

The Brachyura (Decapoda) of Ilha Grande Bay, Rio de Janeiro, Brazil

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Abstract

The species of Brachyura collected through the Ilha Grande Project in the marine area of Ilha Grande State Park, located in the southern part of the state of Rio de Janeiro, were surveyed. At 225 of the 368 stations visited by the barque "Emília" and subsequently by the R/V "Prof. W. Besnard", 110 brachyuran species were collected, representing 83 genera, 29 families and 18 superfamilies.. In addition, 24 beaches, 5 islands, 1 inlet, 1 bay, and 1 mangrove forest were explored. For each species, information is provided on its geographical distribution and habitat, and a list of the stations at which it occurred. A table giving the oceanographic data for the stations, with those species that occurred at each station, is also provided.

Key words: Decapoda, Brachyura, Ilha Grande Bay, Rio de Janeiro, Brazil.

Introduction

Ilha Grande State Park is only a part (5,594 hectares) of the entire island of Ilha Grande (19,300 hectares). It is located on the south coast of the state of Rio de Janeiro, between the municipalities of Mangaratiba and Angra dos Reis (between 23°00'S and 23°40'S and 44°00'W and 44°40'W). This park was created in 1971 by a decree of the state government of Rio de Janeiro, with the objective of protecting the local biodiversity and stimulating tourism (Alho *et al.*, 2002). In 2005, by a Supplementary Bill, the park was enlarged to 12,052 hectares, including all the land on Ilha Grande located above the 100 m altitude contour line.

In 1963, the Research Support Foundation of the State of São Paulo (FAPESP) sponsored a Seminar on the Natural History of Aquatic Organisms, with the objectives of surveying bibliographic data, promoting information exchange about research projects in progress, and identification of priority areas for research (Tommasi, 1969). As a result of that seminar, under the aegis of FAPESP, a volume entitled "História Natural de Organismos Aquáticos do Brasil – Bibliografia Comentada", edited by Paulo Emílio Vanzolini, was produced (Vanzolini, 1964). During that seminar, intensive faunistic sampling of fresh, brackish, and marine

waters of the Brazilian territory, with the material collected to be deposited in regional museums, was approved as a priority item.

Following these recommendations, FAPESP itself sponsored, between 1965 and 1969, a survey of the marine fauna and flora of Ilha Grande Bay, from the beaches of Ilha Grande and adjacent islands to a depth of 50 m. This region was selected because of its wide range of habitats and rich fauna.

This project was conducted by the Oceanographic Institute, Department of Zoology of the Secretariat of Agriculture (presently the Museum of Zoology of the University of São Paulo, MZUSP), in addition to the Departments of Zoology and Botany, all of the University of São Paulo.

The first 299 stations (between 18.xii.1965 and 16.v.1966) were sampled by the Barque "Emília", and the subsequent stations (300-368) were sampled by the R/V "Prof. W. Besnard" (between 16.ii.1968 and 18.iii.1969).

Of the 368 stations programmed for the Project, species of Brachyura were collected at 225. All the material collected was identified and deposited in the Carcinological Collection of the MZUSP. In addition to the oceanographic stations, beaches, bays, islands, and mangrove forests around Ilha Grande and in the Angra dos Reis region were explored.

At the stations visited by the barque “Emilia” and later by the R/V “Prof. W. Besnard”, 110 species were collected, included in 83 genera and 29 families of Brachyura. For each species, information is provided on its geographical distribution and habitat, and a list of the stations at which it occurred. A table giving the oceanographic data for each station, and the species that occurred at each station, is also provided (Tab. I). This material constitutes an important contribution to knowledge of the fauna of the state of Rio de Janeiro.

The classification of the species, genera, and families is based on the works of Melo (1996) and the recently published Ng *et al.* (2008).

Taxonomic account

Superfamily Dromioidea De Haan, 1833
Family Dromiidae De Haan, 1833
Dromia erythropus (G. Edwards, 1771)

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

Habitat: Hard substrates such as corals, broken shells, and rocks. Intertidal to 360 m. Generally covers the carapace with sponges or ascidians.

Material examined: Station 211.

Hypoconcha arcuata Stimpson, 1858

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

Habitat: Shallow waters to 80 m. Sandy or shell substrates. Found in association with bivalve molluscs, which it carries with the aid of its claws and last pairs of legs.

Material examined: Stations 209, 212, 213, 356.

Moreiradromia antillensis (Stimpson, 1858)

Distribution: Western Atlantic – North Carolina, Bermuda, Florida, Gulf of Mexico, Antilles, Venezuela, Guiana, Suriname, French Guiana, and Brazil (from Amapá to Rio Grande do Sul).

Habitat: Hard substrates such as corals, broken shells, and rocks. Intertidal to 330 m. Generally covers the carapace with sponges or ascidians.

Material examined: Stations 269, 287.

Superfamily Homoloidea De Haan, 1839
Family Homolidae De Haan, 1839
Homola barbata (Fabricius, 1793)

Distribution: Western Atlantic – From Virginia to Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (from Rio de Janeiro to Rio Grande do Sul). Eastern Atlantic – Portugal and African coast. Mediterranean.

Habitat: Sand, shell, and coral bottoms; occasionally on muddy substrates. Between 30 and 680 m.

Material examined: Stations 289, 290.

Family Latreilliidae Stimpson, 1858
Latreillia williamsi Melo, 1990

Distribution: Western Atlantic – Brazil (from Rio de Janeiro to Rio Grande do Sul).

Habitat: Usually on sand, gravel, mud, or shell substrates. Depths from 130 to 290 m.

Material examined: Stations 159, 303.

Superfamily Cyclodorippoidea Ortmann, 1892
Family Cyclodorippidae Ortmann, 1892
Clythrocerus granulatus (Rathbun, 1898)

Distribution: Western Atlantic – North Carolina, Florida, Central America, Antilles, Venezuela, and Brazil (from Amapá to Rio Grande do Sul).

Habitat: From 120 to 600 m. Off the Brazilian coast, between 80 and 250 m.

Material examined: Stations 253, 295, 387.

Family Cymonomidae Bouvier, 1897
Cymonomus quadratus A. Milne-Edwards, 1880

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, and Brazil (Amapá and from Rio de Janeiro to Rio Grande do Sul).

Habitat: Sand and mud bottoms. From 190 to 930 meters. Off the Brazilian coast, between 200 and 600 m.

Material examined: Station 279.

Superfamily Dorippoidea MacLeay, 1838

Family Ethusidae De Haan, 1833

***Ethusa americana* A. Milne-Edwards, 1880**

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

Habitat: Rocky and coral bottoms, sand and shell substrates; also on bottoms with algae and bryozoans. Shallow water to 90 meters.

Material examined: Station 53.

***Ethusa tenuipes* Rathbun, 1897**

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (Rio de Janeiro and São Paulo).

Habitat: Sand, gravel, and organogenic bottoms. Between 40 and 400 m.

Material examined: Station 288.

***Ethusina abyssicola* Smith, 1884**

Distribution: Western Atlantic – From Massachusetts to North Carolina, Gulf of Mexico, and Brazil (Rio de Janeiro). Mediterranean (Spain).

Habitat: Usually on muddy bottoms. A species of deep waters (850 to 4050 meters), although off Brazil it occurs at shallower depths.

Material examined: Stations 134, 368.

Superfamily Raninoidea De Haan, 1839

Family Raninidae De Haan, 1839

***Ranilia constricta* (A. Milne-Edwards, 1880)**

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, and Brazil (from Amapá to Rio Grande do Sul). Mid-Atlantic – Ascension Island. Eastern Atlantic – from Senegal to the Republic of Congo, Annobon Island.

Habitat: Prefers coarse-sand bottoms, but can also be found on corals and hard bottoms. From 20 to 340 m.

Material examined: Stations 52, 269.

***Symethis variolosa* (Fabricius, 1793)**

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

Habitat: Sand, mud, and calcareous-algae bottoms. Depths from 20 to 110 m.

Material examined: Station 92.

Superfamily Aethroidea Dana, 1851

Family Aethridae Dana, 1851.

***Hepatus gronovii* Holthuis, 1959**

Distribution: Western Atlantic – Colombia, Venezuela, Guianas, and Brazil (from Amapá to Santa Catarina).

Habitat: Sand and mud bottoms. Between 20 and 60 m.

Material examined: Station 356

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

Distribution: Western Atlantic – Georgia, Gulf of Mexico, Antilles, Venezuela, Guianas, and Brazil (from Amapá to Rio Grande do Sul). Eastern Atlantic – From Guinea to South Africa.

Habitat: Principally on mud, sand, and broken-shell bottoms. Shallow waters to 160 m. Sometimes carries anemones and barnacles on its carapace.

Material examined: Stations 1, 2, 12, 19, 21, 22, 54, 55, 170, 176, 209, 210, 239, 245, 252, 254, 275, 276, 281, 306, 355, 356, 362.

***Osachila tuberosa* Stimpson, 1871**

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (from Rio de Janeiro to Rio Grande do Sul).

Habitat: Coral and shell bottoms, occasionally on sand. Between 40 and 90 m, most common at depths of about 40 m.

Material examined: Station 51.

Superfamily Calappoidea De Haan, 1833

Family Calappidae De Haan, 1833

Acanthocarpus alexandri Stimpson, 1871

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

Habitat: Principally on sand and mud bottoms. Between 70 and 480 m.

Material examined: Station 26

Superfamily Leucosioidea Samouelle, 1819

Family Leucosiidae Samouelle, 1819

Ebalia stimpsonii A. Milne-Edwards, 1880

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

Habitat: Mud-sand, broken-shell, and coral bottoms. Shallow waters to 160 m.

Material examined: Station 302.

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

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

Habitat: Sand, gravel, and occasionally mud bottoms. Shallow waters to 40 m.

Material examined: Stations 11, 207, 208, 211, 242, 290, 356.

***Persephona lichtensteinii* Leach, 1817**

Distribution: Western Atlantic – Venezuela, Suriname, French Guiana, Brazil (from Amapá to Rio Grande do Sul), and Uruguay.

Habitat: Sand, mud, and calcareous-algae bottoms. Intertidal to 70 m.

Material examined: Stations 74, 76, Pai Paulo Beach, and Estrelas Bay.

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

Distribution: Western Atlantic – New Jersey, Carolinas, Florida, Gulf of Mexico, Antilles, Venezuela, Suriname, French Guiana, Brazil (from Amapá to Rio Grande do Sul), and Uruguay.

Habitat: Sand, shell, and coral bottoms. Intertidal to 60 m.

Material examined: Stations 9, 12, 16, 19, 40, 43, 45, 54, 56, 108, 243, 249, 255, 281, 309, 335.

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

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

Habitat: Sand, shell, and, mainly, mud bottoms. Intertidal to 50 m.

Material examined: Stations 3, 45, 54, 209, 335.

Superfamily Majoidea Samouelle, 1819

Family Epialtidae MacLeay, 1838

Acanthonyx scutiformis (Dana, 1851)

Distribution: Western Atlantic – Brazil (from Espírito Santo to São Paulo).

Habitat: In shallow waters, mainly on sand bottoms.

Material examined: Stations 8, 18, 50, 65, 68, 71, 78, 79, 86, 87, Vila Velha and Mombaça beaches.

***Apiomithrax violaceus* (A. Milne-Edwards, 1868)**

Distribution: Western Atlantic – Brazil (from Paraíba to Rio Grande do Sul). Eastern Atlantic – Cape Verde Islands and from Cabo Branco (Azores) to Angola. Mid-Atlantic – Ascension Island.

Habitat: Sand and mud bottoms. Shallow waters to 50 m.

Material examined: Station 362.

***Epialtus brasiliensis* Dana, 1852**

Distribution: Western Atlantic – Colombia and Brazil (from Espírito Santo to São Paulo).

Habitat: In shallow waters, among algae of the genera *Sargassum*, *Padina*, and *Laurentia*. Substrate mimics; the structure of their pereiopods is suitable for clinging to algae.

Material examined: Furado, Leste, Leste Pequeno, Funil, Guanxuma, and Grumixama beaches.

***Leucippa pentagona* H. Milne Edwards, 1833**

Distribution: Western Atlantic – Brazil (from Rio de Janeiro to São Paulo), Uruguay, and Argentina. Eastern Pacific – California, Mexico, and Chile.

Habitat: Sand and shell bottoms, occasionally in mud. Between 20 and 80 meters.

Material examined: Stations 25, 221, 303, 304.

***Libinia ferreirae* Brito Capello, 1871**

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

Habitat: Preferentially on mud bottoms. Intertidal to 35 m.

Material examined: Station 229.

***Libinia spinosa* H. Milne Edwards, 1834**

Distribution: Western Atlantic – Brazil (from Espírito Santo to Rio Grande do Sul), Uruguay, and Argentina.

Habitat: Generally on mud bottoms. From shallow waters to 170 m.

Material examined: Stations 7, 20, 21, 218, 219, 302 and Estrelas Bay.

***Mocosoa crebripunctata* Stimpson, 1871**

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

Habitat: Calcareous-algae and sand bottoms. Between 20 and 130 meters.

Material examined: Station 144.

***Notolopas brasiliensis* Miers, 1886**

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

Habitat: Mud and calcareous-algae bottoms, occasionally on sand and broken shells. Intertidal to 30 m.

Material examined: Stations 140, 193, 197, 355, 356.

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

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

Habitat: Sand and calcareous-algae bottoms. Intertidal to 190 m.

Material examined: Station 356.

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

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

Habitat: Mud, sand, broken-shell, rock, and coral bottoms. Shallow waters to 30 m, rarely to 200 m.

Material examined: Stations 231, 235.

***Rochinia gracilipes* A. Milne-Edwards, 1875**

Distribution: Western Atlantic – Brazil (from Rio de Janeiro to Rio Grande do Sul), Uruguay, Argentina, and Antarctica.

Habitat: Sand, gravel, and shell bottoms. Sometimes among submersed vegetation. Between 15 and 175 m.

Material examined: Stations 174, 222, 231, 232, 302, 315, 316.

Family Inachidae MacLeay, 1838

Podochela algicola (Stebbing, 1914)

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

Habitat: Sand and calcareous-algae substrates, protected among algae. Body camouflaged with pieces of algae among the setae of the ambulatory legs and on the carapace. Between 25 and 90 m.

Material examined: Stations 53, 104.

Podochela gracilipes Stimpson, 1871

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

Habitat: Sand, gravel, broken-shell, rock, and coral bottoms. Intertidal to 220 m. Carapace usually covered with pieces of algae.

Material examined: Stations 280, 315.

Stenorhynchus seticornis (Herbst, 1788)

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

Habitat: Calcareous algae, corals, and rock, shell, and sand bottoms. Occurs together with sponges. Moves slowly, in hops. Does not camouflage itself; is sometimes parasitized by sacculinids. From the intertidal zone to great depths.

Material examined: Station 280.

Family Inachoididae Dana, 1851

Aepinus septemspinosus A. Milne-Edwards, 1879

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

Habitat: Hard bottoms, mainly corals, rocks, and calcareous-algae. From 10 to 85 meters.

Material examined: Stations 81, 177, 317, 318.

Batrachonotus fragosus Stimpson, 1871

Distribution: Western Atlantic – North Carolina, Florida, Antilles to Barbados, and Brazil (from Pará to São Paulo).

Habitat: Sand and calcareous-algae bottoms. Between 12 and 73 m.

Material examined: Stations 52, 166, 177, 223, 229, 341, 356, 357, 358, 359, 362.

Collodes rostratus A. Milne-Edwards, 1878

Distribution: Western Atlantic – Brazil (from Espírito Santo to Rio Grande do Sul), Argentina (including Patagonia).

Habitat: Mud, sand, and shell bottoms. From 20 to 65 m depth.

Material examined: Stations 7, 52, 107, 166, 221, 315, 368.

Euprognatha rastellifera Stimpson, 1871

Distribution: Western Atlantic – Massachusetts to Florida, Gulf of Mexico, Antilles, Guianas, Brazil (from Amapá to Rio Grande do Sul), and Uruguay.

Habitat: Sand, coral, and shell bottoms. Shallow waters to considerable depths (710 m).

Material examined: Stations 135, 136, 172, 288, 289, 290.

Inachoides forceps A. Milne-Edwards, 1879

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

Habitat: From shallow waters to 70 m. Sand, gravel, and coral bottoms. Occasionally on calcareous-algae substrates.

Material examined: Stations 46, 104, 132, 133, 212 and Furado, Freguesia do Sul, Freguesia do Leste, Grumixama, Funil, Brava, Baleia, Vila Velha, and Leste beaches.

***Leurocyclus tuberculosus* (H. Milne Edwards & Lucas, 1843)**

Distribution: Western Atlantic – Brazil (from Rio de Janeiro to Rio Grande do Sul), Uruguay, and Argentina (including Patagonia). Eastern Pacific – Chile.

Habitat: Preferentially on sand, shell, and mud bottoms. Between 10 and 70 m.

Material examined: Stations 2, 25, 221, 263, 306, 310, 312, 316.

Family Majidae Balls, 1929

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

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

Habitat: Shallow waters to 80 m. Sand, rock, and broken-shell bottoms. Also on *Sargassum*.

Material examined: Station 289.

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

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

Habitat: Very common on coral reefs and in almost all shallow marine habitats. Almost always covered with anemones, algae, or sponges.

Material examined: Vila Velha, Mombaça, Aqidabá, Baleia, Furado, Funil, Pai Paulo, Guanxuma, Baixio, Freguesia do Leste, Brava, and Grumixama beaches and Zatim Island.

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

Distribution: Western Atlantic – North Carolina to southern Florida, Gulf of Mexico, Antilles, Venezuela, and Brazil (Fernando de Noronha and Rocas Atoll, and from Maranhão to São Paulo).

Habitat: Intertidal to 90 m. On hard, fissured substrates along rocky beaches. Also on sand, coral, and algal bottoms, in addition to sponges.

Material examined: Freguesia do Leste, Furado, Grumixama, Vila Velha, Brava, and Baleia beaches.

***Mithrax hispidus* (Herbst, 1790)**

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

Habitat: From shallow waters to 65 m. Sand, shell, rock, and coral bottoms. Occasionally in *Halodule* meadows.

Material examined: Grumixama and Freguesia do Sul beaches.

***Stenocionops furcata* (Olivier, 1791)**

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

Habitat: Sand, rock, mud, and coral bottoms, and on wharf pilings. Transports different species of anemones and sponges on its carapace and appendages. From intertidal zone to 180 m.

Material examined: Station 99.

Superfamily Parthenopoidea MacLeay, 1838

Family Parthenopidae MacLeay, 1838

***Agolambrus agonus* (Stimpson, 1871)**

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

Habitat: Sand and shell bottoms. Intertidal to 100 m.

Material examined: Station 279.

***Heterocrypta granulata* (Gibbes, 1850)**

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

Habitat: Sand, shell, and gravel bottoms, where its shape and coloration provide excellent cam-

oufage. Occasionally occurs on rocks and corals. From shallow waters to 140 m.

Material examined: Station 51.

***Heterocrypta lapidea* Rathbun, 1901**

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

Habitat: Sand, mud, and shell bottoms. Intertidal to 180 m.

Material examined: Stations 1, 5, 170, 175, 208, 212, 231, 237, 240, 243, 251, 254, 257, 260, 263, 266, 271, 276, 279, 280, 308, 350, 355, 356, 357, 359, 360, 362.

***Mesorhoea sexspinosa* Stimpson, 1871**

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

Habitat: Mainly on sand and shell bottoms. Intertidal to 100 m.

Material examined: Stations 25, 92, 101, 102, 103, 105, 112, 256, 266, 281, 338.

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

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

Habitat: Sand and calcareous-algae bottoms. Between 15 and 30 m.

Material examined: Stations 22, 250.

***Spinolambrus fraterculus* (Stimpson, 1871)**

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

Habitat: Sand, shell, gravel, rock, and coral bottoms. Shallow waters to 200 m.

Material examined: Stations 1, 177, 282, 284, 287, 288, 289.

***Thyrolambrus astroides* Rathbun, 1894**

Distribution: Western Atlantic – Gulf of Mexico, Antilles, and Brazil (from Pará to Rio de Janeiro). Eastern Pacific – Revillagigedo Island. Indo-Pacific – Andaman Sea and Mauricio Island.

Habitat: Calcareous-algae and detritus bottoms. Between 50 and 370 m.

Material examined: Station 177.

Superfamily Portunoidea Rafinesque, 1815

Family Portunidae Rafinesque, 1815

***Arenaeus cribrarius* (Lamarck, 1818)**

Distribution: Western Atlantic – Massachusetts to North Carolina, Bermuda, Florida, Gulf of Mexico, Antilles, Colombia, Venezuela, Brazil (from Ceará to Rio Grande do Sul), Uruguay, and Argentina.

Habitat: Well adapted to live in beach sand. Found rarely in estuaries or inland ponds.

Material examined: Station 283, Estrelas Bay.

***Callinectes danae* Smith, 1869**

Distribution: Western Atlantic – North Carolina, Bermuda, Florida, Gulf of Mexico, Antilles, Colombia, Venezuela, and Brazil (from Paraíba to Rio Grande do Sul).

Habitat: Occurs in brackish to hypersaline waters, in mangroves and muddy estuaries. Also on sandy beaches and in the open sea. Intertidal to 75 m.

Material examined: Stations 72, 74, 83, Vila Velha and Baiá beaches.

***Callinectes larvatus* Ordway, 1863**

Distribution: Western Atlantic – North Carolina to Florida, Bermuda, Gulf of Mexico, Antilles, Colombia, Venezuela, and Brazil (from Ceará to São Paulo).

Habitat: On sand and mud bottoms, and the edges of mangrove forests; also in brackish water, rarely in the open sea. Intertidal to 25 m.

Material examined: Station 37 and Estrelas Bay.

***Callinectes ornatus* Ordway, 1863**

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

Habitat: On sand and mud, and in less-saline waters.

Material examined: Stations 12, 283, 288, Estrelas Bay, and Coqueiros Island.

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

Distribution: Western Atlantic – Florida, Cuba, Colombia, Venezuela, and Brazil (from Rio Grande do Norte to Santa Catarina). Mediterranean Sea. Indo-Pacific – Hawaii and Red Sea.

Habitat: Rocky shores, under stones, and on coral reefs. Intertidal to 47 m. Introduced species.

Material examined: Station 32.

***Cronius ruber* (Lamarck, 1818)**

Distribution: Western Atlantic – Virginia, North Carolina to southern Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (from Amapá to Rio Grande do Sul). Eastern Atlantic – From Mauritania to Cape Verde, Príncipe, São Tomé and Annobón islands. Eastern Pacific – From Baja California to Peru and the Galapagos Islands.

Habitat: Sandy beaches, and rock and gravel areas. Shallow waters to 110 m.

Material examined: Station 41 and Furado, Guanxuma, Freguesia do Leste, Freguesia do Sul, and Japaris beaches.

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

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

Habitat: Shallow waters to 550 m, on sand, gravel, broken-shell, coral, and mud bottoms.

Material examined: Stations 25, 132, 138, 279, 280, 302, 335, 356, 358.

***Portunus spinimanus* Latreille, 1819**

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

Habitat: Brackish water of channels and bays, on sand, gravel, broken-shell, and mud bottoms. From shallow waters to 90 m.

Material examined: Station 281, Estrelas Bay, Furado Beach, and Coqueiros Island.

Superfamily Pilumnoidea Samouelle, 1819**Family Pilumnidae Samouelle, 1819**

Pilumnus caribaeus Desbonne & Schramm, 1867

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

Habitat: Sand, mud, shell, and coral bottoms. Intertidal to 55 m.

Material examined: Station 235 and Freguesia do Leste Beach.

***Pilumnus dasypodus* Kingsley, 1879**

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

Habitat: Sand, shell, and coral bottoms; also found on mangrove roots and dock pilings. Intertidal to 30 m.

Material examined: Station 290, Freguesia do Leste and Baleia beaches.

***Pilumnus diomedae* Rathbun, 1894**

Distribution: Western Atlantic – Gulf of Mexico, Antilles, and Brazil (from Amapá to Rio Grande do Sul).

Habitat: Mud and coral bottoms. From 20 to 340 m.

Material examined: Station 144.

***Pilumnus reticulatus* Stimpson, 1860**

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

Habitat: Sand and shell bottoms. Intertidal to 75 m.

Material examined: Stations 18, 132, 237, Furado and Baleia beaches, and Zatim Island.

***Pilumnus spinosissimus* Rathbun, 1898**

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

Habitat: On sandy, rocky, and, mainly, coral substrates. From 5 to 20 m.

Material examined: Stations 236, 237, 270, 336.

Superfamily Pseudozioidae Alcock, 1898

Family Pilumnoididae Guinot & Macpherson, 1987

***Pilumnoides coeltoi* Guinot & Macpherson, 1987**

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

Habitat: Shallow waters to 30 m. On sand bottoms or among algae.

Material examined: Station 52.

***Pilumnoides bassleri* A. Milne-Edwards, 1880**

Distribution: Western Atlantic – Brazil (from Rio de Janeiro to Rio Grande do Sul), Uruguay, and Argentina to the Strait of Magellan.

Habitat: Seeks out rock bottoms or submerged objects. Occurs together with ascidians. Forms large concentrations.

Material examined: Stations 51, 197, 302, 308, 339.

Superfamily Xanthoidea MacLeay, 1838

Family Panopeidae Ortmann, 1893

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

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Ceará to Santa Catarina). Eastern Pacific – From Mexico to Peru.

Habitat: In tidepools on rocks, under stones, and on oyster beds. In estuaries and mangroves. From low-tide level to 18 m.

Material examined: Stations 356, 359 and Baleia, Funil, Furado, Freguesia do Leste, and Leste beaches.

***Acantholobulus schmitti* Rathbun, 1930**

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

Habitat: From intertidal to 25 m. Sand, mud, and shell bottoms.

Material examined: Stations 103, 114, 174, 202, 351, Zatim Island, Pai Paulo, Freguesia do Leste, Baleia, and Leste beaches.

***Cyrtoplax spinidentata* (Benedict, 1892)**

Distribution: Western Atlantic – Antilles and Brazil (from Pernambuco to Rio Grande do Sul).

Habitat: Mud bottoms; occasionally on sand or among algae. Shallow waters to 150 m.

Material examined: Stations 65, 69, 72, 73, 74, 77, 81, 82, 85, 86, 88, 91, 115, 128, 185, 202, 205, 363, 364, 365.

***Eucratopsis crassimanus* (Dana, 1852)**

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

Habitat: Sand, coral, and shell-gravel bottoms. Shallow waters to 80 m.

Material examined: Station 209.

***Eurypanopeus abbreviatus* (Stimpson, 1860)**

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

Habitat: Under stones, in coral reefs, or on rocky bottoms. Also in oyster banks, sponges, and bryozoans. Intertidal to 5 m.

Material examined: Freguesia do Leste, Guanxuma, Grumixama, Baleia, Pai Paulo, Vila Velha, Mombasa, and Funil beaches.

***Hexapanopeus paulensis* Rathbun, 1930**

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

Habitat: Sand, broken-shell, and rock bottoms, among sponges, ascidians, and bryozoans. Intertidal to 5 m.

Material examined: Stations 32, 43, 63, 117, 182, 184, 185, 186, 189, 193, 194, 196, 204, 206, 209, 210, 218, 221, 260, Grumixama, Vila Velha, and Pai Paulo beaches, and Coqueiros and Morcegos islands.

***Melybia thalamita* Stimpson, 1871**

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

Habitat: In corals and on sand, rock, and broken-shell bottoms. Depths to 200 m.

Material examined: Station 134, 258.

***Panopeus americanus* Saussure, 1857**

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

Habitat: Under rocks, on mud beaches, and in mangroves. Sand, shell, and mud bottoms. Intertidal to 25 m.

Material examined: Funil, Furado, Freguesia do Leste beaches, and Airport mangrove.

***Panopeus austrobesus* Williams, 1983.**

Distribution: Western Atlantic – Brazil (from Rio de Janeiro to Rio Grande do Sul).

Habitat: Bays, estuaries, channels, and mangroves. Under rocks, and on rock and coral reefs. Excavates burrows in silty beaches. Intertidal to 30 m, although there are records from greater depths.

Material examined: Freguesia do Leste, Pai Paulo, Leste, Baixio, Grande do Frade, Aquidabá beaches and Jipóia Island.

***Panopeus harttii* Smith, 1869**

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, and Brazil (from Maranhão to São Paulo). Mid-Atlantic – Ascension Island.

Habitat: Usually under rocks, also on rock or coral reefs. Intertidal to 25 m.

Material examined: Stations 132, 329 and Furado, Freguesia do Leste, Baleia, and Baixio beaches.

***Panopeus occidentalis* Saussure, 1857**

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

Habitat: Sand, rock, and gravel bottoms. Among algae, sponges, or mangrove roots. Common on dock pilings. Intertidal to 20 m.

Material examined: Stations 18, 213, 356, 359 and Anil, Vila Velha, Mombasa, Baleia, Guanxuma, Furado, Freguesia do Leste, Freguesia do Sul beaches and Airport mangrove.

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

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

Habitat: Sand, shell, rock, and coral bottoms; also on dock pilings. Intertidal to 50 m.

Material examined: Freguesia do Leste, Mombaça, and Brava beaches.

***Tetraxanthus rathbunae* Chace, 1939**

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

Habitat: Mud, sand, rock, and shell bottoms. According to some reports, this species prefers depths between 100 and 500 m; however, in Brazil, it was collected at 20 m.

Material examined: Stations 8, 10, 134, 138, 166, 177, 287, 319, 368.

Family Xanthidae MacLeay, 1838

***Allactaea lithostrota* Williams, 1974**

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

Habitat: Sand and coral bottoms. Between 60 and 640 m.

Material examined: Stations 4, 31, 161.

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

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

Habitat: Rock, coral, sand, and broken-shell bottoms; also on bottoms of *Porites* and *Halimede*. Shallow waters to 180 m.

Material examined: Station 301.

***Paractaea rufopunctata nodosa* (Stimpson, 1860)**

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

Habitat: In corals; also sand, broken-shell, rock, and occasionally mud bottoms. Intertidal to 220 m.

Material examined: Station 52.

***Platypodiella spectabilis* (Herbst, 1794)**

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

Habitat: Coral reefs and under rocks. Shallow depths of 5 to 15 m.

Material examined: Stations 8, 269.

***Speocarcinus carolinensis* Stimpson, 1849**

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

Habitat: In holes of *Squilla*, *Callianassa*, and other crustaceans, and in mud bottoms. Intertidal to 150 m.

Material examined: Stations 23, 24, 30, 35, 36, 137.

Superfamily Eriphioidea MacLeay, 1838

Family Eriphiidae MacLeay, 1838

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

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

Habitat: Rock and coral substrates, cavities in intertidal areas. Also in algae and sponges. Intertidal to 5 m.

Material examined: Freguesia do Leste, Freguesia do Sul, and Furado beaches.

Family Menippidae Ortmann, 1893

***Menippe nodifrons* Stimpson, 1859**

Distribution: Western Atlantic – Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (from Maranhão to Santa Catarina). Eastern Atlantic – From Cape Verde islands to Angola.

Habitat: In tidepools, under rocks, and on dock pilings. In shallow waters near the beach.

Material examined: Vila Velha, Funil, Freguesia do Sul, Mombaça, Freguesia do Leste, Japaris, Funil, and Furado beaches.

Superfamily Goneplacoidea MacLeay, 1838

Family Chasmocarcinidae Serène, 1964

***Chasmocarcinus typicus* Rathbun, 1898**

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

Habitat: Mud bottoms, occasionally on sand. From 25 to 200 m.

Material examined: Stations 3, 48, 134, 135, 282, 287, 300, 301, 323, 341.

Family Euryplacidae Stimpson, 1871

***Frevillea hirsuta* (Borradaile, 1916)**

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

Habitat: Prefers mud bottoms. Between 70 and 150 m.

Material examined: Station 301.

Superfamily Pinnotheroidea De Haan, 1833

Family Pinnotheridae De Haan, 1833

***Austinixa patagoniensis* (Rathbun, 1918)**

Distribution: Western Atlantic – Brazil (from Rio de Janeiro to Rio Grande do Sul), Uruguay, and Argentina.

Habitat: May be free-living, or a commensal of *Callichirus* or *Arenicola*. Occurs on sandy beaches.

Material examined: Station 32, and Monsuaba, Leste, Mombaça, Vila Velha, and Grande beaches.

***Dissodactylus crinitichelis* Moreira, 1901**

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

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

Habitat: Sand, coral, and broken-shell bottoms. In *Halodule* meadows and on echinoids of the genera *Encope* and *Clypeaster*.

Material examined: Stations 5, 235, 263, 264, 267, Freguesia do Leste, Tanguá, and Vila Velha beaches.

***Fabia byssomiae* (Say, 1818)**

Distribution: Western Atlantic – Florida, Cuba, Brazil (from Rio de Janeiro to Rio Grande do Sul) and Argentina.

Habitat: Always associated with bivalves of the genera *Glycymeris* and *Anadara*. On mud, sand, and shell bottoms. Between 5 and 25 m.

Material examined: Stations 25, 66, 72, 82, 83, 87, 88, 159, 174, 175, 266, 267, 268.

***Pinnixa chaetopterana* Stimpson, 1860**

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

Habitat: Mud, shell, and gravel bottoms. Generally are commensals of polychaetes, mainly *Chaetopterus variopedatus*, living in the tube of the host; also in galleries of *Callichirus*. Intertidal to 60 m.

Material examined: Stations 33, 34, 36, 37, 41, 56, 62, 64, 68, 71, 87, 91, 109, 110, 112, 114, 116, 122, 126, 129, 147, 148, 162, 239, 240, 345, 356, 358.

***Pinnixa rapax* Bouvier, 1917**

Distribution: Western Atlantic – Brazil (from Rio de Janeiro to Rio Grande do Sul), Uruguay, and Argentina.

Habitat: Preferentially on muddy bottoms. Depths from 30 to 70 m.

Material examined: Stations 24, 33, 68, 348.

Pinnixa sayana Stimpson, 1860

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

Habitat: Shallow waters to 75 m. On mud bottoms, in tubes of *Arenicola*, or in litter discarded on the beach. Sometimes free-swimming.

Material examined: Stations 24, 31, 33, 36, 37, 38, 41, 42, 43, 71, 76, 77, 80, 81, 82, 83, 89, 92, 110, 119, 129, 145, 159, 163, 187, 200, 302, 325, 329, 330, 331, 341, 343, 344, 356, 360.

Superfamily Grapoidea MacLeay, 1838

Family Grapsidae MacLeay, 1838

Geograpsus lividus (H. Milne Edwards, 1837)

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Rio de Janeiro to Rio Grande do Sul). Eastern Atlantic – Cape Verde Islands and from Senegal to Angola. Eastern Pacific – From Baja California to northern Chile, Galápagos, and Hawaii.

Habitat: In the supra-littoral near the rocky zone, and under stones on rocky beaches.

Material examined: Mombaça Beach.

Goniopsis cruentata (Latreille, 1803)

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Antilles, Guianas, and Brazil (Fernando de Noronha and from Pará to Santa Catarina). Eastern Atlantic – From Senegal to Angola.

Habitat: In mangroves, on the roots or trunks of trees. On silty beaches, in arms of the sea or in estuaries. From the supra-littoral to the intertidal zone.

Material examined: Airport mangrove.

Pachygrapsus gracilis (Saussure, 1858)

Distribution: Western Atlantic – North Carolina, Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (Trindade Island and from Ceará to Rio Grande do Sul). Eastern Atlantic

– From Cape Verde Islands to Angola. Mediterranean Sea. Eastern Pacific – From California to Peru.

Habitat: In rocky areas and the intertidal zone. Under stones and on dock pilings. Occasionally among roots of mangroves and on sandy beaches.

Material examined: Airport mangrove.

Pachygrapsus transversus (Gibbes, 1850)

Distribution: Western Atlantic – From North Carolina to Florida, Bermuda, Gulf of Mexico, Antilles, northern South America, Brazil (Trindade Island and from Ceará to Rio Grande do Sul), and Uruguay. Eastern Atlantic – From Cape Verde Islands to Angola. Mediterranean Sea. Eastern Pacific – From California to Peru and Galápagos Islands.

Habitat: Intertidal zone, under rocks. On dock pilings and sandy beaches, also among mangrove roots.

Material examined: Freguesia do Leste, Freguesia do Sul, Grumixama, Baleia, Furado, Funil, Mangaratiba, Pai Paulo, Aroeira, Monsuaba, Vila Velha, Mombaça beaches, Palmas Bay, Jipóia Island, and Airport mangrove.

Family Sesarmidae Dana, 1851

Aratus pisonii (H. Milne Edwards, 1837)

Distribution: Western Atlantic – Florida, Gulf of Mexico, Antilles, northern South America, and Brazil (from Piauí to São Paulo). Eastern Pacific – From Nicaragua to Peru; (?) Chile.

Habitat: Estuaries, on rocks or dock pilings. Common in mangroves, where they climb the trees.

Material examined: Airport mangrove.

Armases angustipes (Dana, 1852)

Distribution: Western Atlantic – Mexico, Antilles, and Brazil (from Ceará to Santa Catarina).

Habitat: Found with *Sesarma rectum*, in the same kinds of estuarine habitat; more frequent in the shore region. Also on rocky coasts and in bromeliads.

Material examined: Monsuaba, Freguesia do Leste, Freguesia de Santana beaches; Airport mangrove.

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

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

Habitat: Salt marshes, on the sediment among the roots. Also in fissures and cavities of wharves and rocks.

Material examined: Airport mangrove and Mangaratiba Island.

***Sesarma rectum* Randall, 1840**

Distribution: Western Atlantic – Venezuela, Guianas, and Brazil (from Amapá to Santa Catarina).

Habitat: Excavates burrows that may remain uncovered for several days, depending on the height of the tide; these tunnels are in the shade of the mangrove trees. Tolerates all salinity regimes.

Material examined: Monsuaba Beach and Airport mangrove.

Family Varunidae H. Milne Edwards, 1853

***Cyclograpus integer* H. Milne Edwards, 1837**

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

Habitat: Live in galleries, in marshy marine areas. Also in the supra-littoral and intertidal zones of rocky beaches. May also occur in estuaries and on rocky reefs.

Material examined: Grumixama Beach.

Superfamily Ocypodoidea Rafinesque, 1815

Family Ocypodidae Rafinesque, 1815

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

Distribution: Western Atlantic – Bermuda, Florida, Gulf of Mexico, Central America, Antilles, northern South America, and Brazil (Fernando de

Noronha Island and from Pará to Rio Grande do Sul).

Habitat: Sandy beaches, from the supra-littoral to the dune area. Younger individuals construct galleries near the level of maximum high tide and among beach vegetation. The juveniles are diurnal, the adults nocturnal.

Material examined: Freguesia do Leste, Furado, and Tanguá beaches.

***Uca leptodactyla* Rathbun, 1898**

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

Habitat: Supra-littoral and intertidal, in highly saline waters. Prefers sandy substrates with little or no mud content. Some populations occupy muddy environments near mangrove trees, but almost always on the shores of large bays or islands exposed to the open sea.

Material examined: Airport mangrove.

***Uca maracoani* (Latreille, 1802-1803)**

Distribution: Western Atlantic – Antilles, Venezuela, Guianas, and Brazil (from Maranhão to Paraná).

Habitat: Along the shores of calm bays. Always occurs at the level of maximum low tide, on muddy substrates, near mangrove trees.

Material examined: Airport mangrove.

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

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

Habitat: On banks of creeks and mangroves. Populations with larger numbers of individuals establish above the level of the mangrove forests, where the water is nearly fresh. Few individuals live near beaches.

Material examined: Airport mangrove.

Table I. Oceanographic data for the stations, with those species that occurred at each station.

Stations	Date	Depth (m)	Salin. ‰	Temp. °C	Species	Number of Species
1	18/12/65	23.5	35.26	20.3	<i>Spinolambrus fraterculus, Hepatus pudibundus, Heterocrypta lapidea</i>	3
2	18/12/65	32	35.44	17.4	<i>Leurocyclus tuberculatus, Hepatus pudibundus</i>	2
3	18/12/65	35	35.53	17.1	<i>Persephona punctata, Chasmocarcinus typicus</i>	2
4	18/12/65	27	34.88	23.2	<i>Allactaea lithostrota</i>	1
5	18/12/65	18	34.69	24.1	<i>Heterocrypta lapidea, Dissodactylus crinitichelis</i>	2
7	18/12/65	13	34.79	24	<i>Collodes rostratus, Libinia spinosa</i>	2
8	18/12/65	8.5	24.43	24.3	<i>Acanthonyx scutiformis, Platypodiella spectabilis, Tetraxanthus rathbunae</i>	3
9	18/12/65	20.5	35.23	21.4	<i>Persephona mediterranea</i>	1
10	17/12/65	34	35.48	17.4	<i>Tetraxanthus rathbunae</i>	1
11	17/12/65	40	35.59	17	<i>Lithadia brasiliensis</i>	1
12	17/12/65	33	34.88	23.9	<i>Persephona mediterranea, Callinectes ornatus, Hepatus pudibundus</i>	3
16	15/12/65	22	35.46	16.4	<i>Persephona mediterranea</i>	1
18	15/12/65	8	34.25	26.2	<i>Acanthonyx scutiformis, Panopeus occidentalis, Pilumnus reticulatus</i>	3
19	15/12/65	23.5	35.42	17.2	<i>Persephona mediterranea, Hepatus pudibundus</i>	2
20	15/12/65	15	35.44	16.2	<i>Libinia spinosa</i>	1
21	14/12/65	36	35.52	15.1	<i>Libinia spinosa, Hepatus pudibundus</i>	2
22	14/12/65	29	35.52	15.2	<i>Piloslambrus guerini, Hepatus pudibundus</i>	2
23	14/12/65	23	35.53	16	<i>Speocarcinus carolinensis</i>	1
24	14/12/65	22.6	35.5	16.15	<i>Speocarcinus carolinensis, Pinnixa rapax, Pinnixa sayana</i>	3
25	13/12/65	16	35.3	20.1	<i>Leucippa pentagona, Leurocyclus tuberculatus, Mesorhoea sexspinosa, Portunus spinicarpus, Fabia bissomiae</i>	5
26	14/12/65	21	35.57	16.3	<i>Acanthocarpus alexandri</i>	1
30	13/12/65	19.5	35.59	18.4	<i>Speocarcinus carolinensis</i>	1
31	13/12/65	17.5	35.53	18.1	<i>Allactaea lithostrota, Pinnixa sayana</i>	2
32	13/12/65	18	35.66	17.2	<i>Austinixia patagoniensis, Charybdis hellerii, Hexapanopeus paulensis</i>	3
33	13/12/65	15	35.46	18	<i>Pinnixa rapax, Pinnixa sayana, Pinnixa chaetopterana</i>	3
34	13/12/65	12	35.37	22	<i>Pinnixa chaetopterana</i>	1
35	12/12/65	16	35.52	18.6	<i>Speocarcinus carolinensis</i>	1
36	12/12/65	18	35.57	17.3	<i>Speocarcinus carolinensis, Pinnixa chaetopterana, Pinnixa sayana</i>	3
37	12/12/65	16.5	35.52	18.2	<i>Pinnixa sayana, Pinnixa chaetopterana, Callinectes larvatus</i>	3
38	12/12/65	18	35.59	16.5	<i>Pinnixa sayana</i>	1
40	12/12/65	24.5	35.64	16.1	<i>Persephona mediterranea</i>	1
41	11/12/65	15.5	35.61	18.6	<i>Pinnixa chaetopterana, Pinnixa sayana, Cronius ruber</i>	3
42	11/12/65	13.5	35.43	19	<i>Pinnixa sayana</i>	1
43	11/12/65	25	35.62	16.3	<i>Persephona mediterranea, Hexapanopeus paulensis, Pinnixa sayana</i>	3
45	11/12/65	16.5	35.57	17	<i>Persephona punctata, Persephona mediterranea</i>	2
46	10/12/65	13	35.52	18.6	<i>Inachoides forceps</i>	1
48	11/12/65	16.5	35.62	16.4	<i>Chasmocarcinus typicus</i>	1
50	10/12/65	7.5	33.93	25.45	<i>Acanthonyx scutiformis</i>	1
51	29/06/66	37	36.76	21.67	<i>Pilumnoides hassleri, Osachila tuberosa, Heterocrypta granulata</i>	3
52	29/06/66	36	35.6	21.94	<i>Ranilia constricta, Collodes rostratus, Paractea r. nodosa, Pilumnoides coelhoi, Batrachonotus fragosus</i>	5
53	29/06/66	31	35.64	21.9	<i>Ethusa americana, Podochela algicola</i>	2
54	29/06/66	27	35.4	21.84	<i>Persephona mediterranea, Persephona punctata, Hepatus pudibundus</i>	3
55	29/06/66	24	35	22.42	<i>Hepatus pudibundus</i>	1
56	30/06/66	18.2	35.26	22.79	<i>Persephona mediterranea, Pinnixa chaetopterana</i>	2
62	18/05/66	10	34.47	24.88	<i>Pinnixa chaetopterana</i>	1
63	18/05/66	11	34.31	24.8	<i>Hexapanopeus paulensis</i>	1
64	17/05/66	14.5	34.58	24.6	<i>Pinnixa chaetopterana</i>	1
65	18/05/66	9	34.35	24.75	<i>Acanthonyx scutiformis, Cyrtoplax spinidentata</i>	2
66	18/05/66	8	34.23	25.1	<i>Fabia bissomiae, Heterocrypta lapidea</i>	2
68	17/05/66	8.4	34.33	25.6	<i>Acanthonyx scuticornis, Pinnixa chaetopterana, Pinnixa rapax</i>	3
69	17/05/66	6	33.93	25.5	<i>Cyrtoplax spinidentata</i>	1
71	17/05/66	4.5	34.49	26.2	<i>Acanthonyx scuticornis, Pinnixa chaetopterana, Pinnixa sayana</i>	3
72	17/05/66	8	34.52	25.52	<i>Callinectes danae, Cyrtoplax spinidentata, Fabia bissomiae</i>	3
73	17/05/66	11	34.45	24.82	<i>Cyrtoplax spinidentata</i>	1

Stations	Date	Depth (m)	Salin. ‰	Temp. °C	Species	Number of Species
74	14/05/66	12	34.51	25.75	<i>Persephona lichensteinii</i> , <i>Callinectes danae</i> , <i>Cyrtoplax spinidentata</i>	3
76	14/05/66	11.8	34.58	25.35	<i>Persephona lichensteinii</i> , <i>Pinnixa sayana</i>	2
77	14/05/66	13.5	34.83	25.3	<i>Cyrtoplax spinidentata</i> , <i>Pinnixa sayana</i>	2
78	13/05/66	5	34.61	27.4	<i>Acanthonyx scutiformis</i>	1
79	13/05/66	4	34.58	27.9	<i>Acanthonyx scutiformis</i>	1
80	13/05/66	8	34.83	26.1	<i>Pinnixa sayana</i>	1
81	13/05/66	10	35.03	25.45	<i>Aepinus septemspinosus</i> , <i>Cyrtoplax spinidentata</i> , <i>Pinnixa sayana</i>	3
82	13/05/66	13	34.99	24.95	<i>Cyrtoplax spinidentata</i> , <i>Fabia bissomiae</i> , <i>Pinnixa sayana</i>	3
83	14/05/66	11	34.81	25.9	<i>Callinectes danae</i> , <i>Fabia bissomiae</i> , <i>Pinnixa sayana</i>	3
85	16/05/66	7	34.59	26.4	<i>Cyrtoplax spinidentata</i>	1
86	16/05/66	4.5	34	26.4	<i>Acanthonyx scutiformis</i> , <i>Cyrtoplax spinidentata</i>	2
87	16/05/66	5	34.22	26.21	<i>Acanthonyx scutiformis</i> , <i>Fabia bissomiae</i> , <i>Pinnixa chaetopterana</i>	3
88	16/05/66	9	34.34	24.95	<i>Cyrtoplax spinidentata</i> , <i>Fabia bissomiae</i>	2
89	21/05/66	111	34.24	24.88	<i>Pinnixa sayana</i>	1
91	21/05/66	9.8	34.4	24.05	<i>Cyrtoplax spinidentata</i> , <i>Pinnixa chaetopterana</i>	2
92	21/05/66	13	33.68	24.21	<i>Symethis variolosa</i> , <i>Mesorhoea sexspinosa</i> , <i>Pinnixa sayana</i>	3
99	01/07/66	17.5	35.11	22.57	<i>Stenocionops furcata</i>	1
101	30/07/66	18.5	34.41	22.42	<i>Mesorhoea sexspinosa</i>	1
102	01/07/66	21	35.2	22.28	<i>Mesorhoea sexspinosa</i>	1
103	01/07/66	22	35.24	22.19	<i>Mesorhoea sexspinosa</i> , <i>Acantholobulus schmitti</i>	2
104	01/07/66	26	35.54	21.36	<i>Podochela algicola</i> , <i>Inachoides forceps</i>	2
105	01/07/66	15.5	35.1	22.61	<i>Mesorhoea sexspinosa</i>	1
107	01/07/66	20.4	35.08	23.37	<i>Collodes rostratus</i>	1
108	02/07/66	12	35.24	22.27	<i>Persephona mediterranea</i>	1
109	20/05/66	14	34.27	24.45	<i>Pinnixa chaetopterana</i>	1
110	20/05/66	11.5	34.38	24.71	<i>Pinnixa chaetopterana</i> , <i>Pinnixa sayana</i>	2
112	20/05/66	10.6	34.23	24.7	<i>Mesorhoea sexspinosa</i> , <i>Pinnixa chaetopterana</i>	2
114	23/05/66	8.2	34.18	24.6	<i>Pinnixa chaetopterana</i> , <i>Acantholobulus schmitti</i>	2
115	23/05/66	10	34.21	24.5	<i>Cyrtoplax spinidentata</i>	1
116	02/07/66	15	35.2	22.43	<i>Pinnixa chaetopterana</i>	1
117	02/07/66	23	35.36	22.18	<i>Hexapanopeus paulensis</i>	1
119	23/05/66	8.2	34.22	24.6	<i>Pinnixa sayana</i>	1
122	02/07/66	12.2	35.28	22.41	<i>Pinnixa chaetopterana</i>	1
126	03/07/66	8	35	22.7	<i>Pinnixa chaetopterana</i>	1
128	03/07/66	10	35.27	22.57	<i>Cyrtoplax spinidentata</i>	1
129	03/07/66	14	35.22	22.2	<i>Pinnixa chaetopterana</i> , <i>Pinnixa sayana</i>	2
132	12/05/66	24	34.7	—	<i>Portunus spinicarpus</i> , <i>Panopeus harttii</i> , <i>Pilumnus reticulatus</i> , <i>Inachoides forceps</i>	4
133	—	—	—	—	<i>Inachoides forceps</i>	1
134	04/07/66	50	35.28	—	<i>Euthusina abyssicola</i> , <i>Chasmocarcinus typicus</i> , <i>Melybia thalamita</i> , <i>Tetraxanthus rathbunae</i>	4
135	04/07/66	13	34.62	22.52	<i>Euprognatha rastellifera</i> , <i>Chasmocarcinus typicus</i>	2
136	04/07/66	16.5	35.16	22.39	<i>Euprognatha rastellifera</i>	1
137	04/07/66	29	35.22	22.34	<i>Speocarcinus carolinensis</i>	1
138	04/07/66	22.5	35	22.31	<i>Portunus spinicarpus</i> , <i>Tetraxanthus rathbunae</i>	2
140	29/06/66	5.1	34.3	22.46	<i>Notolopas brasiliensis</i>	1
144	28/06/66	20	35.38	22.44	<i>Mocosoa crebripunctata</i> , <i>Pilumnus diomedaeae</i>	2
145	28/07/66	19	34.7	22.91	<i>Pinnixa sayana</i>	1
147	28/06/66	18.5	35.04	22.76	<i>Pinnixa chaetopterana</i>	1
148	28/06/66	16	35	22.92	<i>Pinnixa chaetopterana</i>	1
159	24/06/66	3	34.26	23	<i>Latreillia williamsi</i> , <i>Fabia bissomiae</i> , <i>Pinnixa sayana</i>	3
161	24/06/66	7.5	34.79	22.7	<i>Allactaea lithostrota</i>	1
162	24/06/66	10	35.1	22.5	<i>Pinnixa chaetopterana</i>	1
163	27/06/66	14	35.16	22.67	<i>Pinnixa sayana</i>	1
166	27/06/66	19.5	35.28	22.62	<i>Batrachonotus fragosus</i> , <i>Tetraxanthus rathbunae</i> , <i>Collodes rostratus</i>	3
170	08/07/66	9	34.78	22.36	<i>Hepatus pudibundus</i> , <i>Heterocrypta lapidea</i>	2
172	08/07/66	15.5	35.12	22.3	<i>Euprognatha rastellifera</i>	1
174	22/07/66	23	35.56	21.79	<i>Rochinia gracilipes</i> , <i>Fabia bissomiae</i> , <i>Acantholobulus schmitti</i>	3

Stations	Date	Depth (m)	Salin. ‰	Temp. °C	Species	Number of Species
175	26/07/66	26	35.28	21.87	<i>Fabia bissomiae</i> , <i>Heterocrypta lapidea</i>	2
176	26/07/66	30.4	35.46	21.85	<i>Hepatus pudibundus</i>	1
177	26/07/66	35	35.42	21.9	<i>Aepinus septemspinosis</i> , <i>Spinolambrus fraterculus</i> , <i>Thyrolambrus astroides</i> , <i>Batrachonotus fragosus</i> , <i>Tetraxanthus rathbunae</i>	5
182	26/07/66	4.5	32.1	21.9	<i>Hexapanopeus paulensis</i>	1
184	26/07/66	2.2	31.7	21.5	<i>Hexapanopeus paulensis</i>	1
185	26/07/66	2.2	31.5	21.4	<i>Cyrtoplax spinidentata</i> , <i>Hexapanopeus paulensis</i>	2
186	28/07/66	2.5	30.2	20.66	<i>Hexapanopeus paulensis</i>	1
187	25/07/66	13	33.5	22.58	<i>Pinnixa sayana</i>	1
189	25/07/66	12	33.31	22.65	<i>Hexapanopeus paulensis</i>	1
193	24/07/66	9	32.6	22.42	<i>Notolopas brasiliensis</i> , <i>Hexapanopeus paulensis</i>	2
194	24/07/66	3	32.2	22.08	<i>Hexapanopeus paulensis</i>	1
196	24/07/66	7.3	32.51	22.3	<i>Hexapanopeus paulensis</i>	1
197	24/07/66	25	32.58	22.5	<i>Notolopas brasiliensis</i> , <i>Pilumnoides hassleri</i>	2
200	27/07/66	6.2	29.66	21.82	<i>Pinnixa sayana</i>	1
202	27/07/66	5.5	30.3	21.26	<i>Cyrtoplax spinidentata</i> , <i>Acantholobulus schmitti</i>	2
204	27/07/66	2.5	29.5	20.7	<i>Hexapanopeus paulensis</i>	1
205	27/07/66	3.5	29.8	21	<i>Cyrtoplax spinidentata</i>	1
206	27/07/66	12.5	34.7	22.42	<i>Hexapanopeus paulensis</i>	1
207	21/07/66	10	34.62	22.58	<i>Lithadia brasiliensis</i>	1
208	21/07/66	13.5	34.92	22.46	<i>Lithadia brasiliensis</i> , <i>Heterocrypta lapidea</i>	2
209	21/07/66	13	35.05	22.4	<i>Hipoconcha arcuata</i> , <i>Persephona punctata</i> , <i>Eucratopsis crassimanus</i> , <i>Hepatus pudibundus</i> , <i>Hexapanopeus paulensis</i>	5
210	21/07/66	14.8	34.7	22.51	<i>Hexapanopeus paulensis</i> , <i>Hepatus pudibundus</i>	2
211	21/07/66	13.5	34.78	22.52	<i>Lithadia brasiliensis</i> , <i>Dromia erythropus</i>	2
212	22/07/66	10	34.72	22.4	<i>Hypoconcha arcuata</i> , <i>Inachoides forceps</i> , <i>Heterocrypta lapidea</i>	3
213	22/07/66	22	34.77	22.41	<i>Hypoconcha arcuata</i> , <i>Panopeus occidentalis</i>	2
218	09/07/66	10.6	35.02	22.6	<i>Libinia spinosa</i> , <i>Hexapanopeus paulensis</i>	2
219	09/07/66	10.3	35.03	22.58	<i>Libinia spinosa</i>	1
221	10/07/66	16.6	35.11	22.4	<i>Dromia erythropus</i> , <i>Leucippa pentagona</i> , <i>Collobates rostratus</i> , <i>Leurocyclus tuberculatus</i> , <i>Hexapanopeus paulensis</i>	5
222	10/07/66	17.2	35.24	22.33	<i>Rochinia gracilipes</i>	1
223	10/07/66	13.5	35.26	22.36	<i>Batrachonotus fragosus</i>	1
229	10/07/66	15	35.08	22.35	<i>Batrachonotus fragosus</i> , <i>Libinia ferreirae</i>	2
231	11/07/66	15.5	35.26	22.34	<i>Rochinia gracilipes</i> , <i>Pitho lherminieri</i> , <i>Heterocrypta lapidea</i>	3
232	12/07/66	22.5	35.43	22.12	<i>Rochinia gracilipes</i>	1
235	12/07/66	13.3	35.42	22.26	<i>Pitho lherminieri</i> , <i>Pilumnus caribaeus</i> , <i>Dissodactylus crinitichelis</i>	3
236	12/07/66	16.2	35.5	21.92	<i>Pilumnus spinosissimus</i>	1
237	13/07/66	16	35.5	21.53	<i>Pilumnus reticulatus</i> , <i>Pilumnus spinosissimus</i> , <i>Heterocrypta lapidea</i>	3
239	13/07/66	16.5	35.28	22.38	<i>Pinnixa chaetopterana</i> , <i>Hepatus pudibundus</i>	2
240	13/07/66	14	35.22	22.1	<i>Pinnixa chaetopterana</i> , <i>Heterocrypta lapidea</i>	2
242	13/07/66	7.2	35.18	22.42	<i>Lithadia brasiliensis</i>	1
243	13/07/66	12.3	35.21	22.24	<i>Persephona mediterranea</i> , <i>Heterocrypta lapidea</i>	2
245	16/07/66	8	35.22	22.2	<i>Hepatus pudibundus</i>	1
249	16/07/66	15.1	35.32	22.03	<i>Persephona mediterranea</i>	1
250	16/07/66	14.2	35.3	22.1	<i>Piloslambrus guerini</i>	1
251	17/07/66	18	35.2	22.02	<i>Heterocrypta lapidea</i>	1
252	17/07/66	13.8	35.25	22.2	<i>Hepatus pudibundus</i>	1
253	17/07/66	14.8	35.36	21.94	<i>Clythrocerus granulatus</i>	1
254	17/07/66	11	35.3	22.3	<i>Hepatus pudibundus</i> , <i>Heterocrypta lapidea</i>	2
255	18/07/66	10	35.4	22.42	<i>Persephona mediterranea</i>	1
256	18/07/66	19	35.58	21.54	<i>Mesorhoea sexspinosa</i>	1
257	18/07/66	26.5	35.68	21.08	<i>Heterocrypta lapidea</i>	1
258	18/07/66	31	35.64	21.2	<i>Melybia thalamita</i>	1
260	20/07/66	31	35.74	21.34	<i>Heterocrypta lapidea</i> , <i>Hexapanopeus paulensis</i>	2
263	20/07/66	18	35.7	21.64	<i>Leurocyclus tuberculatus</i> , <i>Dissodactylus crinitichelis</i> , <i>Heterocrypta lapidea</i>	3
264	20/07/66	12.5	35.5	22.1	<i>Dissodactylus crinitichelis</i>	1
266	20/07/66	22.5	35.7	21.02	<i>Mesorhoea sexspinosa</i> , <i>Fabia bissomiae</i> , <i>Heterocrypta lapidea</i>	3

Stations	Date	Depth (m)	Salin. ‰	Temp. °C	Species	Number of Species
267	19/07/66	10	35.46	22.27	<i>Dissodactylus crinitichelis, Fabia bisomiae</i>	2
268	19/07/66	15	35.6	22.26	<i>Fabia bisomiae, Heterocrypta lapidea</i>	2
269	19/07/66	30.2	35.82	21.42	<i>Moreiradromia antillensis, Platypodiella spectabilis, Ranilia constricta</i>	3
270	19/07/66	18.15	35.7	22	<i>Pilumnus spinosissimus</i>	1
271	19/07/66	19.5	35.56	21.8	<i>Heterocrypta lapidea</i>	1
275	15/07/66	23	35.74	19.55	<i>Hepatus pudibundus</i>	1
276	15/07/66	27	35.7	19.1	<i>Heterocrypta lapidea</i>	1
279	15/07/66	43	36.24	18.26	<i>Cymonomus quadratus, Agolambrus agonus, Portunus spinicarpus, Heterocrypta lapidea</i>	4
280	14/07/66	38.2	35.9	18.91	<i>Podochela gracilipes, Portunus spinicarpus, Stenorhynchus seticornis, Heterocrypta lapidea</i>	4
281	14/07/66	17	35.7	20.74	<i>Persephona mediterranea, Mesorhoea sexspinosa, Portunus spinimanus, Hepatus pudibundus</i>	4
282	14/07/66	48.7	36.1	18.5	<i>Spinolambrus fraterculus, Chasmocarcinus typicus</i>	2
283	14/07/66	43	36.04	17.84	<i>Arenaeus cibrarius, Callinectes ornatus</i>	2
284	14/07/66	34	36.02	18.18	<i>Spinolambrus fraterculus</i>	1
287	20/07/66	40	35.9	20.1	<i>Moreiradromia antillensis, Chasmocarcinus typicus, Spinolambrus fraterculus, Tetraxanthus rathbunae</i>	4
288	30/07/66	24	35.9	19.6	<i>Ethusa tenuipes, Eupagriatha rastellifera, Callinectes ornatus, Spinolambrus fraterculus</i>	4
289	30/07/66	42	36.14	17.52	<i>Homola barbata, Eupagriatha rastellifera, Macrocoeloma trispinosum, Spinolambrus fraterculus</i>	4
290	20/07/66	31	36	19.22	<i>Homola barbata, Eupagriatha rastellifera, Lithadia brasiliensis, Pilumnus dasypodus</i>	4
295	16/05/66	15	34.87	24.6	<i>Clythrocerus granulatus</i>	1
300	—	—	—	—	<i>Chasmocarcinus typicus</i>	1
301	—	—	—	—	<i>Micropanope nuttingi, Chasmocarcinus typicus, Frevillea hirsuta</i>	3
302	16/02/68	49	—	—	<i>Ebalia stimpsoni, Libinia spinosa, Rochinia gracilipes, Portunus spinicarpus, Pilumnoides hassleri, Pinnixa sayana</i>	6
303	16/02/68	20	—	—	<i>Latreillia williamsi, Leucippa pentagona</i>	2
304	16/02/68	15	—	—	<i>Leucippa pentagona</i>	1
306	17/02/68	45	—	—	<i>Leurocyclus tuberculatus, Hepatus pudibundus</i>	2
308	17/02/68	35	—	—	<i>Pilumnoides hassleri, Heterocrypta lapidea</i>	2
309	17/02/68	25	—	—	<i>Persephona mediterranea</i>	1
310	17/02/68	22	—	—	<i>Leurocyclus tuberculatus</i>	1
312	18/02/68	20	—	—	<i>Leurocyclus tuberculatus</i>	1
315	18/02/68	50	—	—	<i>Podochela gracilipes, Collodes rostratus, Rochinia gracilipes</i>	3
316	—	—	—	—	<i>Leurocyclus tuberculatus, Rochinia gracilipes</i>	2
317	—	—	—	—	<i>Aepinus septemspinosus</i>	1
318	—	—	—	—	<i>Aepinus septemspinosus</i>	1
319	—	—	—	—	<i>Tetraxanthus rathbunae</i>	1
323	20/03/69	4	34.2	29.5	<i>Chasmocarcinus typicus</i>	1
325	20/03/69	7	33.9	28	<i>Pinnixa sayana</i>	1
329	19/03/69	16	35.5	24.4	<i>Panopeus hartii, Pinnixa sayana</i>	2
330	20/03/69	24	35.1	19.8	<i>Pinnixa sayana</i>	1
331	21/03/69	22	34.9	21.9	<i>Pinnixa sayana</i>	1
335	21/03/69	24	34.8	23.4	<i>Persephona mediterranea, Persephona punctata, Portunus spinicarpus</i>	3
336	19/03/69	30	35.6	17.5	<i>Pilumnus spinosissimus</i>	1
338	19/03/69	32	35.9	17	<i>Mesorhoea sexspinosa</i>	1
339	19/03/69	30	35.8	16.7	<i>Pilumnoides hassleri</i>	1
341	14/03/69	26	34.5	25.5	<i>Batrachonotus fragosus, Chasmocarcinus typicus, Pinnixa sayana</i>	3
343	14/03/69	15	34.7	26.2	<i>Pinnixa sayana</i>	1
344	14/03/69	19	34.3	26.3	<i>Pinnixa sayana</i>	1
345	15/03/69	21	34.8	25.4	<i>Pinnixa chaetopterana</i>	1
348	15/03/69	16	34.7	26.8	<i>Pinnixa rapax</i>	1
350	15/03/69	21	34.7	26.1	<i>Heterocrypta lapidea</i>	1
351	16/03/69	12	34.6	26.1	<i>Acantholobulus schmitti</i>	1
355	18/03/69	4	30	26.9	<i>Notolopas brasiliensis, Hepatus pudibundus, Heterocrypta lapidea</i>	3

Stations	Date	Depth (m)	Salin. %o	Temp. °C	Species	Number of Species
356	16/03/69	18	34.2	26.3	<i>Hypoconcha arcuata</i> , <i>Batrachonotus fragosus</i> , <i>Lithadia brasiliensis</i> , <i>Notolopas brasiliensis</i> , <i>Pelia rotunda</i> , <i>Portunus spinicarpus</i> , <i>Acantholobulus bermudensis</i> , <i>Pinnixa chaetopterana</i> , <i>Panopeus occidentalis</i> , <i>Pinnixa sayana</i> , <i>Hepatus pudibundus</i> , <i>Heterocrypta lapidea</i> , <i>Hepatus gronovii</i>	13
357	18/03/69	10	32.8	26.1	<i>Batrachonotus fragosus</i> , <i>Heterocrypta lapidea</i>	2
358	18/03/69	9	33.4	26.7	<i>Batrachonotus fragosus</i> , <i>Portunus spinicarpus</i> , <i>Pinnixa chaetopterana</i>	3
359	18/03/69	11	32.9	26.7	<i>Batrachonotus fragosus</i> , <i>Panopeus occidentalis</i> , <i>Heterocrypta lapidea</i> , <i>Acantholobulus bermudensis</i>	4
360	18/03/69	6	31.5	27	<i>Pinnixa sayana</i> , <i>Heterocrypta lapidea</i>	2
362	17/03/69	6	33.2	27	<i>Batrachonotus fragosus</i> , <i>Apiomithrax violaceus</i> , <i>Hepatus pudibundus</i> , <i>Heterocrypta lapidea</i>	4
363	17/03/69	6	27.1	26	<i>Cyrtoplax spinidentata</i>	1
364	17/03/69	9	30.9	26.4	<i>Cyrtoplax spinidentata</i>	1
365	17/03/69	10	31.5	26.2	<i>Cyrtoplax spinidentata</i>	1
368	18/03/69	50	35.6	16.4	<i>Ethusina abyssicola</i> , <i>Collodes rostratus</i> , <i>Tetraxanthus rathbunae</i>	3
Palmas Bay					<i>Pachygrapsus transversus</i>	1
Estrelas Creek					<i>Persephona lichtensteinii</i> , <i>Libinia spinosa</i> , <i>Arenaeus cibrarius</i> , <i>Callinectes larvatus</i> , <i>Callinectes ornatus</i> , <i>Portunus spinimanus</i>	6
Coqueiros Island					<i>Callinectes ornatus</i> , <i>Portunus spinimanus</i>	2
Jipóia Island					<i>Panopeus austrobesus</i> , <i>Pachygrapsus transversus</i>	2
Mangaratiba Island					<i>Armases rubripes</i> , <i>Pachygrapsus transversus</i>	2
Morcegos Island					<i>Hexapanopeus paulensis</i>	1
Zatim Island					<i>Microphrys bicornutus</i> , <i>Pilumnus reticulatus</i>	2
Aeroporto					<i>Panopeus americanus</i> , <i>Panopeus occidentalis</i> , <i>Aratus pisonii</i> , <i>Armases angustipes</i> , <i>Armases rubripes</i> , <i>Goniopsis cruentata</i> , <i>Pachygrapsus gracilis</i> , <i>Sesarma rectum</i> , <i>Uca leptodactyla</i> , <i>Uca maracoani</i> , <i>Uca mordax</i> , <i>Uca uruguayensis</i>	12
Mangrove						
Pai Paulo Beach					<i>Persephona lichtensteinii</i> , <i>Microphrys bicornutus</i> , <i>Eurypanopeus abbreviatus</i> , <i>Panopeus austrobesus</i> , <i>Pachygrapsus transversus</i>	5
Furado Beach					<i>Epialtus brasiliensis</i> , <i>Inachoides forceps</i> , <i>Microphrys bicornutus</i> , <i>Mithraculus forceps</i> , <i>Cronius ruber</i> , <i>Portunus spinimanus</i> , <i>Eriphia gonagra</i> , <i>Menippe nodifrons</i> , <i>Panopeus americanus</i> , <i>Acantholobulus bermudensis</i> , <i>Panopeus harttii</i> , <i>Panopeus occidentalis</i> , <i>Pilumnus reticulatus</i> , <i>Pachygrapsus transversus</i> , <i>Ocypode quadrata</i> , <i>Polybius navigator</i>	15
Leste Beach					<i>Epialtus brasiliensis</i> , <i>Inachoides forceps</i> , <i>Panopeus austrobesus</i> , <i>Acantholobulus bermudensis</i>	4
Funil Beach					<i>Epialtus brasiliensis</i> , <i>Inachoides forceps</i> , <i>Microphrys bicornutus</i> , <i>Eurypanopeus abbreviatus</i> , <i>Menippe nodifrons</i> , <i>Panopeus americanus</i> , <i>Acantholobulus bermudensis</i> , <i>Pachygrapsus transversus</i>	8
Grumixama Beach					<i>Epialtus brasiliensis</i> , <i>Inachoides forceps</i> , <i>Microphrys bicornutus</i> , <i>Mithraculus forceps</i> , <i>Mithrax hispidus</i> , <i>Pachygrapsus transversus</i>	6
Freguesia do sul Beach					<i>Inachoides forceps</i> , <i>Mithrax hispidus</i> , <i>Cronius ruber</i> , <i>Eriphia gonagra</i> , <i>Menippe nodifrons</i> , <i>Panopeus occidentalis</i> , <i>Pachygrapsus transversus</i>	7
Freguesia do Leste Beach					<i>Inachoides forceps</i> , <i>Microphrys bicornutus</i> , <i>Mithraculus forceps</i> , <i>Cronius ruber</i> , <i>Eriphia gonagra</i> , <i>Eurypanopeus abbreviatus</i> , <i>Menippe nodifrons</i> , <i>Panopeus americanus</i> , <i>Panopeus austrobesus</i> , <i>Acantholobulus bermudensis</i> , <i>Panopeus occidentalis</i> , <i>Panopeus harttii</i> , <i>Panopeus rugosus</i> , <i>Pilumnus caribaeus</i> , <i>Pilumnus dasypodus</i> , <i>Dissodactylus crinitichelis</i> , <i>Pachygrapsus transversus</i> , <i>Ocypode quadrata</i>	18
Brava Beach					<i>Inachoides forceps</i> , <i>Microphrys bicornutus</i> , <i>Mithraculus forceps</i> , <i>Panopeus rugosus</i>	4
Baleia Beach					<i>Inachoides forceps</i> , <i>Microphrys bicornutus</i> , <i>Mithraculus forceps</i> , <i>Eurypanopeus abbreviatus</i> , <i>Acantholobulus bermudensis</i> , <i>Panopeus harttii</i> , <i>Panopeus occidentalis</i> , <i>Pachygrapsus transversus</i> , <i>Pilumnus dasypodus</i> , <i>Pilumnus reticulatus</i>	10
Vila Velha Beach					<i>Inachoides forceps</i> , <i>Microphrys bicornutus</i> , <i>Mithraculus forceps</i> , <i>Callinectes danae</i> , <i>Eurypanopeus abbreviatus</i> , <i>Menippe nodifrons</i> , <i>Panopeus occidentalis</i> , <i>Pachygrapsus transversus</i> , <i>Dissodactylus crinitichelis</i>	9
Mombaça Beach					<i>Microphrys bicornutus</i> , <i>Eurypanopeus abbreviatus</i> , <i>Menippe nodifrons</i> , <i>Panopeus occidentalis</i> , <i>Panopeus rugosus</i> , <i>Geograpsus lividus</i> , <i>Pachygrapsus transversus</i>	7

Stations	Date	Depth (m)	Salin. ‰	Temp. °C	Species	Number of Species
Aquidabá Beach					<i>Microphrys bicornutus, Panopeus austrobesus</i>	2
Guanxuma Beach					<i>Microphrys bicornutus, Cronius ruber, Panopeus occidentalis,</i> <i>Eurypanopeus abbreviatus</i>	4
Baixio Beach					<i>Microphys bicornutus, Panopeus austrobesus, Panopeus harttii</i>	3
Baiá Beach					<i>Callinectes danae</i>	1
Japaris Beach					<i>Cronius ruber, Menippe nodifrons</i>	2
Grande do Frade Beach					<i>Panopeus austrobesus</i>	1
Anil Beach					<i>Panopeus occidentalis</i>	1
Tanguá Beach					<i>Dissodactylus crinitichelis, Ocypode quadrata</i>	2
Monsuaba Beach					<i>Armases rubripes, Pachygrapsus transversus, Sesarma rectum</i>	3
Aroeira Beach					<i>Pachygrapsus transversus</i>	1
Leste Pequeno Beach					<i>Epialtus brasiliensis</i>	1
Grande Beach					<i>Austinixa patagoniensis</i>	1
Freguesia de Santana Beach					<i>Armases angustipes</i>	1

Uca uruguayensis Nobili, 1901

Distribution: Western Atlantic – Brazil (from Rio de Janeiro to Rio Grande do Sul), Uruguay, and Argentina.

Habitat: Near river mouths, on muddy beaches. Constructs galleries between the edge of the mangroves and the supra-littoral.

Material examined: Airport mangrove.

Discussion

The Ilha Grande survey of 1965-1966 was the largest ever conducted for marine crustaceans, and perhaps other invertebrates, in the area (Serejo *et al.*, 2004, Tommasi, 1969; Junqueira *et al.*, 2004; Tavares and Mendonça Jr., 2004b).

A total of 110 species were collected (circa of 30% of all Brachyuran species known from Brazil), representing 83 genera, 29 families and 18 superfamilies. The stations richest in species were nos. 356 (13 species) and 302 (6 species), and the beaches of Freguesia do Leste (18 species) and Furodo (15 species). In the mangrove stand at the Airport of Angra dos Reis, 12 species were collected. The species collected most frequently were *Pinnixa sayana* (29 stations), *Pinnixa chaetopterana* (28 stations), and *Heterocrypta lapidea* (27 stations). Although not recognized as such at that time, two exotic species were encountered in all: *Polybius navigator* (Herbst, 1794) and *Clarybdis hellerii* (A.

Milne-Edwards, 1867) (Melo and Crivelaro, 2002; Tavares and Mendonça Jr., 1996; 2004a).

The southeastern region of Brazil, where Ilha Grande Bay is located, is considered a region of hydrological transition, which consequently shelters species of several origins: tropical, subtropical, warm-temperate, cold-temperate, and endemic. The species of the Carolinian (warm-temperate) and Caribbean (tropical) patterns are the most numerous, comprising 31% and 26.5%, respectively, of the total species collected in the region. These species use the warm waters of the Brazil Current to reach the southeast-south region of Brazil. The Virginian species, of cold-temperate waters (9%), found in greater depths in the Ilha Grande region, reach as far south as Patagonia, Argentina, where water temperatures are similar to those off Virginia. The species of the so-called Argentine Pattern of distribution, of warm-temperate waters (9%), are influenced by the Malvinas Current, which reaches to the region of Cabo Frio in Rio de Janeiro, but are prevented from passing this limit by the upwelling, which reaches its maximum extent in this region during summer. Only three species (2.5%) are of Magellanic origin, i.e., cold-temperate waters, and would theoretically have their northern limit off Rio Grande do Sul; but possibly they possess some degree of eurythermy. Four species (3.5%) are amphi-American, occurring on both sides of the Americas; and nine (8%) are amphi-Atlantic, found on the American and African coasts. Seven species (6%) with circumtropical distributions were also collected. The low rate of endemism in the region (4.5%) is a result of historical factors,

and indicates that the region is not characterized by long periods of isolation.

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