoma guanhum* as a large blue land crab, called “guoanhamu” by the Native Americans (see Tavares, 1993).

Family Grapsidae MacLeay, 1838
Subfamily Grapsinae MacLeay, 1838

Goniopsis cruentata (Latreille, 1803)

Material examined: 1m, 1f, 11.XI.2006, Maraú, Taipus de Dentro, MZUESC 753; 1m, 12.XI.2006, Maraú, Campinho Island, St. 1, MZUESC 759; 1m, 2f, 3juv, 22.XI.2007, Prado, Barra do Cahy, MZUESC 1055; 1m, 30.VIII.2007, Alcobaça, Itanhem River, St. 2, MZUESC 1033; 2m, 18.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 795. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: From the upper tidal to intertidal. In estuaries, on mud and hard substrata, in decaying tree trunks, and also climbing mangrove roots and trunks. Salinity range: 12-25.

Previous records in Bahia: *Goniopsis cruentatus* – Smith (1869) and Moreira (1901), Abrolhos. *Goniopsis cruentata* – Rathbun (1918), Plataforma (Salvador, Hartt Explorations); Gouvêa (1986b), Candeias, Simões Filho, and Itaparica Island; Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008).

Remarks: Mentioned by Sousa (2001) in his book “Tratado Descritivo do Brasil em 1587” as “guaiararas” (brightly-colored species living in brackish waters) (see Tavares, 1993).

Pachygrapsus gracilis (Saussure, 1858)

Material examined: 1m, 01.VIII.2008, Cairú, Boipeba Island, Velha Boipeba Harbor, MZUESC 1262; 2m,

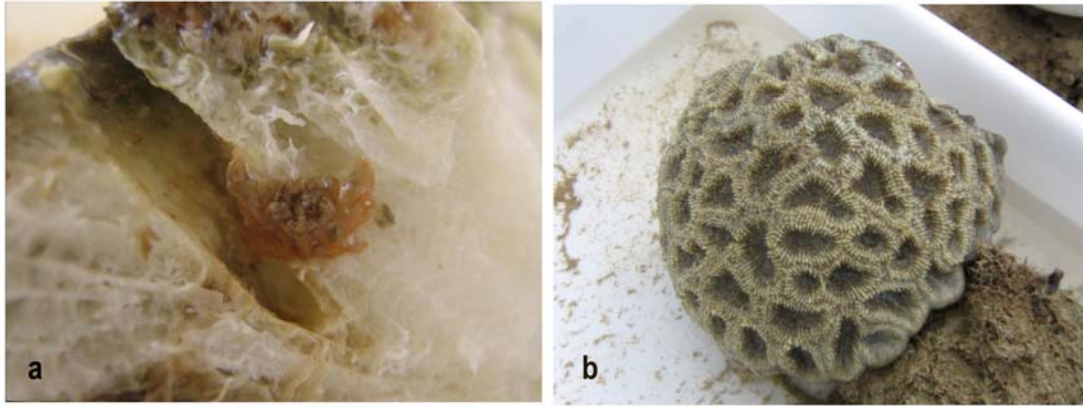


Figure 4. a) *Troglorcarinus corallicola* Verrill, 1908 extracted from a coral gall on Coroa Vermelha Beach, Santa Cruz Cabrália, Bahia, Brazil (MZUESC 892), b) *Mussismilia hispida* (Verrill, 1901), coral host of *Troglorcarinus corallicola* on Coroa Vermelha Beach, Santa Cruz Cabrália, Bahia, Brazil. Photos by LEA Bezerra.

Figura 4. a) *Troglorcarinus corallicola* Verrill, 1908 extraído de una pústula de coral en la Playa de Coroa Vermelha, Santa Cruz Cabrália, Bahia, Brasil (MZUESC 892), b) *Mussismilia hispida* (Verrill, 1901), coral hospedero de *Troglorcarinus corallicola* en la Playa de Coroa Vermelha, Santa Cruz Cabrália, Bahia, Brasil. Fotos de LEA Bezerra.

2f, 1ni, 01.VIII.2008, Cairú, Boipeba Island, Triana River, MZUESC 1279; 2m, 02.VIII.2008, Cairú, Boipeba Island, Oritiba River, MZUESC 1286; 1f, 02.VIII.2008, Cairú, Boipeba Island, Oritiba River, MZUESC 1287; 1m, 2f, 11.XI.2006, Maraú, Taipus de Dentro, MZUESC 754; 2f, 12.XI.2006, Maraú, Campinho Island, St. 1, MZUESC 760; 1m, 12.XI.2006, Maraú, Campinho Island, St. 2, MZUESC 765; 1m, 06.VI.2003, Ilhéus, Olivença, Sirihyba Beach, MZUESC 172; 3m, 4f, 1juv, 14.III.2007, Ilhéus, Cachoeira River, Maramata Beach, MZUESC 856; 1m, 1f, 08.V.2008, Una, Comandatuba Village, MZUESC 1257; 2m, 3f, 1juv, 06.V.2008, Canavieiras, Pardo River, MZUESC 1227; 9m, 15f, 19juv, 16.V.2007, Santa Cruz Cabrália, João de Tiba River, MZUESC 861; 2m, 1f, 08.III.2008, Santa Cruz Cabrália, João de Tiba River, near Santo André Beach, MZUESC 1180; 53ni, 17.V.2007, Porto Seguro, Buranhem River, Municipal Pier of Porto Seguro, MZUESC 931; 1m, 1f, 22.XI.2007, Prado, Barra do Cahy, St. 2, MZUESC 1056; 1m, 7f, 30.VIII.2007, Alcobaça, Itanhem River, St. 1, MZUESC 1030; 3m, 2f, 30.VIII.2007, Alcobaça, Itanhem River, St. 2, MZUESC 1034; 1m, 1f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 981; 1f, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 997; 1m, 2f, 30.VIII.2007, Caravelas, Pontal do Sul, MZUESC 1026; 4m, 1f, 30.VIII.2007, Caravelas, Pontal do Sul, MZUESC 1027; 2m, 7f, 17-18.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 805. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: Frequently found in decaying tree trunks in the intertidal and shallow-subtidal, on mud and sand bottoms in the intertidal, also on and under rocks and rubble. Together with *Panopeus lacustris* it is one of the most abundant decapods found in *Crassostrea rhizophorae* beds attached to trunks, rocks, jetties, and *Rhizophora mangle* roots. Salinity range: 4-37.

Previous records in Bahia: Rathbun (1918), Plataforma (Salvador, Hartt Explorations); Gouvêa (1986b), Salvador, Candeias, Simões Filho, and Ilha de Maré; Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Pachygrapsus transversus (Gibbes, 1850)

Material examined: 1m, 13.XI.2006, Maraú, Ponta do Mutá, MZUESC 782; 1f, 05.V.2008, Itacaré, Concha Beach, mouth of Contas River, MZUESC 1212; 2m, 2f, 10.VIII.2002, Ilhéus, Olivença, Jairí Beach, MZUESC 34; 2m, 07.VI.2003, Ilhéus, Milionários Beach, sandstone reef in front of Opaba Hotel, MZUESC 170; 9m, 4f, 06.VI.2003, Ilhéus, Olivença, Sirihyba Beach, MZUESC 173; 2m, 11.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 215; 2m, 1f, 18.VII.2003, Ilhéus, Olivença, Back-door Beach, MZUESC 227; 4m, 1f, 07.V.2004, Ilhéus, Milionários Beach, Morro dos Navegantes, MZUESC

381; 2m, 3f, 10.VII.2004, Ilhéus, Olivença, Sirihya Beach, MZUESC 474; 9m, 4f, 28.IV.2005, Ilhéus, Olivença, Batuba Beach, MZUESC 505; 1m, 27.IV.2005, Ilhéus, Malhado Beach, MZUESC 507; 1f, 14.III.2007, Ilhéus, Cachoeira River, Maramata Beach, MZUESC 857; 2f, 16.V.2007, Santa Cruz Cabralia, Coroa Vermelha Beach (reef), MZUESC 894; 2m, 1f, 17.V.2007, Porto Seguro, Buranhem River, Municipal Pier of Porto Seguro, MZUESC 932; 1f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 982; 1m, 1f, 28.VIII.2007, Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2, MZUESC 998; 1m, 2f, 29.VIII.2007, Caravelas, Caravelas River, Ponta de Areia, St. 3, MZUESC 1004; 1f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 1094; 2f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, St. 2, MZUESC 827; 1m, 2f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, near St. 3, MZUESC 843. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Bermuda, Massachusetts to Florida, Gulf of Mexico, West Indies, northern South America, Brazil (Trindade Island, and from Ceará to Rio Grande do Sul), and Uruguay. Eastern Atlantic: southern Portugal to Namibia, including Madeira Island, Canary Islands, and Cape Verde. Mediterranean: Alboran Sea to Levantine Basin (Melo, 1996; Poupin *et al.*, 2005; Schubart *et al.*, 2005).

Ecological notes: In the intertidal, mainly on hard bottoms, including *Crassostrea rhizophorae* beds (attached to jetties and *Rhizophora mangle* roots) and tree trunks in the intertidal, also on sand and rocks and on the octocoral *Carijoa riisei*. Salinity range: 19-39.

Previous records in Bahia: Rathbun (1898), Abrolhos (*Albatross* Exp., inland); Moreira (1901); Rathbun (1918), Plataforma (Salvador, Hartt Explorations) and Abrolhos (*Albatross* Exp., inland); Gouvêa (1986a), Lauro de Freitas, Salvador, and Itaparica Island; Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Family Sesarmidae Dana, 1851

Aratus pisonii (H. Milne-Edwards, 1837)

Material examined: 1f, 02.VIII.2008, Cairú, Boipeba Island, Oritiba River, MZUESC 1288; 1m, 1f, 11.XI.2006, Maráu, Taipus de Dentro, MZUESC 755; 2f, 12.XI.2006, Maráu, Campinho Island, St. 1, MZUESC 761; 1f, 12.X.2006, Maráu, Maráu River, MZUESC 1113; 2f, 09.XI.2006, Maráu, Maráu River, MZUESC 1115; 2f, 18.III.2007, Nova Viçosa, Peruípe River, MZUESC 851; 2f, 18.III.2007, Mucuri, Mucuri

River, St. 1, MZUESC 806. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Florida, Gulf of Mexico, West Indies, northern South America, and Brazil (Pará to São Paulo). Eastern Pacific: Nicaragua to Peru (Melo, 1996; Barros *et al.*, 1997b).

Ecological notes: In estuaries, on rocks, jetties, on *Crassostrea rhizophorae* beds, and climbing mangrove trees (*Rhizophora mangle*). Salinity range: 4-20.

Previous records in Bahia: Rathbun (1918), Mapelle, "Bay of Bahia" (= Mapele, Todos os Santos Bay, Hartt Explorations); Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Remarks: *A. pisonii* was cited in the book "Tratado Descritivo do Brasil em 1587" as "aratus". The climbing habits of this species are mentioned (see Tavares, 1993).

Armases angustipes (Dana, 1852)

Material examined: 1m, 3f, 11.XI.2006, Maráu, Taipus de Dentro, MZUESC 756; 5f, 12.XI.2006, Maráu, Campinho Island, St. 2, MZUESC 766; 2m, 03.II.2005, Itacaré, Ribeira Beach, MZUESC 790; 4m, 2f, 07.V.2008, Canavieiras, Patipe River, MZUESC 1245; 1m, 1f, 07.V.2008, Canavieiras, Patipe River, MZUESC 1247; 1m, 3f, 30.VIII.2007, Prado, Jucuruçu River, St. 1, MZUESC 1042; 3m, 1f, 2juv, 22.XI.2007, Prado, Barra do Cahy, MZUESC 1057; 1m, 2f, 1ni, 24.XI.2007, Prado, Jucuruçu River, St. 3, MZUESC 1082; 4m, 3f, 24.XI.2007, Prado, Jucuruçu River, St. 3, MZUESC 1083; 1m, 1f, 18.III.2007, Nova Viçosa, Peruípe River, MZUESC 850; 4m, 4f, 17.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 807; 5m, 17.III.2007, Mucuri, Mucuri River, St. 2, MZUESC 813. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Mexico, West Indies, and Brazil (Pará to Santa Catarina) (Melo, 1996; Barros *et al.*, 1997b).

Ecological notes: In the upper and intertidal zones, among herbaceous plants, and in the leaf litter on the edge of the mangrove, on hard substrata (rarely), mud and sand, and inside tree trunks. Salinity range: 4-38.

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

Itaparica Island and Salvador; Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

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

Armases rubripes (Rathbun, 1897)

Material examined: 1f, 22.II.2005, Ilhéus, Almada River, St. 2, MZUESC 1043; 1f, 07.V.2008, Canavieiras, Patipe River, MZUESC 1246; 2m, 1f, 24.XI.2007, Prado, Jucuruçu River, St. 3, MZUESC 1084; 2m, 24.XI.2007, Prado, Jucuruçu River, St. 3, MZUESC 1085; 2m, 2f, 17.III.2007, Mucuri, Mucuri River, St. 2, MZUESC 814. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: In the upper tidal zone, among herbaceous plants on the mangrove border, on sand and mud, and inside decaying tree trunks in the intertidal. Some specimens (from the Almada River) were collected in a part of the river without tidal influence, above the water level, where other crabs were also collected or seen, including *Cardisoma guanhumi*, *Uca (Minuca) mordax* (Smith, 1870), and *Ucides cordatus*. Salinity range: 7-35.

Previous records in Bahia: *Sesarma mülleri* A. Milne-Edwards, 1869 – Miers (1886), Salvador (*Challenger* Exp., inland). *Sesarma (Holometopus) rubripes* – Rathbun (1897). *Sesarma rubripes* – Moreira (1901). *Metasesarma rubripes* – Abele (1972a). *Armases rubripes* – Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

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

Sesarma curacaoense De Man, 1892

Material examined: 1m, 12.XI.2006, Maráu, Campinho Island, St. 2, MZUESC 767; 1f, 08.V.2008, Una, Comandatuba Village, MZUESC 1258; 1m, 30.VIII.2007, Alcobaça, Itanhem River, St. 3,

MZUESC 1039; 3f, 1juv, 18.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 808. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Florida, West Indies, Panama, and Brazil (from Pará to Espírito Santo) (Abele, 1992; Prado, 1999).

Ecological notes: In the upper and intertidal zones, on fine sand and mud, under rocks, among herbaceous plants between the mangrove and the adjacent Restinga forest (coastal scrub forest), and inside tree trunks. Salinity range: 12-35.

Previous records in Bahia: Rathbun (1918) and Abele (1992), Mapele, “Bay of Bahia” (= Mapele, Todos os Santos Bay, Hartt Explorations); Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008), Mucuri.

Sesarma rectum Randall, 1840

Material examined: 3m, 12.XI.2006, Maráu, Campinho Island, St. 2, MZUESC 768; 1f, 06.V.2008, Canavieiras, Pardo River, MZUESC 1228; 1m, 07.V.2008, Canavieiras, Patipe River, MZUESC 1248; 2f, 22.XI.2007, Prado, Barra do Cahy, MZUESC 1058; 1m, 4f, 24.XI.2007, Prado, Jucuruçu River, St. 3, MZUESC 1086; 1m, 1f, 18-19.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 809; 5m, 1f, 17.III.2007, Mucuri, Mucuri River, St. 2, MZUESC 815. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: West Indies (Granada), Venezuela, Guianas, and Brazil (Amapá to Santa Catarina) (Melo, 1996; Schubart *et al.*, 1999).

Ecological notes: In the upper tidal, on mud and sand, among herbaceous plants on the mangrove edge. Salinity range: 7-35.

Previous records in Bahia: *Sesarma (Holometopus) rectum* – Rathbun (1918), Mapele, “Bay of Bahia” (= Mapele, Todos os Santos Bay) and Caravelas (Hartt Explorations). *Sesarma rectum* – Abele (1992), Mapele (Simões Filho and Salvador) and Caravelas (Hartt Explorations); Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008).

Family Varunidae H. Milne-Edwards, 1853

Subfamily Cyclograpsinae H. Milne-Edwards, 1853

Cyclograpsus integer H. Milne-Edwards, 1837

Material examined: See material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Florida, Gulf of Mexico, Central America, northern South America, and Brazil (Ceará to Rio Grande do Sul). Eastern

Atlantic: Cape Verde to Senegal. Indo-Pacific (Melo, 1996; Souza, 1999).

Ecological notes: In burrows on mud bottoms, also in the upper and intertidal zones on rocky beaches, in estuaries, and on reefs (Melo, 1996). The single specimen examined (see Almeida *et al.* 2006) was collected in the upper tidal, on sand substratum.

Previous records in Bahia: Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Superfamily Ocypodoidea Rafinesque, 1815

Family Ocypodidae Rafinesque, 1815

Subfamily Ocypodinae Fabricius, 1798

Ocypode quadrata (Fabricius, 1787)

Material examined: 2m, 1f, 10.VIII.2002, Ilhéus, Acuípe Beach, MZUESC 4; 1f, 22.XI.2007, Prado, Barra do Cahy, MZUESC 1045. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Bermuda, Florida, Gulf of Mexico, Central America, West Indies, northern South America, Brazil (Fernando de Noronha, and from Pará to Rio Grande do Sul), and Uruguay (Melo, 1996; Spivak 1997).

Ecological notes: In the upper tidal, on beaches and in estuaries, always on fine sand.

Previous records in Bahia: *Ocypoda arenaria* Say, 1817 – Miers (1886), Salvador (*Challenger* Exp., inland). *Ocypode arenaria* – Rathbun (1898), “Bahia” and Abrolhos (*Albatross* Exp., inland). *Ocypode albicans* Bosc, 1802 – Rathbun (1918), Itaparica, Mar Grande, and Caravelas (Hartt Explorations), and Abrolhos (*Albatross* Exp.). *Ocypode quadrata* – Gomes Corrêa (1972), Abrolhos; Gouvêa (1986a), Lauro de Freitas and Salvador; Gouvêa (1986b), Lauro de Freitas, Salvador, and Itaparica Island; Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008).

Remarks: *O. quadrata* was mentioned, as “guaiaúças”, in the book “Tratado Descritivo do Brasil em 1587”. Gabriel de Sousa reported its habit of living on sand beaches, and its use by the native Americans as fishbait (see Tavares, 1993).

Subfamily Ucinæ Dana, 1851

Uca (Leptuca) cumulanta Crane, 1943 (Fig. 5)

Material examined: 1m, 01.VIII.2008, Cairú, Boipeba Island, Triana River, MZUESC 1336; 6m, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 979.

Distribution: Western Atlantic: Central America, northern South America, and Brazil (Pará to Rio de Janeiro) (Melo, 1996, as *U. cumulanta*).

Ecological notes: In the intertidal, on fine sand and mud. Salinity range: 24-36.

Previous records in Bahia: None.

Uca (Leptuca) leptodactyla Rathbun, 1898

Material examined: 4m, 01.VIII.2008, Cairú, Boipeba Island, Velha Boipeba Harbor, MZUESC 1263; 10m, 1f, 02.VIII.2008, Cairú, Boipeba Island, Oritiba River, MZUESC 1284; 6m, 3f, 11.XI.2006, Maraú, Taipus de Dentro, MZUESC 751; 1f, 12.XI.2006, Maraú, Campinho Island, St. 1, MZUESC 757; 6m, 1f, 12.XI.2006, Maraú, Campinho Island, St. 2, MZUESC 763; 5m, 06.VI.2003, Ilhéus, Olivença, Sirihya Beach, MZUESC 177; 2m, 1f, 08.V.2008, Una, Comandatuba Village, MZUESC 1253; 10m, 3f, 06.V.2008, Canavieiras, Pardo River, MZUESC 1225; 2m, 3f, 06.V.2008, Canavieiras, Pardo River, MZUESC 1229; 3m, 1f, 07.V.2008, Canavieiras, Patipe River, MZUESC 1243; 4m, 3f, 16.V.2007, Santa Cruz Cabrália, João de Tiba River, MZUESC 860; 1m, 16.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 893; 7m, 1f, 18.V.2007, Porto Seguro, Buranhem River, Arraial d'Ajuda, MZUESC 948; 8m, 6f, 22.XI.2007, Prado, Barra do Cahy, St. 1, MZUESC 1052; 1m, 24.XI.2007, Prado, Jucuruçu River, St. 3, MZUESC 1081; 2m, 30.VIII.2007, Alcobaça, Itanhem River, St. 3, MZUESC 1036; 6m, 2f, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 980; 3m, 29.VIII.2007, Caravelas, Caravelas River, Ponta de Areia, St. 3, MZUESC 1002; 7m, 2f, 30.VIII.2007, Caravelas, Pontal do Sul, MZUESC 1024; 5m, 5f, 19.III.2007, Nova Viçosa, Pontal da Barra Beach, between St. 2 and 3, MZUESC 828; 2m, 17.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 803; 3m, 17.III.2007, Mucuri, Mucuri River, St. 2, MZUESC 810. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Florida, Gulf of Mexico, West Indies, Venezuela, and Brazil (Maranhão to Santa Catarina) (Melo, 1996, as *U. leptodactyla*; Calado & Sousa, 2003, as *U. leptodactyla*).

Ecological notes: In the upper tidal and intertidal, generally on sand substrata, including sand deposits on reefs, and sand areas covered with herbaceous plants between the mangrove border and the adjacent Restinga forest. Also on sand-mud bottoms, occasionally on mud. Salinity range: 4-39.

Previous records in Bahia: *Uca leptodactyla* – Rathbun (1918), Plataforma (Salvador, Hartt Explo-

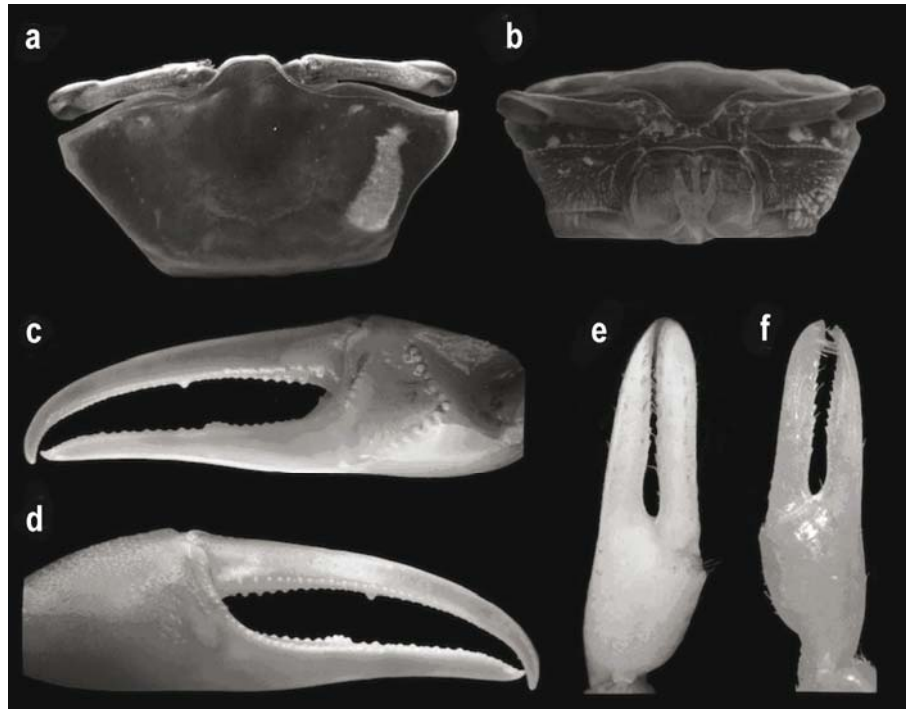


Figure 5. *Uca (Leptuca) cumulanta* Crane, 1943, male (Carapace Width = 13 mm) from Caravelas River, Caravelas, Bahia, Brazil (MZUESC 979). a) Carapace, dorsal view, b) fronto-orbital region, c) major chela, inner surface, d) major chela, outer surface, e) minor chela, outer surface, and f) minor chela, inner surface. Photos by LEA Bezerra.

Figura 5. *Uca (Leptuca) cumulanta* Crane, 1943, macho (ancho del caparazón = 13 mm) del Río Caravelas, Caravelas, Bahia, Brasil (MZUESC 979). a) Caparazón, vista dorsal, b) región fronto-orbital, c) quela mayor, superficie interna, d) quela mayor, superficie externa, e) quela menor, superficie externa, f) quela menor, superficie interna. Fotos de LEA Bezerra.

rations) and Porto Seguro (Thayer Exp., St. 102); Coelho & Ramos (1972); Gouvêa (1986b), Lauro de Freitas, Salvador, Candeias, and Ilha de Maré; Coelho (1995); Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008). *Uca (Celuca) leptodactyla* – Crane (1975), Salvador, Plataforma (Salvador), Itaparica, and Porto Seguro.

Uca (Minuca) burgersi Holthuis, 1967

Material examined: 2m, 1f, 12.XI.2006, Maraú, Campinho Island, St. 2, MZUESC 852; 1m, 09.II.2005, Ilhéus, Mamoã River, MZUESC 546; 2m, 06.V.2008, Canavieiras, Pardo River, MZUESC 1224; 6m, 2f, 06.V.2008, Canavieiras, Pardo River, MZUESC 1231; 3m, 2f, 07.V.2008, Canavieiras, Patipe River, MZUESC 1242; 6m, 1f, 30.VIII.2007, Alcobaca, Itanhem River, St. 3, MZUESC 1035; 1m, 1f, 18.III.2007, Nova Viçosa, Peruípe River, MZUESC 848.

Distribution: Western Atlantic: Florida, Gulf of Mexico, West Indies, Venezuela, and Brazil (Maranhão to São Paulo) (Melo, 1996, as *U. burgersi*).

Ecological notes: In the upper and intertidal zones, on sand and mud, sometimes at sites far from the river, such as between the mangrove border and the adjacent Restinga forest, sandy roads, and flooded upper-tidal areas. Salinity range: 7-38.

Previous records in Bahia: *Uca (Minuca) burgersi* – Crane (1975), Salvador and Itaparica. *Uca rapax* (Smith, 1870) – Almeida *et al.* (2006), Ilhéus (in part, lot MZUESC 546, misidentified). *Uca burgersi* – Almeida & Coelho (2008).

Uca (Minuca) mordax (Smith, 1870)

Material examined: See material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Gulf of Mexico, Central America, northern South America, and Brazil (Pará to São Paulo) (Melo, 1996, as *U. mordax*).

Ecological notes: On streambanks and mangrove edges. Populations with more individuals usually establish above the mangrove level, where the water is practically fresh (Melo, 1996, as *U. mordax*), which

was observed at the collection site of the material examined. Specimens of *Cardisoma guanhumi* were seen at the same sites where *U. (Minuca) mordax* was collected, and it was caught together with *Armases rubripes* and *Ucides cordatus*.

Previous records in Bahia: *Uca mordax* – Gouvêa (1986b), Salvador and Ilha de Maré; Coelho (1995); Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Uca (Minuca) rapax (Smith, 1870)

Material examined: 16m, 1f, 12.XI.2006, Maraú, Campinho Island, St. 2, MZUESC 764; 2m, 1f, 08.V.2008, Una, Comandatuba Village, MZUESC 1255; 5m, 06.V.2008, Canavieiras, Pardo River, MZUESC 1226; 1f, 06.V.2008, Canavieiras, Pardo River, MZUESC 1230; 2f, 30.VIII.2007, Prado, Jucuruçu River, St. 1, MZUESC 1041; 2m, 1f, 22.XI.2007, Prado, Barra do Cahy, St. 2, MZUESC 1053; 6m, 1f, 29.VIII.2007, Caravelas, Caravelas River, Ponta de Areia, St. 3, MZUESC 1003; 4m, 3f, 30.VIII.2007, Caravelas, Pontal do Sul, MZUESC 1025; 12m, 4f, 17.III.2007, Mucuri, Mucuri River, St. 2, MZUESC 811. See also material cited by Almeida *et al.* (2006), except lot MZUESC 546 [see *U. (M.) burgersi*].

Distribution: Western Atlantic: Florida, Gulf of Mexico, West Indies, Venezuela, and Brazil (Pará to Santa Catarina) (Melo, 1996, as *U. rapax*).

Ecological notes: In the upper tidal and intertidal zones, on mud, sand, and sand-mud substrata, also near herbaceous plants and in the leaf litter on the edge of the mangrove. Salinity range: 7-38.

Previous records in Bahia: *Uca pugnax rapax* – Rathbun (1918), Plataforma (Salvador) and Caravelas (Hartt Explorations). *Uca (Minuca) rapax* – Crane (1975), Salvador and Itaparica. *Uca rapax* – Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Uca (Minuca) thayeri Rathbun, 1900

Material examined: 1m, 01.VIII.2008, Cairú, Boipeba Island, Triana River, MZUESC 1278; 2f, 11.XI.2006, Maraú, Taipus de Dentro, MZUESC 752; 3m, 3f, 12.XI.2006, Maraú, Campinho Island, St. 1, MZUESC 758; 2m, 1f, 08.V.2008, Una, Comandatuba Village, MZUESC 1256; 3m, 1f, 06.V.2008, Canavieiras, Pardo River, MZUESC 1232; 1m, 1f, 18.V.2007, Porto Seguro, Buranhem River, Arraial d'Ajuda, MZUESC 950; 4m, 22.XI.2007, Prado, Barra do Cahy, St. 2, MZUESC 1054; 2m, 1f, 30.VIII.2007, Alcobaça, Itanhem River, St. 1, MZUESC 1029; 1m, 2f, 30.VIII.2007, Alcobaça, Itanhem River, St. 3,

MZUESC 1038; 1m, 19.III.2007, Nova Viçosa, Peruípe River, MZUESC 849; 5m, 2f, 17.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 793; 2m, 1f, 18.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 804; 1m, 1f, 17.III.2007, Mucuri, Mucuri River, St. 2, MZUESC 812. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: Florida, Gulf of Mexico, West Indies, Central America, Venezuela, and Brazil (Maranhão to Santa Catarina) (Melo, 1996, as *U. thayeri*).

Ecological notes: In the intertidal, on mud, frequently in the shaded area of the mangrove. Rarely on sand-mud substrata on the edge of the mangrove near the Restinga forest. Salinity range: 4-35.

Previous records in Bahia: *Uca thayeri* – Rathbun (1918), Plataforma (Salvador, Hartt Explorations); Almeida *et al.* (2006), Ilhéus; Almeida & Coelho (2008).

Uca (Minuca) vocator (Herbst, 1804)

Material examined: See material cited by Almeida *et al.* (2006).

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

Ecological notes: In estuaries, in damp mud among mangrove trees. Also recorded in parts of the rivers beyond the mangrove limits (Melo, 1996, as *U. vocator*).

Previous records in Bahia: *Uca vocator* – Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008).

Uca (Uca) maracoani (Latreille, 1802)

Material examined: 5m, 2f, 01.VIII.2008, Cairú, Boipeba Island, Triana River, MZUESC 1277; 4m, 2f, 02.VIII.2008, Cairú, Boipeba Island, River Oritiba, MZUESC 1285; 1m, 08.V.2008, Una, Comandatuba Village, MZUESC 1254; 15m, 2f, 18.V.2007, Porto Seguro, Buranhem River, Arraial d'Ajuda, MZUESC 949; 5m, 28.VIII.2007, Caravelas, Caravelas River, St. 1, MZUESC 969; 2m, 29.VIII.2007, Caravelas, Caravelas River, Ponta de Areia, St. 3, MZUESC 970; 6m, 2f, 30.VIII.2007, Caravelas, Pontal do Sul, MZUESC 971; 4m, 1f, 17.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 792. See also material cited by Almeida *et al.* (2006).

Distribution: Western Atlantic: West Indies, northern South America, and Brazil (Pará to Paraná)

(Melo, 1996, as *U. maracoani*; Barros *et al.*, 1997b, as *U. maracoani*).

Ecological notes: Always on mud, frequently found close to the level of the maximum low tide. Salinity range: 4-38.

Previous records in Bahia: *Uca maracoani* – Rathbun (1918), Plataforma (Salvador, Hartt Explorations) and Porto Seguro (Thayer Exp., St. 102); Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008). *Uca (Uca) maracoani maracoani* – Crane (1975), Salvador, Plataforma (Salvador), Itaparica, and Porto Seguro.

Family Ucididae Števcíć, 2005

Ucides cordatus (Linnaeus, 1763)

Material examined: 2m, 1f, 18.V.2007, Porto Seguro, Buranhem River, Arraial d'Ajuda, MZUESC 957; 2m, 18.III.2007, Mucuri, Mucuri River, St. 1, MZUESC 794. See also material cited by Almeida *et al.* (2006).

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

Ecological notes: In the intertidal zone, excavating its burrows in mud substrata, generally among mangrove roots (Melo, 1996). Also occurs upstream, past the limit of the mangrove in water that is probably fresh, as observed in the Almada River in Ilhéus, where a specimen was collected together with *Armases rubripes* and *Uca (Minuca) mordax*. At the same point, *Cardisoma guanhumi* was also observed. Salinity range: 12-16.

Previous records in Bahia: *Uca cordata* – Smith (1869). *Ucides cordatus* – Rathbun (1918), Plataforma (Salvador, Hartt Explorations); Almeida *et al.* (2006) and Bento *et al.* (2007), Ilhéus; Almeida & Coelho (2008).

Remarks: The use of this crab as food by the Native Americans and some of its biological aspects are described in the “Tratado Descritivo do Brasil em 1587”. Gabriel de Sousa mentioned the species as “uçá” (see Tavares, 1993).

Superfamily Pinnotheroidea De Haan, 1833

Family Pinnotheridae De Haan, 1833

Subfamily Pinnothereliinae Alcock, 1900

Austinixa aidae (Righi, 1967) (Fig. 6)

Material examined: 1m, 1f, 07.IX.2004, Ilhéus, Milionários Beach, MZUESC 416; 4m, 7f, 06.V.2008, Canavieiras, Atalaia Beach, southern Atalaia Island,

MZUESC 1235; 6m, 6f, 2juv, 07.V.2008, Canavieiras, Atalaia Beach, northern Atalaia Island, MZUESC 1236; 1m, 2f, 09.III.2008, Belmonte, Mojiquçaba Beach, MZUESC 1192; 9m, 14f, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1124.

Distribution: Western Atlantic: Trinidad and Tobago to Brazil (São Paulo) (Coelho, 1997, as *Pinnixa aidae*; Bezerra *et al.*, 2006).

Ecological notes: In burrows on sand beaches. A specimen was collected in a burrow of *Anomalocardia brasiliiana* (Gmelin, 1791) (Bivalvia: Veneridae) (Atalaia Beach, Canavieiras). Among potential callianassid hosts are *Biffarius fragilis* (Biffar, 1970), *Callichirus major* (Say, 1818), and *Lepidophthalmus siriboia* Felder & Rodrigues, 1993, collected at the same site where specimens of *A. aidae* were obtained. Salinity range: 35-40.

Previous records in Bahia: None.

Austinixa leptodactyla (Coelho, 1997) (Fig. 7)

Material examined: 2m, 4f, 23.XI.2007, Prado, Cumuruxatiba Beach, MZUESC 1077.

Distribution: Western Atlantic: Brazil (Pará to Bahia) (Coelho, 1997, as *Pinnixa leptodactyla*; this study).

Ecological notes: The material was collected in burrows of an unidentified, probably callianassid host, in the intertidal of a sand beach, at a salinity of 35. Two potential hosts are *Biffarius fragilis* and *Lepidophthalmus siriboia*, also collected from burrows at Cumuruxatiba Beach. According to Coelho (1997), the species is found from the intertidal to 39 m, in polychaete and callianassid tubes, in areas under the influence of river discharge.

Previous records in Bahia: None.

Remarks: The southern distribution of *A. leptodactyla*, endemic to the Brazilian coast, is enlarged from Sergipe to Bahia (Prado, Cumuruxatiba Beach, 17°06'18.6"S, 39°10'50.4"W).

Pinnixa sayana Stimpson, 1860

Material examined: 1m, 11.XI.2006, Maraú, Taipus de Dentro, MZUESC 750.

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

Ecological notes: In the intertidal, in burrows on mud, at a salinity of 24. Probably associated with the callianassid *Lepidophthalmus siriboia*, obtained at the same station. According to Coelho (1997), *P. sayana* occurs from shallow waters to 80 m, on mud and sand



Figure 6. *Austinixa aidae* (Righi, 1967), male (Carapace Width = 6.7 mm) from Cumuruxatiba Beach, Prado, Bahia, Brazil (MZUESC 1124). a) Dorsal view, b) detail of carapace. Photos by LEA Bezerra.

Figura 6. *Austinixa aidae* (Righi, 1967), macho (ancho del caparazón = 6,7 mm) de la Playa de Cumuruxatiba, Prado, Bahia, Brasil (MZUESC 1124). a) Vista dorsal, b) detalle del caparazón. Fotos de LEA Bezerra.

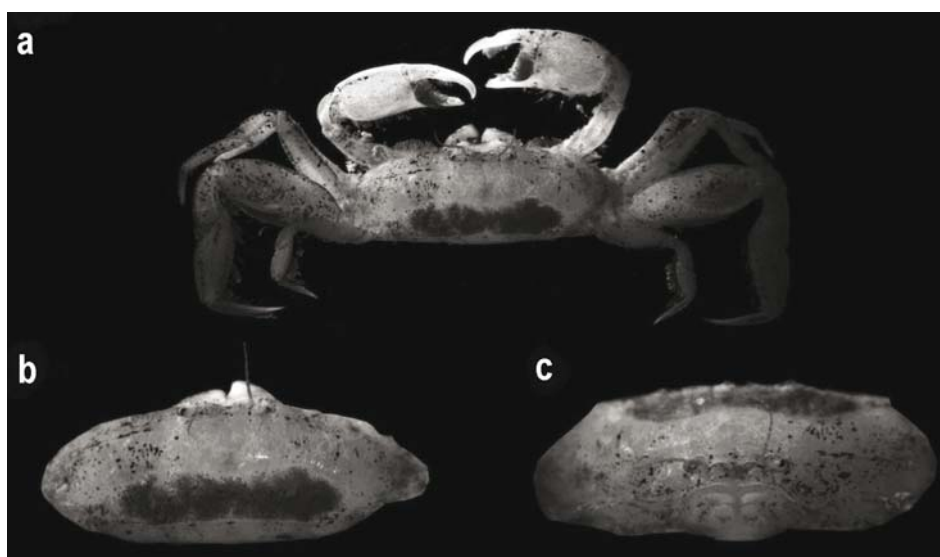


Figure 7. *Austinixa leptodactyla* (Coelho, 1997), male (Carapace Width = 6 mm) from Cumuruxatiba Beach, Prado, Bahia, Brazil (MZUESC 1077). a) Dorsal view, b) detail of carapace, c) fronto-orbital region. Photos by LEA Bezerra.

Figura 7. *Austinixa leptodactyla* (Coelho, 1997), macho (ancho del caparazón = 6 mm) de la Playa de Cumuruxatiba, Prado, Bahia, Brasil (MZUESC 1077). a) Vista dorsal, b) detalle del caparazón, c) región fronto-orbital. Fotos de LEA Bezerra.

bottoms in areas under the influence of river discharge, frequently in tubes of *Chaetopterus* Cuvier, 1827.

Previous records in Bahia: Coelho (1997), 12°43'85"S (sic), 38°05'50"W; Almeida *et al.* (2007a), Camamu Bay; Almeida & Coelho (2008).

Subfamily Pinnotherinae De Haan, 1833

Dissodactylus crinitichelis Moreira, 1901 (Fig. 8)

Material examined: 1m, 18.V.2007, Santa Cruz Cabrália, Coroa Vermelha Beach (reef), MZUESC 943.

Distribution: Western Atlantic: North Carolina, Florida, Gulf of Mexico, West Indies, northern South America, Brazil (Pará to Rio Grande do Sul), and Argentina (Melo, 1996).

Ecological notes: The only specimen collected was found on the oral surface of *Encope emarginata* (Leske, 1778) (Echinoidea: Mellitidae) (Fig. 8), on a sand bottom, at a salinity of 39. It has been recorded on fine sand, coral, and broken-shell bottoms, in *Halodule* meadows, and in association with echinoderms of the genera *Encope* L. Agassiz, 1841 and *Clypeaster* Lamarck, 1801 (Melo, 1996).

Previous records in Bahia: *Dissodactylus crinitichelis* – Coelho & Ramos (1972); Gouvêa

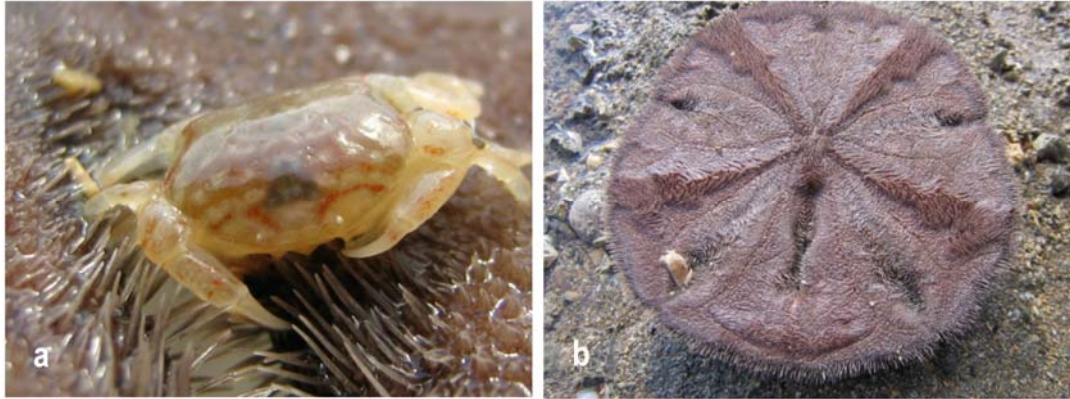


Figure 8. a) *Dissodactylus crinitichelis* Moreira, 1901, male (Carapace Width = 5.9 mm) from Coroa Vermelha Beach, Santa Cruz Cabrália, Bahia, Brazil (MZUESC 943), b) *Dissodactylus crinitichelis* on the oral surface of the echinoderm *Encope emarginata* (Leske, 1778), Coroa Vermelha Beach, Santa Cruz Cabrália, Bahia, Brazil. Photos by LEA Bezerra.

Figura 8. a) *Dissodactylus crinitichelis* Moreira, 1901, macho (ancho del caparazón = 5,9 mm) de la Playa de Coroa Vermelha, Santa Cruz Cabrália, Bahia, Brasil (MZUESC 943), b) *Dissodactylus crinitichelis* en el superficie oral del equinodermo *Encope emarginata* (Leske, 1778), Playa de Coroa Vermelha, Santa Cruz Cabrália, Bahia, Brasil. Fotos de LEA Bezerra.

(1986b), Salvador; Barreto *et al.* (1993); Young & Serejo (2005), Abrolhos Bank (RAP, St. 3, 4 and 20); Almeida & Coelho (2008). *Dissodactylus crinitichelis* (misspelled) – Gouvêa (1986a), Salvador.

Fabia byssomiae (Say, 1818) (Fig. 9)

Material examined: 1f, 11.XI.2006, Maraú, Taipus de Dentro, MZUESC 1095.

Distribution: Western Atlantic: Florida, Cuba, and Brazil (Bahia, and from Rio de Janeiro to Rio Grande do Sul) (Campos, 1996; Melo, 2008; this study).

Ecological notes: From 5 to 25 m, on mud, sand, and shell bottoms. In Brazil, it has been recorded in association with the bivalves *Anadara* Gray, 1847 and *Glycymeris* Costa, 1778 (Melo, 2008), and in the northern hemisphere with *Hiatella arctica* (Linnaeus, 1767) and *Anadara notabilis* (Röding, 1798) (Campos, 1996). The specimen examined was collected within the mantle cavity of *Macoma constricta* (Bruchiere, 1792) (Bivalvia: Tellinidae) (new host record), on a mud bottom, at a salinity of 24.

Previous records in Bahia: None.

Remarks: Melo (2008), listing the brachyurans from Ilha Grande, Rio de Janeiro, mentioned the occurrence of *F. byssomiae* in that region. However, Melo did not discuss the possible synonymy with *F. emiliai* (Melo, 1971). The status of the latter species in the western Atlantic is still unclear (Dr. E. Campos, *pers. comm.*). Fenucci (1975) found a pair of pinnotherids in a bivalve of the genus *Glycymeris*. The female specimen

was identified as *F. insularis*, and the male as *F. emiliai*, both described by Melo (1971). Based on the third pair of maxillipeds and on the shape of the ambulatory legs, Fenucci (1975) concluded that the two specimens were conspecific. After an analysis of the type material of Melo's (1971) species, Fenucci (1975) concluded that the holotype of *F. emiliai* was in fact the male of *F. insularis*. As *F. emiliai*, in Melo's (1971) publication, had been treated before *F. insularis*, the former species had priority over the latter, being considered its senior synonym. Later, Martins & D'Incao (1996) pointed out that both species should be recognized as valid, after they examined a male specimen of *F. insularis*. These authors commented that the male of this species was very similar to the female, differing from it by having the abdomen smaller than the sternum. The characterization of the male gonopods was incomplete, because the first pair had the tip damaged. According to Dr. E. Campos (*pers. comm.*) the supposed male of *F. insularis* described and figured by Martins & D'Incao (1996) is a subadult female (females and males in the genus *Fabia* Dana, 1851 are sexually dimorphic), and their conclusions were therefore not scientifically supported. Campos (1996), in his partial revision of *Fabia*, commented that *F. byssomiae*, of which only the female is known, and *F. emiliai* are morphologically very similar, and suggested that the latter could represent a hitherto unrecognized junior synonym of the former. However, the supposed synonymy between *F. byssomiae* and *F. emiliai* suggested by Campos (1996) was based on the descriptions available at that time (Dr. E. Campos,

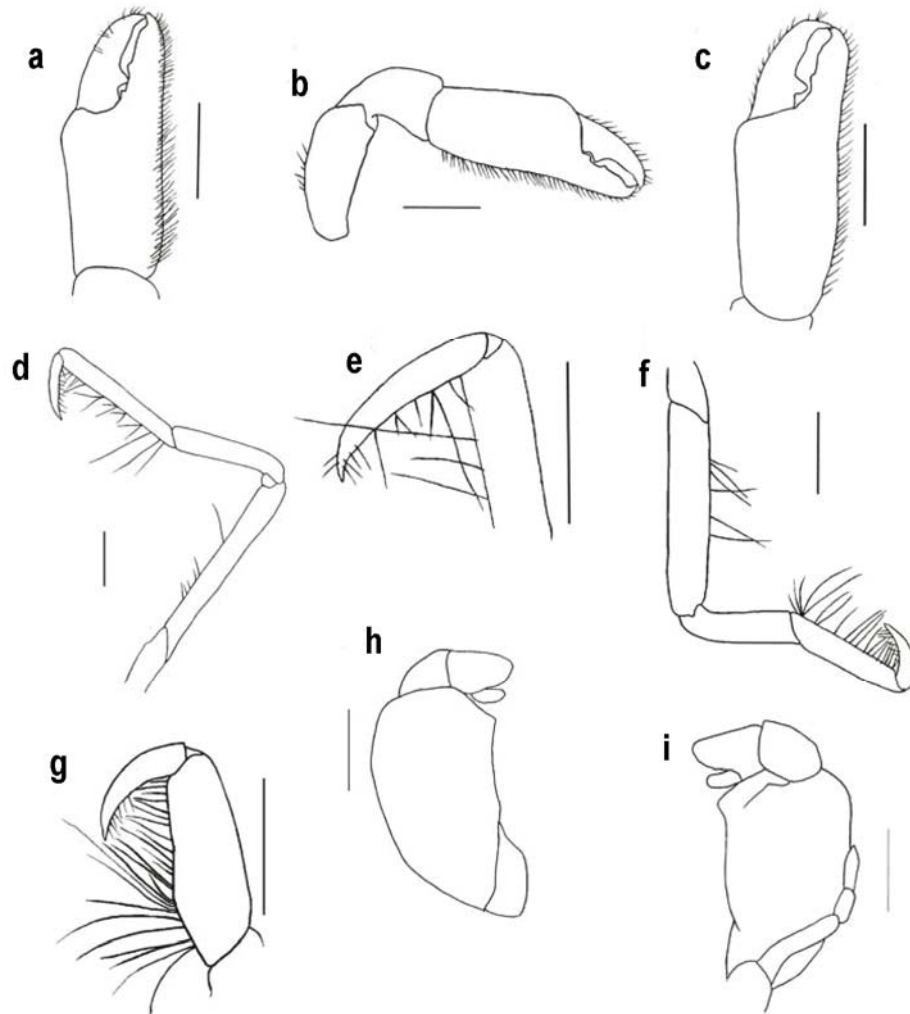


Figure 9. *Fabia byssomiae* (Say, 1818), female (Carapace Length x Carapace Width = 5.2x6.1 mm) from Taipus de Dentro, Maraú, Bahia, Brazil (MZUESC 1095). a) left chela, inner surface, b) right chela, outer surface, c) right chela, outer surface, d) right pereopod 3, e) right pereopod 3, detail of dactylus and propodus, f) left pereopod 3, g) right pereopod 2, detail of dactylus and propodus, h) right maxilliped 3, outer surface, i) right maxilliped 3, inner surface. Figs. h-i: setae omitted. Scale bars: a-g = 1 mm; h-i = 0.5 mm.

Figura 9. *Fabia byssomiae* (Say, 1818), hembra (largo del caparazón x ancho del caparazón = 5.2x6.1 mm) de Taipus de Dentro, Maraú, Bahia, Brasil (MZUESC 1095). a) quela izquierda, superficie interna, b) quela derecha, superficie externa, c) quela derecha, superficie externa, d) pereopodo 3, derecho, e) pereopodo 3, derecho, detalle del dactilo y propodo, f) pereopodo 3, izquierdo, g) pereopodo 2, derecho, detalle del dactilo y ropodo, h) maxilípedo 3, derecho, superficie externa, i) maxilípedo 3, derecho, superficie interna. Figs. h-i: cerdas omitidas. Escalas: a-g = 1 mm; h-i = 0,5 mm.

pers. comm.). After the publication of his 1996 article, Campos has recognized some possible differences between these two species based on the figures available (the carapace in *F. byssomiae* is sub-circular and the abdomen is not posteriorly produced, whereas in *F. emiliai* the carapace is sub-quadrate and the abdomen is posteriorly produced) (Dr. E. Campos, *pers. comm.*). The specimen from southern Bahia (CLx CW = 5.2x6.1 mm), although it had suffered damage to the carapace and abdomen before its fixation, has a sub-circular carapace, with two

longitudinal grooves that originate from the superior margin of the orbit. The abdomen is not posteriorly produced. The shape of the third maxilliped is as represented by Campos (1996, p. 1160, fig. 1b) for *F. byssomiae* (Figs. 9h-9i). The cutting edge of the dactylus of the cheliped is armed with a strong proximal tooth (Figs. 9a-9c). The third pair of pereopods is asymmetrical: the right is longer than the left, because their articles are proportionally longer (Fig. 9d, 9f). Thus, our specimen matches the main characteristics of *F. byssomiae*. In the *Systema*

Brachyurorum, Ng *et al.* (2008) considered both species as synonyms, perhaps following Campos' (1996) proposal. It is possible that Melo (2008) referred the species from Ilha Grande to *F. byssomiae*, following Campos' (1996) suggestion and Ng *et al.* (2008). Collection and description of the males is highly important to clarify the taxonomic status of these species, because the shape of the abdominal somites and the telson are unique in each species within the genus *Fabia*.

Zaops ostreus (Say, 1817)

Material examined: 1m, 1f, 11.XI.2006, Marau, Taipus de Dentro, MZUESC 1096; 3m, 4f, 11.XI.2006, Marau, Taipus de Dentro, MZUESC 1336; 2f, 17.V.2007, Porto Seguro, Buranhem River, near harbor, MZUESC 1337; 3m, 3f, 01.VIII.2008, Cairu, Boipeba Island, Triana River, MZUESC 1338; 5m, 7f, 02.VIII.2008, Cairu, Oritiba River, Boipeba Island, MZUESC 1339.

Distribution: Western Atlantic: Massachusetts to Florida, Gulf of Mexico, West Indies, and Brazil (Ceara to Santa Catarina) (Melo, 1996, as *Z. ostreum*; Bezerra *et al.*, 2006, as *Z. ostreum*).

Ecological notes: All individuals were collected in the mantle cavity of *Crassostrea rhizophorae*. Salinity range: 4-24. Also found in association with the bivalves *Crassostrea virginica* (Gmelin, 1791), *Anomia simplex* Orbigny, 1842, *Mytilus edulis* (Orbigny, 1846), and *Pecten* sp. Occasionally in polychaete tubes, mainly *Chaetopterus variopedatus* (Renier, 1804) (Powers, 1977; Melo, 1996).

Previous records in Bahia: *Zaops ostreum* – Martins & D'Incao (1996), Itaparica Island; Almeida & Coelho (2008).

Patterns of Distribution

Based on the patterns of geographical distribution proposed by Melo (1985), the 16 anomurans collected have ampho-American (n = 2), circumtropical (n = 1), or western Atlantic (n = 13) longitudinal patterns of distribution (Table 1). Among the western Atlantic species, the majority have a latitudinal distribution of the Antillean pattern (8 species), but the Central-South American (n = 2), Brazil endemic (n = 2), and Virginian (n = 1) patterns are also represented (Table 1).

The 68 brachyurans obtained fit into four patterns of longitudinal distribution: ampho-American (n = 2), ampho-Atlantic (n = 6), circumtropical (n = 2), and western Atlantic (n = 57) (Table 2). A single nonindigenous species has been reported from the Bahia coast, *Charybdis hellerii* (see discussion in the

“Taxonomy” section). Possible means of introduction of this portunid in the western Atlantic have been exhaustively discussed (Campos & Türkay, 1989; Lemaitre, 1995; Tavares & Mendonça Jr., 1996, 2004; Tavares & Amouroux, 2003). Among the western Atlantic species, a greater part have the Antillean pattern of latitudinal distribution (26 species). The other species represented are Carolinian (n = 14), Central-South American (n = 8), Virginian (n = 6), or endemic to Brazil (n = 4) (Table 2).

DISCUSSION

Of the 53 species of Anomura known from Bahia (Almeida, 2009), ranging from the intertidal to the deep continental slope, only 16 were recorded in this study. None of them represents a new record for the fauna of the state.

Almeida & Coelho (2008) reviewed the brachyuran fauna of Bahia and listed a total of 162 species for the state's coast, ranging from the intertidal to bathyal waters. To this list are added the species *Sotoplax robertsi* (Almeida *et al.*, 2008a), *Homologenus rostratus* A. Milne-Edwards, 1880 (Homoloidea: Homolidae), and *Rochinia crassa* Tavares, 1991 (Majoidea: Epialtidae), the last two not included by Almeida & Coelho (2008) but reported by Serejo *et al.* (2007). In this study, *Uca* (*Leptuca*) *cumulanta*, *Austinixa aidae*, *A. leptodactyla*, and *Fabia byssomiae* are reported for the first time. Thus, the brachyuran fauna of Bahia is currently composed of 169 species.

Almost 30% of the brachyuran species reported for the Bahia coast have their southern limits of distribution in the western Atlantic between the states of Bahia and Rio de Janeiro, suggesting that this area constitutes a transition zone between the Brazilian and Paulista zoogeographic provinces (Almeida & Coelho, 2008). The deepening and regression of coralline algae bottoms that occurs to the south of Abrolhos (Kempf, 1970, 1971) certainly acts as a thermal and edaphic barrier to a certain group of species adapted to this type of substratum, limiting their distribution. Almeida & Coelho (2008) also commented on the possible influence of the belt formed by the relatively large watersheds on this part of the Brazilian coast, such as those of the rivers Jequitinhonha, Pardo, Doce, and Paraiba do Sul, as a seasonally limiting factor of distribution for stenohaline species. However, this region seems to have little zoogeographical importance for the coastal species reported in this study, since only 10 species (two anomurans and eight brachyurans) have their southern limits of distribution

Table 1. Anomuran crabs collected in southern Bahia, their distribution patterns, and the northern and southern limits of their distributions in the western Atlantic Ocean.**Tabla 1.** Cangrejos anomuros recolectados en el sur de Bahia, sus patrones de distribución, y límites norte y sur en el Océano Atlántico Occidental.

Species	Distribution pattern	Northern limit	Southern limit
<i>Megalobrachium mortenseni</i>	Amphi-American	West Indies	São Paulo
<i>Megalobrachium soriatum</i>	Amphi-American	North Carolina	São Paulo
<i>Albunea paretii</i>	Antillean Continuous	Florida	Rio Grande do Sul
<i>Clibanarius sclopetarius</i>	Antillean Continuous	Florida	Santa Catarina
<i>Calcinus tibicen</i>	Antillean Disjunct	Florida	Santa Catarina
<i>Clibanarius antillensis</i>	Antillean Disjunct	Florida	Santa Catarina
<i>Emerita portoricensis</i>	Antillean Disjunct	Florida	Bahia
<i>Lepidopa richmondi</i>	Antillean Disjunct	West Indies	Santa Catarina
<i>Pagurus brevidactylus</i>	Antillean Disjunct	Florida	Santa Catarina
<i>Pagurus criniticornis</i>	Antillean Disjunct	West Indies	Southern Patagonia
<i>Megalobrachium roseum</i>	Central-South American	Central America	São Paulo
<i>Minyocerus angustus</i>	Central-South American	Central America	Santa Catarina
<i>Petrolisthes armatus</i>	Circumtropical	North Carolina	Santa Catarina
<i>Pachycheles greeleyi</i>	Endemic	Pará	Espírito Santo
<i>Pisidia brasiliensis</i>	Endemic	Pará	São Paulo
<i>Clibanarius vittatus</i>	Virginian Continuous	Virginia	Santa Catarina

corresponding to this stretch of Brazilian coast (see Tables 1 and 2). For 74 of the 84 species studied, the southern limit of distribution in the western Atlantic is located in the Argentinean and Paulista provinces (between São Paulo and the Argentina coast), which are influenced in winter by the cold waters of the Malvinas Current, the Plate River discharge, and the Subtropical Convergence (Melo, 1990; Melo Filho, 2006). Thus, this region represents a thermal barrier to the southward progression of these southern species in the western Atlantic.

According to Coelho *et al.* (1978), each province in the southern hemisphere has an equivalent in the northern hemisphere, and the Antillean and Brazilian provinces are equivalent, especially due to the similar climate (low annual thermal gradient). Just over 40% of species collected in the study area (part of the Brazilian Province) have latitudinal patterns of distribution of the Antillean type, showing the close relationship between these two tropical faunas. However, considering the totality of the decapod fauna from the western Atlantic, the number of species from the Caribbean region is almost double that found in the Brazilian province (including the Guianas region), the second most species-rich province (Boschi, 2000). The marine fauna of tropical America derived from the Tertiary Caribbean province, which included the eastern tropical Pacific to the formation of the Panama Isthmus at the end of the Pliocene. The speciation events that took place after the final closing

of the isthmus there about three million years ago, combined with the displacement of warm-water species from north to south during the Pliocene (from Florida, for example), may explain the large concentration of species in the Antilles (Werding *et al.*, 2003).

Among the western Atlantic species, a contingent of 22 species of the 70 studied (31.4%) have a disjunct distribution, including Virginian, Carolinian, and Antillean species (Tables 1 and 2). The gap in the distribution of these species corresponds at least to the Guianas region, mainly characterized by the predominance of soft bottoms (mud and sand), strongly influenced by freshwater discharge from major rivers of the Equatorial region, such as the Orinoco, Amazon, and Tocantins (Coelho, 1969; Coelho & Ramos, 1972). In this case, the gap in the species distributions would be due to ecological causes. On the other hand, this gap may represent an artifact. The composition of the crustacean fauna of this coastal area remains less known, and perhaps some of the species considered disjunct, in fact occur in the Guianas region although they have not yet been collected there.

Another factor to be considered is that some of the species with disjunct distributions may represent pairs of cryptic species, which are common in the marine environment, including some decapod groups (see Knowlton, 1986, 1993; Anker, 2001; Machordom & Macpherson, 2004; Asakura & Watanabe, 2005; Hiller

Table 2. Brachyuran crabs collected in southern Bahia, their distribution patterns, and the northern and southern limits of their distribution in the western Atlantic Ocean.**Tabla 2.** Cangrejos braquiuros recolectados en el sur de Bahia, sus patrones de distribución, y límites norte y sur en el Océano Atlántico Occidental.

Species	Distribution pattern	Northern limit	Southern limit
<i>Aratus pisonii</i>	Amphi-American	Florida	São Paulo
<i>Pilumnus reticulatus</i>	Amphi-American	West Indies	Río Negro Province
<i>Cataleptodius floridanus</i>	Amphi-Atlantic	Florida	Rio Grande do Sul
<i>Menippe nodifrons</i>	Amphi-Atlantic	Florida	Santa Catarina
<i>Pachygrapsus gracilis</i>	Amphi-Atlantic	Gulf of Mexico	Argentina
<i>Pachygrapsus transversus</i>	Amphi-Atlantic	Massachusetts	Uruguay
<i>Troglocarcinus corallicola</i>	Amphi-Atlantic	Florida	São Paulo
<i>Xanthodius denticulatus</i>	Amphi-Atlantic	Florida	São Paulo
<i>Acantholobulus bermudensis</i>	Antillean Continuous	Florida	Santa Catarina
<i>Acantholobulus caribbaeus</i>	Antillean Continuous	West Indies	Rio Grande do Sul
<i>Achelous tumidulus</i>	Antillean Continuous	Florida	São Paulo
<i>Armases angustipes</i>	Antillean Continuous	Mexico	Santa Catarina
<i>Callinectes danae</i>	Antillean Continuous	Florida	Rio Grande do Sul
<i>Callinectes exasperatus</i>	Antillean Continuous	Florida	Santa Catarina
<i>Cardisoma guanhumí</i>	Antillean Continuous	Florida	São Paulo
<i>Eurytium limosum</i>	Antillean Continuous	Florida	Santa Catarina
<i>Goniopsis cruentata</i>	Antillean Continuous	Florida	Santa Catarina
<i>Hepatus pudibundus</i>	Antillean Continuous	Georgia	Rio Grande do Sul
<i>Ocypode quadrata</i>	Antillean Continuous	Florida	Uruguay
<i>Panopeus americanus</i>	Antillean Continuous	Florida	Rio Grande do Sul
<i>Panopeus lacustris</i>	Antillean Continuous	Florida	Rio de Janeiro
<i>Sesarma curacaoense</i>	Antillean Continuous	Florida	Bahia
<i>Uca (Minuca) rapax</i>	Antillean Continuous	Florida	Santa Catarina
<i>Uca (Minuca) thayeri</i>	Antillean Continuous	Florida	Santa Catarina
<i>Uca (Minuca) vocator</i>	Antillean Continuous	West Indies	Santa Catarina
<i>Uca (Uca) maracoani</i>	Antillean Continuous	West Indies	Paraná
<i>Ucides cordatus</i>	Antillean Continuous	Florida	Santa Catarina
<i>Epialtus bituberculatus</i>	Antillean Disjunct	Florida	São Paulo
<i>Fabia byssomiae</i>	Antillean Disjunct	Florida	Rio Grande do Sul
<i>Mithrax hemphilli</i>	Antillean Disjunct	Florida	Rio de Janeiro
<i>Panopeus harttii</i>	Antillean Disjunct	Florida	Santa Catarina
<i>Panopeus rugosus</i>	Antillean Disjunct	Florida	Rio Grande do Sul
<i>Uca (Leptuca) leptodactyla</i>	Antillean Disjunct	Florida	Santa Catarina
<i>Uca (Minuca) burgersi</i>	Antillean Disjunct	Florida	São Paulo
<i>Callinectes bocourti</i>	Carolinian Continuous	North Carolina	Rio Grande do Sul
<i>Callinectes marginatus</i>	Carolinian Continuous	North Carolina	São Paulo
<i>Callinectes ornatus</i>	Carolinian Continuous	North Carolina	Rio Grande do Sul
<i>Dissodactylus crinitichelis</i>	Carolinian Continuous	North Carolina	Buenos Aires Prov.
<i>Eriphia gonagra</i>	Carolinian Continuous	North Carolina	Santa Catarina
<i>Inachoides forceps</i>	Carolinian Continuous	North Carolina	Rio de Janeiro
<i>Moreiradromia antillensis</i>	Carolinian Continuous	North Carolina	Rio Grande do Sul
<i>Panopeus occidentalis</i>	Carolinian Continuous	North Carolina	Rio Grande do Sul
<i>Pitho lherminieri</i>	Carolinian Continuous	North Carolina	São Paulo
<i>Eurypanopeus abbreviatus</i>	Carolinian Disjunct	South Carolina	Rio Grande do Sul
<i>Macrocoeloma trispinosum</i>	Carolinian Disjunct	North Carolina	São Paulo

Species	Distribution pattern	Northern limit	Southern limit
<i>Microphrys bicornutus</i>	Carolinian Disjunct	North Carolina	Rio Grande do Sul
<i>Mithraculus forceps</i>	Carolinian Disjunct	North Carolina	Santa Catarina
<i>Pilumnus dasydodus</i>	Carolinian Disjunct	North Carolina	Santa Catarina
<i>Acantholobulus schmitti</i>	Central-South American	Ceará	Buenos Aires Prov.
<i>Armases rubripes</i>	Central-South American	Central America	Buenos Aires Prov.
<i>Austinixa aidae</i>	Central-South American	Trinidad	São Paulo
<i>Notolopas brasiliensis</i>	Central-South American	Colombia	São Paulo
<i>Pelia rotunda</i>	Central-South American	Pará	Río Negro Province
<i>Sesarma rectum</i>	Central-South American	West Indies	Santa Catarina
<i>Uca (Leptuca) cumulanta</i>	Central-South American	Central America	Rio de Janeiro
<i>Uca (Minuca) mordax</i>	Central-South American	Gulf of Mexico	São Paulo
<i>Cyclograpsus integer</i>	Circumtropical	Florida	Rio Grande do Sul
<i>Elamena gordonae</i>	Circumtropical	Sergipe	Bahia
<i>Acathonyx dissimulatus</i>	Endemic	Maranhão	São Paulo
<i>Austinixa leptodactyla</i>	Endemic	Pará	Bahia
<i>Chasmocarcinus arcuatus</i>	Endemic	Amapá	Espírito Santo
<i>Mithrax braziliensis</i>	Endemic	Piauí	São Paulo
<i>Pinnixa sayana</i>	Virginian Continuous	Massachusetts	Rio Grande do Sul
<i>Arenaeus cribrarius</i>	Virginian Disjunct	Massachusetts	Buenos Aires Prov.
<i>Callinectes sapidus</i>	Virginian Disjunct	Massachusetts	Rio Grande do Sul
<i>Hexapanopeus angustifrons</i>	Virginian Disjunct	Massachusetts	Santa Catarina
<i>Zaops ostreus</i>	Virginian Disjunct	Massachusetts	Santa Catarina

et al., 2006; Rodríguez *et al.*, 2006). Based on the distribution of reef fishes, for example, Floeter & Gasparini (2000) suggested the recognition of two provinces in the western Atlantic. To the north, the Northwest Atlantic province (or Caribbean expanded), including from the Florida east coast to Cape Hatteras and Bermuda, and the Brazilian province to the south, extending to the southeast of Brazil and separated from the Caribbean by the freshwater barrier formed by the mouth of the Amazon River. The rate of endemism of the Brazilian province is high (about 18%) for this shallow-water species group. The Amazon barrier acts as a primary barrier in relation to the dispersal of shallow-water reef organisms, and is so effective for reef fishes that only some species associated with sponge bottoms in the ocean waters can overcome it (Collette & Rützler, 1977; Floeter & Gasparini, 2000). This conclusion is also applicable to the distribution of porcellanid crabs in the western Atlantic, since few intertidal and shallow subtidal species occur on both sides of this barrier (Werding *et al.*, 2003). Among the species with disjunct distributions reported in this study, some are abundant in shallow-water environments where hard substrata occur, such as the anomurans *Calcinus tibicen* and

Clibanarius antillensis, and the brachyurans *Epialtus bituberculatus*, *Microphrys bicornutus*, *Pilumnus dasydodus*, *Eurypanopeus abbreviatus*, and *Panopeus harttii*, for which the river discharge in the Guianas region may represent an ecological barrier, restricting gene flow and perhaps leading to speciation. Many of these belong to taxa that require extensive taxonomic revision (e.g., Pilumnidae, Panopeidae), especially given the context of the existence of cryptic species in several groups of marine crustaceans. Thus, it is to be expected in the coming years that the study of cryptic biodiversity, supported by detailed morphological examination of specimens throughout their ranges and the use of molecular tools, will allow the description of numerous new taxa for science.

In agreement with Tavares (2004), the major part of the carcinological collections in Brazil is quite recent and these samples still have to be properly studied. As a result, few Brazilian specimens have been compared with material from other geographical areas. On several recent occasions, when comparative material from outside Brazil was available, the Brazilian specimens that had been considered to be identical to those from the Caribbean proved to belong to new species (Tavares, 2004).

ACKNOWLEDGEMENTS

To the Universidade Estadual de Santa Cruz for financing the project “Diversidade de Crustáceos do Sudeste e Sul da Bahia, Brasil: I. Ambientes Costeiros” (2006–2009). To Dr. Petrônio Alves Coelho for supervising the Doctoral thesis of the first author. To Dr. Ernesto Campos (Universidad Autónoma de Baja California, Mexico) for his criticisms on the section on *Fabia byssomia*. The cnidarians and the specimen of *Encope emarginata* were identified by Dr. Carlos Daniel Perez (UFPE) and Dr. Erminda Couto (UESC), respectively. To Dr. Janet W. Reid and Dr. Erich Rudolph for assistance with the English and Spanish text, respectively. To Felipe Souza Gudinho, Leandro Silva Oliveira, and M.Sc. Jesser Fidelis de Souza-Filho for the invaluable support in the field activities. LEAB thanks PNP/DCAPES for providing a post-doc scholarship. The IBAMA (Instituto Brasileiro do Meio-Ambiente e dos Recursos Naturais Renováveis) granted collecting permits.

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Appendix

List of species by collection station during the projects conducted in southern Bahia from 2003 to 2008.

1. List of stations of the project “Inventariamento da Fauna de Crustáceos do Município de Ilhéus, Bahia”, sponsored by the Universidade Estadual de Santa Cruz, Ilhéus (2003-2005).

1. Listado de estaciones del proyecto “Inventariamento da Fauna de Crustáceos do Município de Ilhéus, Bahia”, financiado por la Universidade Estadual de Santa Cruz, Ilhéus (2003-2005).

List of estuarine stations (in alphabetical order):

Locality/Station	Coordinates	Species collected
Acuípe River	not available	<i>Eurytium limosum</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>P. occidentalis</i> , <i>P. rugosus</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) rapax</i> , <i>U. (M.) thayeri</i>
Acuípe River, St. 1, near “Ilha dos Desejos”	15°05'19"S; 38°59'56"W	<i>Aratus pisonii</i> , <i>Goniopsis cruentata</i> , <i>Sesarma rectum</i> , <i>Ucides cordatus</i> , <i>Uca (Minuca) thayeri</i>
Acuípe River, St. 2, near highway BA-001	15°05'21.8"S; 38°59'56.4"W	<i>Aratus pisonii</i> , <i>Callinectes danae</i> , <i>Eurytium limosum</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>P. rugosus</i> , <i>Sesarma rectum</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) rapax</i> , <i>U. (M.) thayeri</i>
Acuípe River, St. 3	15°04'53.6"S; 39°00'13.8"W	<i>Goniopsis cruentata</i> , <i>Sesarma rectum</i>
Acuípe River, St. 4, old bridge over Acuípe River	15°04'59.5"S; 38°59'56.0"W	<i>Acantholobulus caribbaeus</i> , <i>Armases angustipes</i> , <i>Callinectes danae</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Uca (Minuca) thayeri</i> , <i>U. (Uca) maracoani</i> , <i>Ucides cordatus</i>
Acuípe River, St. 5, Acuípe River tributary	15°04'58.6"S; 38°59'53.4"W	<i>Callinectes exasperatus</i> , <i>Eurytium limosum</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Sesarma curacaoense</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) thayeri</i> , <i>U. (Uca) maracoani</i>
Acuípe River, St. 6, mouth of Acuípe River	15°05'41"S; 38°59'50"W	<i>Callinectes danae</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) thayeri</i>
Almada River	not available	<i>Aratus pisonii</i> , <i>Armases angustipes</i> , <i>A. rubripes</i> , <i>Callinectes danae</i> , <i>Eurytium limosum</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus rugosus</i> , <i>Sesarma curacaoense</i> , <i>S. rectum</i> , <i>Uca (Minuca) thayeri</i> , <i>U. (M.) vocator</i> , <i>Ucides cordatus</i>
Almada River, St. 2, mouth of Almada River	14°46'27.2"S; 39°03'14.8"W	<i>Armases rubripes</i> , <i>Callinectes danae</i> , <i>C. exasperatus</i> , <i>Clibanarius scolopetarius</i> , <i>C. vittatus</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus transversus</i>
Almada River, St. 3, São Miguel	14°45'40.9"S; 39°03'39.4"W	<i>Armases rubripes</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Uca (Minuca) thayeri</i>

Locality/Station	Coordinates	Species collected
Almada River, St. 5	14°43'30.3"S; 39°04'02.4"W	<i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus rugosus</i> , <i>Uca</i> (<i>Leptuca</i>) <i>leptodactyla</i> , <i>U.</i> (<i>Minuca</i>) <i>thayeri</i> , <i>U.</i> (<i>Uca</i>) <i>maracoani</i> , <i>Ucides cordatus</i>
Almada River, St. 6	14°41'06.5"S; 39°04'32.0"W	<i>Sesarma rectum</i> , <i>Uca</i> (<i>Minuca</i>) <i>mordax</i> , <i>Ucides cordatus</i>
Almada River, St. 7 (apparently without tidal influence)	14°40'30.6"S; 39°04'43.5"W	<i>Armases rubripes</i> , <i>Cardisoma guanhumi</i> (not collected), <i>Uca</i> (<i>Minuca</i>) <i>mordax</i> , <i>Ucides cordatus</i>
Cachoeira River, bank near 2 de Julho Avenue	14°48'05.4"S; 39°02'01.5"W	<i>Callinectes exasperatus</i> , <i>C. marginatus</i> , <i>Clibanarius sclopetarius</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i>
Cachoeira River, bank near Lomanto Júnior Avenue	14°48'31.1"S; 39°02'08.3"W	<i>Panopeus lacustris</i>
Cachoeira River, bank near Sapetinga Avenue	14°48'40.9"S; 39°02'21.1"W	<i>Callinectes danae</i> , <i>C. exasperatus</i> , <i>C. marginatus</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Uca</i> (<i>Leptuca</i>) <i>leptodactyla</i> , <i>Ucides cordatus</i>
Cachoeira River, Cristo Beach	14°48'22.9"S; 39°01'55.0"W	<i>Callinectes danae</i> , <i>Clibanarius sclopetarius</i> , <i>C. vittatus</i> , <i>Uca</i> (<i>Leptuca</i>) <i>leptodactyla</i>
Cachoeira River, locality of Banco da Vitória	14°47'05.0"S; 39°16'13.5"W	<i>Cardisoma guanhumi</i>
Cachoeira River, Maramata Beach	14°48'28.7"S; 39°01'33.3"W	<i>Callinectes marginatus</i> , <i>Clibanarius antillensis</i> , <i>C. sclopetarius</i> , <i>C. vittatus</i> , <i>Eurypanopeus abbreviatus</i> , <i>Pachygrapsus gracilis</i> , <i>P. transversus</i> , <i>Panopeus lacustris</i> , <i>Petrolisthes armatus</i> , <i>Uca</i> (<i>Leptuca</i>) <i>leptodactyla</i>
Cachoeira River, St. 1, near ETE (Ilhéus sewage treatment station), trawl	14°47'28.8"S; 39°05'45.3"W	<i>Callinectes bocourti</i>
Cachoeira River, St. 2, trawl	14°48'00.7"S; 39°05'29.8"W	<i>Callinectes danae</i> , <i>C. sapidus</i>
Cachoeira River, St. 3, trawl	14°47'57.9"S; 39°04'51.2"W	<i>Callinectes bocourti</i> , <i>C. danae</i> , <i>Panopeus rugosus</i>
Cachoeira River, St. 4, trawl	14°48'15.6"S; 39°04'22.3"W	<i>Acantholobulus caribbaeus</i> , <i>Callinectes danae</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus occidentalis</i> , <i>P. rugosus</i>
Cachoeira River, St. 5, trawl	14°48'51"S; 39°03'27.4"W	<i>Callinectes danae</i> , <i>C. exasperatus</i> , <i>C. sapidus</i>
Cachoeira River, St. 6, trawl	14°48'49.9"S; 39°03'19"W and 14°48'51.5"S; 39°02'28.1"W	<i>Acantholobulus caribbaeus</i> , <i>Callinectes danae</i> , <i>Clibanarius vittatus</i> , <i>Pachygrapsus gracilis</i>
Cachoeira River, St. 7, Lomanto Júnior Bridge, trawl	14°48'57.3"S; 39°02'30.5"W	<i>Acantholobulus caribbaeus</i> , <i>Callinectes danae</i> , <i>C. ornatus</i> , <i>Charybdis hellerii</i>
Cachoeira River, St. 8, Pontal, trawl	14°48'10"S; 39°02'12.3"W	<i>Acantholobulus caribbaeus</i> , <i>A. schmitti</i> , <i>Aratus pisonii</i> , <i>Callinectes danae</i> , <i>C. ornatus</i> , <i>Clibanarius vittatus</i> , <i>Panopeus occidentalis</i> , <i>Pisidia brasiliensis</i>
Cururupe River	14°52'51.0"S; 39°01'34.9"W	<i>Eurytium limosum</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Sesarma curacaoense</i> , <i>Uca</i> (<i>Leptuca</i>) <i>leptodactyla</i> , <i>U.</i> (<i>Minuca</i>) <i>thayeri</i>
Fundão River, St. 1	14°48'00.1"S; 39°03'31.8"W	<i>Callinectes danae</i>
Mamoã River	14°35'05.6"S; 39°03'10.5"W	<i>Aratus pisonii</i> , <i>Armases angustipes</i> , <i>A. rubripes</i> , <i>Callinectes exasperatus</i> , <i>Cyclograpsus integer</i> , <i>Eurytium limosum</i> , <i>Goniopsis cruentata</i> , <i>Ocypode quadrata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>P. occidentalis</i> , <i>Sesarma curacaoense</i> , <i>Uca</i> (<i>Leptuca</i>) <i>leptodactyla</i> , <i>U.</i> (<i>Minuca</i>) <i>rapax</i> , <i>U.</i> (<i>M.</i>) <i>thayeri</i> , <i>Ucides cordatus</i>

Locality/Station	Coordinates	Species collected
Parque Municipal da Boa Esperança, Ribeirão Iguape	14°47'01.3"S; 39°03'49.6"W	<i>Aratus pisonii</i> , <i>Armases angustipes</i> , <i>A. rubripes</i> , <i>Cardisoma guanhumi</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus rugosus</i> , <i>Sesarma rectum</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) thayeri</i> , <i>Ucides cordatus</i>
Santana River, St. 1, trawl	14°51'08.1"S; 39°03'59.8"W	<i>Callinectes bocourti</i>
Santana River, St. 2, trawl	14°51'04"S; 39°03'37.5"W	<i>Acantholobulus caribbaeus</i>
Santana River, St. 3, trawl	14°50'35.8"S; 39°02'45.1"W	<i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>P. occidentalis</i>
Santana River, St. 4, trawl	14°50'14.4"S; 39°02'39.2"W	<i>Acantholobulus caribbaeus</i> , <i>Callinectes bocourti</i> , <i>C. danae</i> , <i>C. exasperatus</i>
Santana River	14°37'20.8"S; 39°08'32.5"W	<i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Uca (Minuca) thayeri</i>
Santana River	14°49'55.4"S; 39°02'55.3"W	<i>Uca (Minuca) rapax</i>
Sargi River	14°30'06.7"S; 39°02'29.4"W	<i>Aratus pisonii</i> , <i>Callinectes danae</i> , <i>C. marginatus</i> , <i>Clibanarius sclopetarius</i> , <i>Eurytium limosum</i> , <i>Goniopsis cruentata</i> , <i>Ocypode quadrata</i> , <i>Pachygrapsus gracilis</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) thayeri</i>

List of marine stations (in alphabetical order):

Locality/Station	Coordinates	Species collected
Acuípe Beach	15°05'26.6"S; 38°59'46.6"W	<i>Arenaeus cribrarius</i> , <i>Ocypode quadrata</i>
Back-door Beach, Olivença	14°55'52"S; 39°00'59"W	<i>Acanthonyx dissimulatus</i> , <i>Arenaeus cribrarius</i> , <i>Calcinus tibicen</i> , <i>Callinectes marginatus</i> , <i>Cataleptodius floridanus</i> , <i>Clibanarius antillensis</i> , <i>C. sclopetarius</i> , <i>Eriphia gonagra</i> , <i>Menippe nodifrons</i> , <i>Microphrys bicornutus</i> , <i>Moreiradromia antillensis</i> , <i>Pachygrapsus transversus</i> , <i>Xanthodius denticulatus</i>
Back-door Beach, near Hotel Vilage Back-door, Olivença	14°56'10.2"S; 39°00'53.0"W	<i>Emerita portoricencis</i> , <i>Lepidopa richmondi</i>
Batuba Beach, Olivença	14°56'32.8"S; 39°00'43.3"W	<i>Arenaeus cribrarius</i> , <i>Calcinus tibicen</i> , <i>Clibanarius antillensis</i> , <i>Emerita portoricencis</i> , <i>Eriphia gonagra</i> , <i>Pachygrapsus transversus</i>
Jairí Beach, Olivença	14°58'42.8"S; 39°00'06.8"W	<i>Callinectes marginatus</i> , <i>Menippe nodifrons</i> , <i>Pachygrapsus transversus</i>
Malhado Beach	14°46'50.2"S; 39°02'44.3"W	<i>Callinectes marginatus</i> , <i>C. ornatus</i> , <i>Clibanarius sclopetarius</i> , <i>Eriphia gonagra</i> , <i>Eurypanopeus abbreviatus</i> , <i>Pachygrapsus transversus</i>
Milionários Beach	14°49'48.2"S; 39°09'30.3"W	<i>Albunea paretii</i> , <i>Austinixa aidaae</i> , <i>Emerita portoricencis</i> , <i>Lepidopa richmondi</i>
Milionários Beach, Morro dos Navegantes	14°52'23.9"S; 39°01'24"W	<i>Arenaeus cribrarius</i> , <i>Callinectes marginatus</i> , <i>Eriphia gonagra</i> , <i>Pachygrapsus transversus</i>
Milionários Beach, sandstone reef in front of Opaba Hotel	14°49'00.6"S; 39°01'26.1"W	<i>Microphrys bicornutus</i> , <i>Pachygrapsus transversus</i>
Sargi River (Sargi Beach)	14°30'23.3"S; 39°02'05.3"W	<i>Arenaeus cribrarius</i> , <i>Ocypode quadrata</i>

Locality/Station	Coordinates	Species collected
Sirihya Beach, Olivença	14°57'32.5"S; 39°00'21.5"W	<i>Acanthonyx dissimulatus</i> , <i>Calcinus tibicen</i> , <i>Callinectes marginatus</i> , <i>Cataleptodius floridanus</i> , <i>Clibanarius antillensis</i> , <i>C. sclopetarius</i> , <i>Eriphia gonagra</i> , <i>Eurypanopeus abbreviatus</i> , <i>Lepidopa richmondi</i> , <i>Pachygrapsus gracilis</i> , <i>P. transversus</i> , <i>Panopeus occidentalis</i> , <i>Uca (Leptuca) leptodactyla</i>

2. List of stations of the project "Diversidade de Crustáceos do Sudeste e Sul da Bahia, Brasil: Ambientes Costeiros", sponsored by the Universidade Estadual de Santa Cruz, Ilhéus. (2006-2008).

2. Listado de estaciones del proyecto "Diversidade de Crustáceos do Sudeste e Sul da Bahia, Brasil: Ambientes Costeiros", financiado por la Universidade Estadual de Santa Cruz, Ilhéus (2006-2008).

Locality/Station	Coordinates	Species collected
Alcobaça, Itanhem River, St. 1	17°33'24.9"S; 39°11'22.8"W	<i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Uca (Minuca) thayeri</i>
Alcobaça, Itanhem River, St. 2	17°33'09.9"S; 39°11'22.5"W	<i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>P. rugosus</i> .
Alcobaça, Itanhem River, St. 3	17°32'59.5"S; 39°11'34.6"W	<i>Sesarma curacaoense</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) burgersi</i> , <i>U. (M.) thayeri</i>
Belmonte, Mojiquiçaba Beach	16°05'10.8"S; 38°56'51.7"W	<i>Acanthonyx dissimulatus</i> , <i>Austinixa aidaae</i> , <i>Calcinus tibicen</i> , <i>Mithrax braziliensis</i> , <i>M. hemphilli</i> , <i>Pachycheles greeleyi</i>
Belmonte, Mojiquiçaba River	16°05'13.8"S; 38°56'53.8"W	<i>Acantholobulus caribbaeus</i>
Cairú, Moreré Beach, Boipeba Island	13°36'49.5"S; 38°54'16.2"W	<i>Achelous tumidulus</i> , <i>Calcinus tibicen</i> , <i>Cataleptodius floridanus</i> , <i>Clibanarius antillensis</i> , <i>Eriphia gonagra</i> , <i>Eurypanopeus abbreviatus</i> , <i>Microphrys bicornutus</i> , <i>Pagurus criniticornis</i> , <i>Panopeus harttii</i> , <i>Petrolisthes armatus</i>
Cairú, Oritiba River, Boipeba Island	13°35'49.1"S; 38°54'33.2"W	<i>Aratus pisonii</i> , <i>Callinectes danae</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Uca) maracoani</i> , <i>Zaops ostreus</i>
Cairú, Tassimirim Beach, Boipeba Island	13°34'49.6"S; 38°54'49.4"W	<i>Cataleptodius floridanus</i> , <i>Clibanarius antillensis</i> , <i>Microphrys bicornutus</i> , <i>Panopeus harttii</i> , <i>Pilumnus dasypodus</i>
Cairú, Triana River, Boipeba Island	13°35'00.6"S; 38°55'49.2"W	<i>Acantholobulus caribbaeus</i> , <i>Charybdis hellerii</i> , <i>Clibanarius sclopetarius</i> , <i>Pachygrapsus gracilis</i> , <i>Uca (Leptuca) cumulanta</i> , <i>U. (Minuca) thayeri</i> , <i>U. (Uca) maracoani</i> , <i>Zaops ostreus</i>
Cairú, Velha Boipeba Harbor, Boipeba Island	13°35'00.6"S; 38°55'49.2"W	<i>Clibanarius antillensis</i> , <i>Microphrys bicornutus</i> , <i>Pachygrapsus gracilis</i> , <i>Uca (Leptuca) leptodactyla</i>
Canavieiras, Atalaia Beach, northern Atalaia Island	15°38'40.5"S; 38°56'18.9"W	<i>Austinixa aidaae</i>
Canavieiras, Atalaia Beach, southern Atalaia Island	15°41'20.5"S; 38°55'42.8"W	<i>Austinixa aidaae</i> , <i>Emerita portoricencis</i>
Canavieiras, Pardo River	15°41'33.7"S; 38°56'07.0"W	<i>Clibanarius sclopetarius</i> , <i>Eurytium limosum</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Sesarma rectum</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) burgersi</i> , <i>U. (M.) rapax</i> , <i>U. (M.) thayeri</i>
Canavieiras, Patipe River	15°38'44.8"S; 38°56'30.2"W	<i>Acantholobulus caribbaeus</i> , <i>Armases angustipes</i> , <i>A. rubripes</i> , <i>Sesarma rectum</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) burgersi</i>

Locality/Station	Coordinates	Species collected
Caravelas, Caravelas River, St. 1	17°44'39.4"S; 39°14'49.7"W	<i>Acantholobulus bermudensis</i> , <i>Callinectes danae</i> , <i>C. exasperatus</i> , <i>C. ornatus</i> , <i>Charybdis hellerii</i> , <i>Clibanarius vittatus</i> , <i>Elamena gordonae</i> , <i>Pachygrapsus gracilis</i> , <i>P. transversus</i> , <i>Panopeus lacustris</i> , <i>Pelia rotunda</i> , <i>Petrolisthes armatus</i> , <i>Pilumnus reticulatus</i> , <i>Uca (Leptuca) cumulanta</i> , <i>U. (L.) leptodactyla</i> , <i>U. (Uca) maracoani</i>
Caravelas, Caravelas River, Farol Abrolhos Iate Clube, St. 2	17°44'44.2"S; 39°14'31.7"W	<i>Callinectes danae</i> , <i>Charybdis hellerii</i> , <i>Clibanarius vittatus</i> , <i>Megalobrachium mortenseni</i> , <i>Menippe nodifrons</i> , <i>Pachygrapsus gracilis</i> , <i>P. transversus</i> , <i>Petrolisthes armatus</i> , <i>Pilumnus reticulatus</i> , <i>Pisidia brasiliensis</i>
Caravelas, Caravelas River, Ponta de Areia, St. 3	17°45'01.8"S; 39°13'40.4"W	<i>Callinectes danae</i> , <i>C. exasperatus</i> , <i>Clibanarius sclopetarius</i> , <i>Pachygrapsus transversus</i> , <i>Petrolisthes armatus</i> , <i>Pisidia brasiliensis</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) rapax</i> , <i>U. (Uca) maracoani</i>
Caravelas, Caravelas River, Barra de Caravelas, St. 4	17°44'16.3"S; 39°11'16.3"W	<i>Callinectes danae</i> , <i>Charybdis hellerii</i> , <i>Clibanarius vittatus</i> , <i>Hepatus pudibundus</i> , <i>Notolopas brasiliensis</i> , <i>Pagurus criniticornis</i> , <i>Petrolisthes armatus</i> , <i>Pisidia brasiliensis</i>
Caravelas, Pontal do Sul	17°45'05.6"S; 39°11'35.4"W	<i>Clibanarius sclopetarius</i> , <i>C. vittatus</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Petrolisthes armatus</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) rapax</i> , <i>U. (Uca) maracoani</i>
Itacaré, Concha Beach, mouth of Contas River	14°16'31.4"S; 38°59'14.5"W	<i>Cataleptodius floridanus</i> , <i>Clibanarius sclopetarius</i> , <i>Eurypanopeus abbreviatus</i> , <i>Pachygrapsus transversus</i> , <i>Panopeus americanus</i> , <i>P. lacustris</i>
Itacaré, Contas River	14°16'38.2"S; 38°59'41.7"W	<i>Callinectes danae</i> , <i>Clibanarius sclopetarius</i> , <i>C. vittatus</i>
Itacaré, Ribeira Beach	not available	<i>Armases angustipes</i>
Maraú, Barra Grande (Barra Grande Pier)	13°53'26.1"S; 38°57'09.4"W	<i>Epialtus bituberculatus</i>
Maraú, Campinho Island, St. 1	13°55'38.1"S; 38°57'55.1"W	<i>Aratus pisonii</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) thayeri</i>
Maraú, Campinho Island, St. 2	13°55'44"S; 38°57'48.8"W	<i>Armases angustipes</i> , <i>Eurytium limosum</i> , <i>Pachygrapsus gracilis</i> , <i>Sesarma curacaoense</i> , <i>S. rectum</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) burgersi</i> , <i>U. (M.) rapax</i>
Maraú, Maraú River	14°06'60.2"S; 39°02'84.7"W	<i>Acantholobulus caribbaeus</i> , <i>Aratus pisonii</i> , <i>Panopeus lacustris</i>
Maraú, Maraú River, Tanque Island	13°59'92.2"S; 38°58'17.2"W	<i>Clibanarius sclopetarius</i>
Maraú, Ponta do Mutá	13°52'48.2"S; 38°56'53"W	<i>Acanthonyx dissimulatus</i> , <i>Calcinus tibicen</i> , <i>Callinectes marginatus</i> , <i>Cataleptodius floridanus</i> , <i>Clibanarius antillensis</i> , <i>Epialtus bituberculatus</i> , <i>Eriphia gonagra</i> , <i>Eurypanopeus abbreviatus</i> , <i>Pachygrapsus transversus</i> , <i>Pagurus criniticornis</i> , <i>Petrolisthes armatus</i>
Maraú, Taipus de Dentro	13°56'45.4"S; 38°58'53.7"W	<i>Aratus pisonii</i> , <i>Armases angustipes</i> , <i>Callinectes danae</i> , <i>C. marginatus</i> , <i>Clibanarius sclopetarius</i> , <i>Fabia byssomiae</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Petrolisthes armatus</i> , <i>Pinnixa sayana</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) thayeri</i> , <i>Zaops ostreus</i>
Maraú, Taipus de Fora Beach	not available	<i>Callinectes danae</i>
Maraú, Tanque Island, T1 (= Transect 1), Van Veen	14°00'77.1"S; 38°59'16.6"W	<i>Acantholobulus bermudensis</i> , <i>Clibanarius antillensis</i> , <i>Hexapanopeus angustifrons</i> , <i>Pagurus criniticornis</i>
Maraú, Tanque Island, T2 (= Transect 2), Van Veen	14°00'59.0"S; 38°59'15.6"W	<i>Chasmocarcinus arcuatus</i> , <i>Pagurus criniticornis</i>

Locality/Station	Coordinates	Species collected
Maraú, Tanque Island, T3 (= Transect 3), Van Veen	14°00'47.8"S; 38°59'00.5"W	<i>Clibanarius scolopetarius</i>
Mucuri, Mucuri Beach	18°05'20.7"S; 39°33'14.6"W	<i>Emerita portoricencis</i>
Mucuri, Mucuri River, St. 1, mouth	18°05.633'S; 39°33.113'W	<i>Aratus pisonii</i> , <i>Armases angustipes</i> , <i>Callinectes exasperatus</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Sesarma curacaoense</i> , <i>S. rectum</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) thayeri</i> , <i>U. (Uca) maracoani</i> , <i>Ucides cordatus</i>
Mucuri, Mucuri River, St. 2, har- bor	18°05'20.7"S; 39°33'14.6"W	<i>Armases angustipes</i> , <i>A. rubripes</i> , <i>Sesarma rectum</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) rapax</i> , <i>U. (M.) thayeri</i>
Nova Viçosa, Peruípe River	17°52'42.0"S; 39°21'55.7"W	<i>Aratus pisonii</i> , <i>Armases angustipes</i> , <i>Clibanarius vittatus</i> , <i>Eurytium limosum</i> , <i>Panopeus lacustris</i> , <i>Petrolisthes armatus</i> , <i>Uca (Minuca) burgersi</i> , <i>U. (M.) thayeri</i>
Nova Viçosa, Pontal da Barra Beach, St. 1	17°53'35.7"S; 39°21'51.2"W	<i>Emerita portoricencis</i>
Nova Viçosa, Pontal da Barra Beach, St. 2	17°53'22.7"S; 39°21'53.5"W	<i>Acantholobulus bermudensis</i> , <i>A. schmitti</i> , <i>Clibanarius vittatus</i> , <i>Pachygrapsus transversus</i> , <i>Petrolisthes armatus</i>
Nova Viçosa, Pontal da Barra Beach, near St. 2	17°53'22.7"S; 39°21'53.5"W	<i>Acantholobulus bermudensis</i> , <i>Petrolisthes armatus</i> , <i>Pisidia brasiliensis</i>
Nova Viçosa, Pontal da Barra, between St. 2 and 3	17°53'00.9"S; 39°21'48.2"W	<i>Uca (Leptuca) leptodactyla</i>
Nova Viçosa, Pontal da Barra Beach, St. 3, pier	17°53'00.9"S; 39°21'48.2"W	<i>Acantholobulus bermudensis</i> , <i>Clibanarius vittatus</i> , <i>Elamena gordonae</i> , <i>Megalobrachium roseum</i> , <i>Menippe nodifrons</i> , <i>Pachycheles greeleyi</i> , <i>Petrolisthes armatus</i> , <i>Pilumnus reticulatus</i> , <i>Pisidia brasiliensis</i>
Nova Viçosa, Pontal da Barra Beach, near St. 3	17°53'00.9"S; 39°21'48.2"W	<i>Clibanarius vittatus</i> , <i>Pachygrapsus transversus</i> , <i>Petrolisthes armatus</i>
Porto Seguro, Buranhem River, Arraial d'Ajuda	16°27'30.6"S; 39°03'59.6"W	<i>Callinectes danae</i> , <i>Clibanarius vittatus</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) thayeri</i> , <i>U. (Uca) maracoani</i> , <i>Ucides cordatus</i>
Porto Seguro, Buranhem River, Municipal Pier of Porto Seguro	16°26'48.5"S; 39°03'40.3"W	<i>Acantholobulus schmitti</i> , <i>Callinectes danae</i> , <i>Clibanarius scolopetarius</i> , <i>Pachygrapsus gracilis</i> , <i>P. transversus</i> , <i>Panopeus lacustris</i> , <i>Petrolisthes armatus</i>
Porto Seguro, Buranhem River, near harbor	16°27'14.5"S; 39°03'49.9"W	<i>Clibanarius vittatus</i> , <i>Zaops ostreus</i>
Porto Seguro, Mutá Beach, near mouth of Sabacuzinho River	16°21'52.2"S; 39°00'15.9"W	<i>Callinectes danae</i> , <i>Clibanarius scolopetarius</i>
Porto Seguro, Mutá Beach (reef)	16°21'52.2"S; 39°00'15.9"W	<i>Acantholobulus schmitti</i> , <i>Acanthonyx dissimulatus</i> , <i>Clibanarius antillensis</i> , <i>Epialtus bituberculatus</i> , <i>Eriphia gonagra</i> , <i>Macrocoeloma trispinosum</i> , <i>Microphrys bicornutus</i> , <i>Mithraculus forceps</i> , <i>Mithrax brasiliensis</i> , <i>Pagurus criniticornis</i> , <i>Pilumnus reticulatus</i> , <i>Troglocarcinus corallicola</i>
Prado, Barra do Cahy	17°00'45.0"S; 39°10'21.0"W	<i>Armases angustipes</i> , <i>Callinectes exasperatus</i> , <i>Goniopsis cruentata</i> , <i>Ocypode quadrata</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Sesarma rectum</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) rapax</i> , <i>U. (M.) thayeri</i>
Prado, Cumuruxatiba Beach	17°06'18.6"S; 39°10'50.4"W	<i>Acantholobulus schmitti</i> , <i>Acanthonyx dissimulatus</i> , <i>Austinixa aidae</i> , <i>A. leptodactyla</i> , <i>Callinectes marginatus</i> , <i>Clibanarius antillensis</i> , <i>Microphrys bicornutus</i> , <i>Petrolisthes armatus</i> , <i>Pilumnus dasypodus</i> , <i>Pisidia brasiliensis</i> , <i>Uca (Leptuca) leptodactyla</i>

Locality/Station	Coordinates	Species collected
Prado, Jucuruçu River, St. 1	17°20'57.5"S; 39°12'57.2"W	<i>Armases angustipes</i> , <i>Uca (Minuca) rapax</i>
Prado, Jucuruçu River, St. 3	17°21'33.1"S; 39°12'46.6"W	<i>Armases angustipes</i> , <i>A. rubripes</i> , <i>Sesarma rectum</i> , <i>Uca (Leptuca) leptodactyla</i> <i>Acantholobulus schmitti</i> , <i>Callinectes ornatus</i> , <i>Clibanarius antillensis</i> , <i>C. sclopetarius</i> , <i>Dissodactylus crinitichelis</i> , <i>Megalobrachium roseum</i> , <i>M. soriatum</i> , <i>Microphrys bicornutus</i> , <i>Minyocerus angustus</i> , <i>Mithraculus forceps</i> , <i>Mithrax brazilensis</i> , <i>Pachycheles greeleyi</i> , <i>Pachygrapsus transversus</i> , <i>Pagurus brevidactylus</i> , <i>P. criniticornis</i> , <i>Panopeus americanus</i> , <i>P. hartti</i> , <i>Petrolisthes armatus</i> , <i>Pilumnus dasypodus</i> , <i>P. reticulatus</i> , <i>Pitho lherminieri</i> , <i>Troglocarcinus corallicola</i> , <i>Uca (Leptuca) leptodactyla</i>
Santa Cruz Cabrália, Coroa Vermelha Beach	16°19'58.5"S; 39°00'21.5"W	<i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Uca (Leptuca) leptodactyla</i>
Santa Cruz Cabrália, João de Tiba River	16°16'38.8"S; 39°01'24.4"W	<i>Clibanarius vittatus</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus americanus</i> , <i>P. lacustris</i> , <i>Petrolisthes armatus</i>
Santa Cruz Cabrália, João de Tiba River, near Santo André Beach	16°15'03.9"S; 39°00'54.9"W	<i>Inachoides forceps</i> , <i>Megalobrachium roseum</i> , <i>M. soriatum</i> , <i>Menippe nodifrons</i> , <i>Mithrax brazilensis</i> , <i>Notolopas brasiliensis</i> , <i>Pachycheles greeleyi</i> , <i>Panopeus harttii</i> , <i>Pelia rotunda</i> , <i>Pilumnus reticulatus</i>
Santa Cruz Cabrália, Mouth of João de Tiba River (reef)	17°06'18.6"S; 39°10'50.4"W	<i>Eurytium limosum</i> , <i>Pachygrapsus gracilis</i> , <i>Panopeus lacustris</i> , <i>Sesarma curacaoense</i> , <i>Uca (Leptuca) leptodactyla</i> , <i>U. (Minuca) rapax</i> , <i>U. (M.) thayeri</i> , <i>U. (Uca) maracoani</i>
Una, Comandatuba Village	15°21'09.3"S; 38°59'13.6"W	

Received: 14 January 2010; Accepted: 9 August 2010