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# **An Illustrated Guide to the Marine Decapod Crustaceans of Florida**

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[This electronic document consists of most of the text from Abele and Kim's decapod guide. One will need to consult a copy of the paper version, however, to benefit from the extensive and excellent illustrations available in that form.]

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# INTRODUCTION

There are more species of shrimps, lobsters, and crabs in the marine waters of the state of Florida than in any other region of the continental United States. This great diversity is the result of three factors: (1) Florida's coastline is extensive; (2) a tremendous number of marine habitats occurs in Florida; and (3) two biogeographic regions come together in Florida, the northern *Carolinian* and the southern *Caribbean* (or *West Indian*). The total number of decapods in the marine

shallow waters of Florida is probably close to 900 (see Methods and Materials).

The literature of Florida's decapods is scattered and incomplete and often lacks keys or illustrations. The present contribution is an attempt to remedy this situation. We have compiled a checklist, keys, and illustrations of all marine, shallow-water (< 300 m) decapod crustaceans known to occur in Florida, a total of 724 species.

## Brief Review of the Literature

Published work on the decapod crustaceans occurring in Florida dates from the earliest explorations by Europeans in the Caribbean and western Atlantic. Many of these contained brief descriptions and even some illustrations (e. g., Sloane, 1725), which were given nomenclatural status by Linnaeus (1758). Many of the species described by Gibbes (1850), Stimpson (1860, 1871), and Kingsley (1878) occurred in the marine waters of Florida. Professor H. E. Webster collected along the gulf coast of Florida, and these collections were published on by Kingsley (1879). Additional Florida collections were reported on by Ives (1891). The *Blake* expeditions included Florida material, which was published by A. Milne Edwards and Bouvier (1893, 1897, 1902, 1909, 1923).

Modern published work dealing explicitly with Florida marine decapods is scattered. Chace (1942a) described five new species of decapods from the west coast of Florida. Wass (1955) published an annotated list of the decapods of northwestern Florida and described three new species. Provenzano (1959) reviewed the hermit crabs of Florida and described one new species. Hulings (1961) added several new records from deeper water in the northeastern gulf. Wells and Wells (1961) described a new species of crab from the northern gulf, as did Salmon and

Atsaides (1968) and Novak and Salmon (1974). Although not dealing specifically with Florida, William's (1965a) excellent volume on the decapods on the Carolinas contains a tremendous amount of information relevant to the Florida fauna. The 1984 revision of this work (Williams, 1984) extended the coverage to include the northeastern Atlantic coast of Florida.

Beginning in the 1970's, there was a virtual explosion of information on Florida decapods. Biffar (1971a, 1971b) reviewed the callianassids of Florida. Abele (1971, 1972a, 1972b, 1972c, 1973) reviewed the status of some palaemonids, xanthids, atyids, and grapsids in Florida. McLaughlin and Provenzano (1974a, 1974b), and McLaughlin and co-workers (McLaughlin, 1981a, 1981b, 1982; García-Gómez, 1982; Lemaitre, 1982; Lemaitre et al., 1982) provided extensive information on the hermit crabs of Florida. Beginning in 1973, Robert H. Gore published a series of papers on the decapods of the Indian River region of Florida, including a major work on parthenopid crabs (e. g., Hendrix and Gore, 1973; Gore 1977, 1979, 1981; Gore and Wilson, 1978; Gore and Scotto, 1979; Kensley and Gore, 1981). Mayo (1973) reviewed the genus *Cancellus* including Florida material. Additional data on Florida decapods can be found in Rouse (1970) and in the results of the *Hourglass* cruises (e. g., Lyons, 1970; Cobb, 1971, 1973; Cobb et al., 1973).

## Methods and Materials

The checklist is derived from several sources. First, it is based on a search of the literature, and we have cited these sources in the text. Additions were made based on our own collections, those of Dr. Patsy McLaughlin, and those housed in the following institutions: the Smithsonian Institution's National Museum of Natural History (SI-NMMH); the State of Florida's Department of Natural Resources Collections in St. Petersburg, Florida; and the collections of Harbor Branch Foundation's Indian River Coastal Zone Museum in Fort Pierce, Florida.

Keys were prepared from the literature sources cited in the headings of the keys and verified by us in so far as was possible. We personally examined more than 450 of the species listed.

This volume is intended as an identification guide, and we wished to provide a standard format for the illustrations. The illustrations were therefore re-drawn from the sources cited.

We were able to locate source illustrations for 722 of the 724 species, although they varied in quality. We were unable to locate specimens or illustrations of the majid crab *Collodes nudus* and the goneplacid crab *Pilumnoplax elata*. We urge our readers to verify their identifications using the primary literature. The scaling is in a standard format: a single line indicates that the scale is in millimeters, and a double line indicates centimeters; the number of units is indicated by the number of tick marks shown on the scale.

We made every effort to indicate all species known from Florida's marine waters. The checklist, however, is not complete for three reasons: (1) we were working on a time schedule and could not search indefinitely; (2) there are numerous undescribed species that are either currently being studied or in museums, and we did not believe it appropriate to include these; and (3) we are sure that we simply missed some species.

## Classification and Arrangement of Taxa and Illustrations

We have generally followed the classification given in Bowman and Abele (1982) and the arrangement in Abele and Felgenhauer (1982). Within families we have arranged the genera (and species within genera) alphabetically. The illustrations are grouped by family and follow the key to that family. They are grouped by genera and within genera by the sequence that they occur in the in the

key with the following exception: Genera containing a single species are grouped together at the end of the family. This was done simply to save space.

Taxonomic nomenclature follows the most recent revisions available unless general usage dictates otherwise. This is an identification guide not a revision.

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# Checklist of the Decapod Crustaceans of Florida

## SUBORDER DENDROBRANCHIATA

### FAMILY ARISTEIDAE

*Aristaeomorpha foliacea* (Risso, 1827)

Description: Zariquey Alvarez, 1968:42, figs. 22a, b, 24a.—Holthuis, 1980b:8.

Type-locality: Vicinity of Nice.

Distribution: Eastern Atlantic: Bay of Biscay to NW Africa and the entire Mediterranean. Western Atlantic: South of Massachusetts to the Straits of Florida, Gulf of Mexico, Caribbean Sea and off Venezuela. Indo-West Pacific: East Africa to Japan, Australia, New Zealand and Fiji (Holthuis, 1980b).

*Plesiopenaeus edwardsianus* (Johnson, 1867)

Description: Crosnier and Forest, 1973:292, figs. 98, 99a, b.—Holthuis, 1980b:11.

Type-locality: Madeira

Distribution: Eastern Atlantic: Portugal to South Africa; (not in the Mediterranean). Western Atlantic: Grand Bank (43°42'N) to Gulf of Mexico, Caribbean Sea and north coast of South America (Holthuis, 1980b). Indo-West Pacific: off east Africa to Japan, Australia.

### FAMILY BENTHESICYMIDAE

*Bentheogenennema intermedia* (Bate, 1888)

Description: Bate, 1888:343, pl. 58: fig. 3.—

Roberts and Pequegnat, 1970:39.

Type-locality: Off Sierra Leone, 01°47'N, 24°26'W; 3386 m; *Challenger* station 106.

Distribution: Appears to be distributed worldwide; probably pelagic (Roberts and Pequegnat, 1970); Florida (personal communication, P. M. Mikkelsen).

### FAMILY PENAEIDAE

*Funchalia villosa* (Bouvier, 1905)

Description: Burkenroad, 1936:129

Type-locality: Between Canary Islands and Azores.

Distribution: Adults are known from the eastern and western North Atlantic, Mediterranean, the south central South Atlantic, and the Caribbean; larvae known from the western North Atlantic and South Pacific. Florida (personal communication, D. K. Camp, P. M. Mikkelsen).

*Metapenaeopsis gerardoi* Pérez Farfante, 1971

Description: Pérez Farfante, 1971:20, figs. 11, 12, 13c.

Type-locality: Off Mayaguez, Puerto Rico, 18°8.5'N, 67°23'W.

Distribution: Bahamas, Florida Keys, West Indies, and Caribbean coast of Central and South America (Pérez Farfante, 1971).

*Metapenaeopsis goodei* (Smith, 1885)

Description: Pérez Farfante, 1971:9, figs. 4-8.—Williams, 1984:36, 37, figs. 17-18.

Type-locality: Bermudas.

Distribution: Bermuda; between Capes Hatteras and Lookout, North Carolina, through Florida Straits and along west Florida to Pensacola; Isla de Lobos reef, Veracruz (Ray, 1974), around Yucatan Peninsula, through Caribbean Sea, and along South American coast to Espírito Santo, Brazil (Coelho and Ramos, 1972; Williams, 1984).

*Metapenaeopsis smithi* (Schmitt, 1924)

Description: Schmitt, 1924a:62, figs. 1b, c, 2a, c.—Pérez Farfante, 1971: 29, figs. 13E, 18-22.

Type-locality: Caracas Baai, Curaçao.

Distribution: Bermudas and southeastern Florida to Curaçao, mostly near islands; western Caribbean; Lesser Antilles (Chace, 1972).

*Parapenaeus americanus* (Rathbun, 1901)

Description: A. Milne Edwards and Bouvier, 1909:231.

Type-locality: Off Mayaguez Harbor, Puerto Rico, 412 m. *Fish Hawk* Stn. 6070.

Distribution: 40°03'N, 70°49'W northern Uruguay, 33°26'S, 59°58'W; Puerto Rico; St. Lucia; Martinique.

*Parapenaeus politus* Smith, 1881

Description: Pérez Farfante, 1982:200, figs. 3-5.—Williams, 1984:37, fig. 19.

Type-locality: Off "Martha's Vineyard" (Smith, 1885) 39°55'00"N, 70°54'15"W, 260 m.

Distribution: Martha's Vineyard, Massachusetts, through Gulf of Mexico; Gulf of Paria off Venezuela (Williams, 1984). Florida (personal communication, P. M. Mikkelsen).

***Penaeopsis serrata* Bate, 1881**

Description: Pérez Farfante, 1980b:748, figs. 28-36.  
Type-locality: Off Barbados, "Gulf of Mexico",  
*Blake* Stn. 275, 399 m.

Distribution: Western Atlantic: from east of Barngate, New Jersey south of Martha's Vineyard, Massachusetts, through the Gulf of Mexico and the Caribbean south to French Guiana; off Rio Grande do Sul, Brazil. Eastern Atlantic: from south of Cabo San Vicent, Portugal, to off Cadiz, Spain and off the northwest coast of Africa to Tamzak ("Tamxat"), Mauritania (Pérez Farfante, 1980b).

***Penaeus aztecus* Ives, 1891**

Description: Pérez Farfante, 1969:527, figs. 39-43, 46-48, 50.—Williams, 1984:24, figs. 9, 10.  
Type-locality: Veracruz, Mexico.

Distribution: Martha's Vineyard, Massachusetts around Florida Peninsula to northwestern Yucatan (Williams, 1984).

***Penaeus brasiliensis* Latreille, 1817**

Description: Pérez Farfante, 1969:562, figs. 68, 75, 76.—Williams, 1984:28, figs. 11-12.

Type-locality: Brazil.

Distribution: Bermudas; off Cape Hatteras, North Carolina to Florida Keys, off Campeche and Yucatan; through Caribbean Sea to Rio Grande do Sul, Brazil (Williams, 1984).

***Penaeus duorarum* Burkenroad, 1939**  
Description: Pérez Farfante, 1969:499, figs. 20-22, 25-27, 30-31.—Williams, 1984:28, 29, figs. 13-14.  
Type-locality: Off Mobile Bay, Alabama ( $29^{\circ}15'N$  and  $88^{\circ}11'W$ , 36.5 m *Atlantis* Stn. 2813). Distribution: Lower Chesapeake Bay through Florida Straits, around Mexico to Cape Catoche and Isla Mujeres at the tip of Yucatan Peninsula (Williams, 1984).

***Penaeus setiferus* (Linnaeus, 1767)**

Description: Pérez Farfante, 1969:468, figs. 4-11.—Williams, 1984:32, figs. 15-16.

Type-locality: Off Matanzas Inlet, Florida.

Distribution: Fire Island, New York, to Saint Lucie Inlet, Florida; near Dry Tortugas, Florida (rarely); Gulf of Mexico from Ochlocknee River, Florida, to Campeche, Mexico (Williams, 1984).

***Trachypenaeus constrictus* (Stimpson, 1874)**

Description: Williams, 1984:38, figs. 20, 21.

Type-locality: Beaufort, North Carolina.

Distribution: Tangier Sound, Chesapeake Bay, to Veracruz, Mexico; Bermuda; Cuba, Puerto Rico and

Sombrero Island; Surinam; off Ceara, São Paulo, and Santa Catarina, Brazil (Williams, 1984).

***Trachypenaeus similis* (Smith, 1885)**

Description: Burkenroad, 1934:96, figs. 10, 11.

Type-locality: Gulf of Paria, Venezuela,  
 $10^{\circ}37'40''N$ ,  $61^{\circ}42'40''W$ .

Distribution: Gulf of Mexico to Estado do Pará, Brazil.

***Trachypeneopsis mobilispinis* (Rathbun, 1920)**

Description: Rathbun, 1920:320, figs. 1, 2a-c — Chace, 1972:10.

Type-locality: Cave Round Bay, Saba.

Distribution: Bermudas and Bay of Campeche eastward to Cuba, Cay Sal Bank, Turks, Saba, Barbuda, Jamaica, Virgin Islands and Saint Christopher Islands (Chace, 1972).

***Xiphopenaeus kroyeri* (Heller, 1862)**

Description: Williams, 1984:40, figs. 22, 23.

Type-locality: Rio de Janeiro, Brazil.

Distribution: Between Capes Hatteras and Lookout, North Carolina, through Gulf of Mexico and Caribbean Sea to Ponta do Zimbro, Santa Catarina, Brazil (Pérez Farfante, 1978).

## FAMILY SOLENOCERIDAE

***Hadropenaeus affinis* (Bouvier, 1906)**

Description: Pérez Farfante, 1977:317 figs. 9, 43, 44A, 45-49.

Type-locality: Off Cape Verde Island ( $16^{\circ}53'N$ ,  $25^{\circ}10'W$ , 410-460 m).

Distribution: Western Atlantic: from off Cape Lookout, North Carolina southward to the Straits of Florida, in the northeastern part of the Gulf of Mexico and throughout Caribbean. Eastern Atlantic: off Cape Verde Islands (Pérez Farfante, 1977).

***Hadropenaeus modestus* (Smith, 1885)**

Description: Pérez Farfante, 1977:323, figs. 9, 44, 46, 49-52.

Type-locality: Off Bethany Beach, Delaware,  $38^{\circ}31'N$ ,  $73^{\circ}21'W$ , 285 m. *Fish Hawk* Stn. 1047.

Distribution: Off Delaware Bay, to the Straits of Florida, and in the Gulf of Mexico, northwest of Charlotte Harbor, Florida; Bahamas throughout the Caribbean to off Barra Grande, Brazil (Pérez Farfante, 1977).

***Hymenopenaeus aphoticus* Burkenroad, 1936**

Description: Pérez Farfante, 1977:275, figs. 4C, 8-12.

Type-locality: Turks Island Passage, 1,646-1,728 m,  $21^{\circ}15'40''N$ ,  $71^{\circ}17'06''W$ , *Pawnee* Stn. 54.

Distribution: Western Atlantic: southwest Florida throughout the Gulf of Mexico, and Caribbean Sea. Eastern Atlantic: south of the Azores Islands and off Morocco. (Pérez Farfante, 1977).

***Hymenopenaeus debilis*** Smith, 1882

Description: Pérez Farfante, 1977:268 figs. 2, 3, 4B, 5-9.

Type-locality: Syntypes: SE of Savannah Beach, Georgia,  $31^{\circ}57'00''N$ ,  $78^{\circ}18'35''W$ , 609 m, *Blake* Stn. 317; SE of Cape Fear, North Carolina,  $33^{\circ}19'00''N$ ,  $76^{\circ}13'30''W$ , 836 m, *Blake* Stn. 323; E of Cape Fear, North Carolina  $33^{\circ}42'15''N$ ,  $76^{\circ}00'50''W$ , 849 m, *Blake* Stn. 326.

Distribution: Western Atlantic: from Hudson Canyon, New Jersey ( $39^{\circ}55'N$ ,  $70^{\circ}31'W$ ) through Gulf of Mexico and Caribbean Sea to Guyana ( $08^{\circ}14'N$ ,  $57^{\circ}38'W$ ). Eastern Atlantic: Azores Islands and northwest Africa from Cape Spartel, Morocco, to Cape Verde Islands, including Canary Islands (Pérez Farfante, 1977).

***Mesopenaeus tropicalis*** (Bouvier, 1905)

Description: Pérez Farfante, 1977:332, figs. 56-58, 60-63.—Williams, 1984:18, fig. 5.

Type-locality: Mer des Antilles (Pérez Farfante 1977).

Distribution: Northeast of Cape Lookout, North Carolina,  $34^{\circ}43'N$ ,  $76^{\circ}40'W$ , through Florida Straits to Alabama; off Cape Catoche and Bahamas through Caribbean Sea and along coast of South America to Rio Grande do Sul, Brazil (Williams, 1984).

***Pleoticus robustus*** (Smith, 1885)

Description: Pérez Farfante, 1977:297, figs. 9, 29-36. Type-locality: South of Curaçao  $11^{\circ}43'00''N$ ,  $69^{\circ}09'30''W$ , 380 m., *Albatross* Stn. 2125.

Distribution: South of Martha's Vineyard, Massachusetts, through Gulf of Mexico, and the Caribbean to French Guiana (Pérez Farfante, 1977).

***Solenocera atlantidis*** Burkenroad, 1939

Description: Pérez Farfante and Bullis, 1973:20, figs. 11, 13, 14.—Williams, 1984:19, fig. 6.

Type-locality: Gulf of Mexico off Alabama,  $29^{\circ}45'N$ ,  $88^{\circ}11'W$ , 37 m. *Atlantis* Stn. 281.

Distribution: Off Oregon Inlet, North Carolina, around Gulf of Mexico and Caribbean Sea to Cananeia, São Paulo, Brazil (Pérez Farfante and Bullis, 1973).

***Solenocera necopina*** Burkenroad, 1939

Description: Pérez Farfante and Bullis, 1973:14, figs. 7, 9, 10.—Williams, 1984:20, fig. 7.

Type-locality: Off Mobile Bay, Alabama,  $29^{\circ}16'N$ ,  $87^{\circ}54'W$ , 229 m. *Atlantis* Stn. 2377.

Distribution: South of New England ( $40^{\circ}04'N$ ,  $70^{\circ}29'W$ ) through Gulf of Mexico and Caribbean Sea to Rio Grande do Sul, Brazil and Uruguay (Williams, 1984; Pérez Farfante, 1977).

***Solenocera vioscai*** Burkenroad, 1939

Description: Pérez Farfante and Bullis, 1973:3, figs. 1A, B, 3.—Williams, 1984:21, fig. 8.

Type-locality: About 5 mi. (8km) off Pass a L'outré, Louisiana, 27 m.

Distribution: Southeast of Cape Lookout, North Carolina, to Dry Tortugas, Florida (but rare off Florida); northern and western Gulf of Mexico to Tabasco (Williams, 1984).

## FAMILY SICYONIIDAE

***Sicyonia brevirostris*** Stimpson, 1871

Description: Williams, 1984:43, figs. 25, 26.

Type-locality: Cuba.

Distribution: Off Norfolk, Virginia, through Bahamas to Southern Cuba; around Gulf of Mexico to southern Texas; Campeche Banks to Isla Contoy, Yucatan; doubtful record of its occurrence on Pacific Coast of southern Mexico (Williams, 1984).

***Sicyonia burkenroadi*** Cobb, 1971

Description: Williams, 1984:46, fig. 27.

Type-locality: Gulf of Mexico off Port Isabel, Texas,  $26^{\circ}13'N$ ,  $96^{\circ}45'W$ , 42 m.

Distribution: Off Cape Lookout, North Carolina,  $34^{\circ}12'N$ ,  $76^{\circ}11'W$ , through Gulf of Mexico to Bahia, Brazil (Pérez Farfante 1980a); occasionally as deep as 585 m.

***Sicyonia dorsalis*** Kingsley, 1878

Description: Williams, 1984:46, fig. 28.

Type-locality: Fort Jefferson, Dry Tortugas, Florida.

Distribution: Cape Hatteras, North Carolina to Texas; Colombia to French Guiana; Ceara to Santos and Santa Catarina, Brazil (Williams, 1984).

***Sicyonia laevigata*** Stimpson, 1871

Description: Williams, 1984:47, fig. 29.

Type-locality: Charleston, South Carolina.

Distribution: Cape Hatteras, North Carolina, to northwest Florida; through West Indies to Colombia, and Santa Catarina, Brazil (Pérez Farfante 1980a). Pacific Coast of Panama.

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

Description: Williams, 1984:48, fig. 30.

Type-locality: Crooked Island, Bahamas.  
Distribution: Beaufort, North Carolina through Gulf of Mexico and West Indies to Bahia, Brazil (Williams, 1984).

***Sicyonia stimpsoni* Bouvier, 1905**

Description: Williams, 1984:49, fig. 31.  
Type-locality: Off Barbados, 13°03'05"N, 59°36'18"W, 185 m.  
Distribution: Near Cape Hatteras through Florida Straits, and including west Florida, to Barbados and Columbia to Surinam (Williams, 1984).

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

Description: Williams, 1984:49, fig. 32.  
Type-locality: Molde Fjord, west coast of Norway (erroneous locality, evidently incorrectly labeled).  
Distribution: Off Wrightsville Beach, North Carolina, through Gulf of Mexico; Cuba through West Indies to near Ilha de Santa Catarina, Brazil (Williams, 1984).

## FAMILY SERGESTIDAE

***Acetes americanus carolinae* Hansen, 1933**

Description: Williams, 1984:50, fig. 33.  
Type-locality: Beaufort Inlet (about 34°47'N), North Carolina.  
Distribution: Lower Chesapeake Bay (Mobjack Bay and York River) through Gulf of Mexico to Panama, Surinam and French Guiana (Williams, 1984).

***Sergestes armatus* Kröyer, 1855**

Description: Kensley, 1971:232, fig. 8.  
Type-locality: Tropical Atlantic.  
Distribution: North Atlantic, Mediterranean, off Azores and Canaries, South Atlantic. Florida (85-108b, 100b-c, 110c-d).  
Type-locality: Tropical Atlantic from 3 degrees S to 10 degrees N.  
Distribution: Atlantic Ocean; also reported from the Indo-Pacific and Eastern Pacific but there is some question about the identity of material outside of the Atlantic (Crosnier and Forest, 1973). Florida (65-300 m) (personal communication, P. M. Mikkelsen).

***Sergestes atlanticus* H. Milne Edwards, 1830**

Description: Kensley, 1971:234, fig. 9.  
Type-locality: Near Azores.  
Distribution: Mediterranean, North Atlantic, off Azores and Canaries, Sagassum Sea, Off Cape Point. Florida (75-250 m) (personal communication, P. M. Mikkelsen).

***Sergestes edwardsii* Kröyer, 1855**

Description: Crosnier and Forest, 1973:320, figs. 108b, 100b-c, 110c-d.

Type-locality: Tropical Atlantic from 3 degrees S to 10 degrees N.

Distribution: Atlantic Ocean; also reported from the Indo-Pacific and Eastern Pacific but there is some question about the identity of material outside of the Atlantic (Crosnier and Forest, 1973). Florida (65-300 m) (personal communication, P. M. Mikkelsen).

***Sergestes henseni* (Ortmann, 1893)**

Description: Ortmann, 1893:38, pl. 3: fig. 3.  
Type-locality: North Atlantic off West Africa.  
Distribution: Mediterranean; north Atlantic; western and southern Atlantic; (Crosnier and Forest, 1973). Florida (85-250 m) (personal communication, P. M. Mikkelsen).

***Sergestes paraseminudus* Crosnier and Forest, 1973**

Description: Crosnier and Forest, 1973:313, figs. 105d, 106c-d,f.  
Type-locality: Tropical eastern Atlantic; 01°55'S, 8°30'E; 0-50 m.

Distribution: Tropical eastern Atlantic; Florida (85-250 m) (personal communication, P. M. Mikkelsen).

***Sergestes pectinatus* Sund, 1920**

Description: Kensley, 1971:240, fig. 13.  
Type-locality: "Atlantic Ocean, equatorial region."  
Distribution: Sargassum Sea, North Atlantic, Off Canaries, Azores. Florida (85-250 m) (personal communication, P. M. Mikkelsen).

***Sergestes sargassi* Ortmann, 1893**

Description: Hansen, 1922:148, pl. 9: fig. 2a-p  
Type-locality: Off Florida, Sargassum Sea.  
Distribution: NE Atlantic, Sargassum Sea; Florida (75-750 m) (personal communication, P. M. Mikkelsen).

***Sergestes vigilax* Stimpson, 1860**

Description: Hansen, 1922:159, pl. 1: fig. 8.  
Type-locality: Off the Azores.  
Distribution: NE Atlantic, Indian Ocean from Gulf of Aden to Ceylon and Cocos-Keeling Island; Florida (65-300 m) (personal communication, P. M. Mikkelsen).

***Sergia extenuatus* Burkenroad, 1940**

Description: Crosnier and Forest, 1973:338, figs. 112e-f, 113b, 114g.  
Type-locality: Off the Ivory Coast, 03°45'S, 10°00'W.  
Distribution: Tropical eastern Atlantic (Gabon to Angola); Florida (85-250 m) (personal communication, P. M. Mikkelsen).

***Sergia splendens* Sund, 1920**

Description: Kensley, 1971:260, fig. 23.  
Type-locality: Unknown

Distribution: North Atlantic, Mediterranean (off Monaco), off Table Bay, Florida (85-250 m) (personal communication, P. M. Mikkelsen).

## FAMILY LUCIFERIDAE

*Lucifer faxoni* Borradaile, 1915

Description: Williams, 1984:52, fig. 34.

Type-locality: Hampton Roads, Virginia (Chace 1972).

Distribution: "Coastal waters of North and South America from Long Island Sound to Rio de Janeiro," around Gulf of Mexico and throughout Caribbean Sea (probably widespread); Bermuda and scattered mid-Atlantic occurrences in path of Gulf Stream; Bay of Dakar, Senegal (Bowman and McCain, 1967).

*Lucifer typus* H. Milne Edwards, 1837

Description: Bowman and McCain, 1967:660, figs. 1a, b, 2-7.

Type-locality: Tropical North Atlantic.

Distribution: Warmer open waters of the north and south Atlantic oceans approximately between the 40 degrees parallels. Unlike *L. faxoni*, this species is not usually found in inshore waters (Bowman and McCain, 1967).

## SUBORDER PLEOCYEMATA

### INFRAORDER STENOPODIDEA

#### FAMILY STENOPODIDAE

*Microprosthem semilaeve* (Von Martens, 1872)

Description: Holthuis, 1946:54, pl. 3: fig. 1.

Type-locality: Cuba.

Distribution: Bahamas, southern Florida, and Yucatan to Fernando de Noronha, Brazil (Chace, 1972).

*Odontozona libertae* Gore, 1981

Description: Gore, 1981:153, figs. 4a-c, 5a-l.

Type-locality: Elbow Reef, off Key Largo, Monroe County, Florida.

Distribution: Known only from the type-locality.

*Stenopus hispidus* (Olivier, 1811)

Description: Williams, 1984:54, fig. 35.

Type-locality: "Australasiatic seas."

Distribution: Western Atlantic from North Carolina (Kruczynski and Jenner, 1969) and Bermuda, southern Florida through Gulf of Mexico (Ray, 1974) to Fernando de Noronha and Espirito Santo, Brazil (Coelho and Ramos, 1972). Indo-Pacific from Durban, South Africa, and Red Sea, to Japan,

Hawaii, western Australia south to ~24 degrees South and eastern Australia as far south as Shellharbour, New South Wales, through New Caledonia, New Hebrides, Lord Howe Island, northern New Zealand, to Tuamotu Archipelago (Yaldwyn, 1968; Williams, 1984).

*Stenopus scutellatus* Rankin, 1898

Description: Williams, 1984:56, fig. 36.

Type-locality: Silver Cay, New Providence, Bahamas.

Distribution: Bermuda; South Carolina (Wenner and Read, 1982); Gulf of Mexico to Fernando de Noronha and Rio Grande do Norte, Brazil (Williams, 1984).

## INFRAORDER CARIDEA

### FAMILY ATYIDAE

*Potimirim potimirim* (Müller, 1881)

Description: Villalobos, 1960:327.—Abele, 1972c:215, figs. 3D, 4.

Type-locality: Rio Itahai Itahai, state of Santa Catarina, Brazil.

Distribution: Rio Itahai Itahai, State of Santa Catarina, and Rio Gurjau, Recife, state of Pernambuco, Brazil; introduced into the freshwaters of southern Florida (Abele, 1972c).

### FAMILY OPLOPHORIDAE

*Acanthephyra purpurea* A. Milne Edwards, 1881

Description: Chace, 1940a:134, figs. 11-17.

Type-locality: Berlengas Island, off the West Coast of Portugal, 2590 m.

Distribution: North Atlantic between about 20° and 53° N latitude (Chace, 1940a). Florida (85-250 m over 750 m) (personal communication, P. M. Mikkelsen).

*Janicella spinicauda* (A. Milne Edwards, 1883)

Description: Chace, 1986: figs. 23, 24.

Type-locality: Off Casablanca, Morocco:

*Travailleur* Stn. 65; 34°13'30"N, 7°43'00"W, 636 m, muddy sand.

Distribution: Apparently widespread mesopelagically in the tropical seas of the world (except in the eastern Pacific off the Americas) (Chace, 1986).

*Ophophorus gracilirostris* A. Milne Edwards, 1881

Description: Chace, 1986: figs. 32a-32c.

Type-locality: Off Dominica, Lesser Antilles, 216 m.

Distribution: Off southeastern Africa, Indian Ocean, Indonesia, Philippines, southern Japan, Fiji Islands, Hawaii, Gulf of Mexico, Bahamas, Caribbean Sea; mesopelagic (Chace, 1986).

***Oplophorus spinosus*** (Brullé, 1839)

Description: Crosnier and Forest, 1973:25.  
Type-locality: Canary Islands (Holthuis, 1949b).  
Distribution: Indian Ocean, southern Japan, off Hawaii, seamounts west of North America, and northeast of Easter Island, western and eastern subtropical North Atlantic, central South Atlantic; mesopelagic (Chace, 1986). Florida (150 m) (personal communication, P. M. Mikkelsen).

***Systellaspis debilis*** (A. Milne Edwards, 1881)

Description: Chace, 1986: figs. 34g-i, 35 e-f.  
Type-locality: "... trouvée à une profondeur de 500 brasses dans le canal de Bahama."  
Distribution: South Africa, Indian Ocean, Philippines, Indonesia, Hawaii, western Atlantic from south of Greenland to Gulf of Mexico and Bahamas and eastern Atlantic from the Faeroe Islands to Angola; mesopelagic (Chace, 1986).

## FAMILY PASIPHAEIDAE

***Leptochela bermudensis*** Gurney, 1939

Description: Chace, 1976:7, figs. 5-7.  
Type-locality: Seven miles south of Bermuda between 1000 m and surface.  
Distribution: Bermuda to Barbados and southwestern Gulf of Mexico (Chace, 1976).

***Leptochela carinata*** Ortmann, 1893

Description: Chace, 1976:45, figs. 35-37.—Williams, 1984:59, fig. 39.  
Type-locality: Off Baia de Marajo, Para, Brazil, 50-100 m.  
Distribution: Georges Bank; South Carolina; Gulf of Mexico through Bahamas to Para, Brazil (Williams, 1984).

***Leptochela papulata*** Chace, 1976

Description: Chace 1976:26, figs. 22-24.  
Type-locality: East of Cape Lookout, North Carolina, 34°35'30"N, 75°45'30"W, 59 m.  
Distribution: Georges Bank off Cape Cod, Massachusetts (Fontaine, 1977); North Carolina to Georgia; eastern Gulf of Mexico (Williams, 1984).

***Leptochela serratorbita*** Bate, 1888

Description: Chace, 1976:36, figs. 29-31.—Williams, 1984:58, fig. 38.  
Type-locality: Saint Thomas, Virgin Islands.  
Distribution: Beaufort, North Carolina; South Carolina; western Gulf of Mexico and Florida Keys to Leeward Islands (Williams, 1984).

## FAMILY BRESILIIDAE

***Discias atlanticus*** Gurney, 1939

Description: Williams, 1984:62, fig. 41.

Type-locality: The Reach, Bermuda.

Distribution: Bermuda; off Savannah, Georgia, off Fort Pierce, Florida; Guadeloupe; Cape Verde Islands and Gabon; off northern Kenya (Bruce, 1975; Gore and Wilson, 1978); (Williams, 1984).

***Discias serratiostris*** Labour, 1949

Description: Wilson and Gore, 1979:311, fig. 1  
Type-locality: Off Castle Roads, Bermuda.  
Distribution: 3 mi. off Castle Roads, Bermuda, Vero Beach, Indian River County, on the central eastern coast of Florida.

***Pseudocheles chacei*** Kensley, 1983

Description: Kensley, 1983:22, figs. 18-22.  
Type-locality: Looe Key, Florida.  
Distribution: Looe Key, Florida to Carrie Bow Cay, Belize.

## FAMILY EUGONATONOTIDAE

***Eugonatonotus crassus*** (A. Milne Edwards, 1881)

Description: A. Milne Edwards, 1881:10.—Boone, 1927:106, figs. 22, 23.  
Type-locality: Caribbean Sea, off Grenada, 479 m, Blake Stn. 249.  
Distribution: Bahamas, Guianas, and westward into eastern Gulf of Mexico, Yucatan, and Honduras; 26°28'N, 84°42'W, 228 m; 26°20'N, 84°42'W, 216 m, from stomach of *Epinephelus flavolimbatus*. (personal communication, D. K. Camp). Pacific: from Borneo through the Philippines to Japan.

## FAMILY RHYNCHOCINETIDAE

***Rhynchocinetes rigens*** Gordon, 1936

Description: Gordon, 1936:75, figs. 1-7.—Manning, 1961a:1, figs. 1, 2.  
Type-locality: Pontinha Bay, Madeira Island.  
Distribution: Florida; Bahamas; Virgin Islands; Bermuda; Madeira and Azores.

## FAMILY GNATHOPHYLLIDAE

***Gnathophylloides mineri*** Schmitt, 1933

Description: Schmitt, 1933:7, fig. 3.  
Type-locality: Coral reefs at Ballena Point, Ensenada, Puerto Rico.  
Distribution: Southeastern Florida, Yucatan, and Caribbean Sea (Chace, 1972).

***Gnathophyllum americanum*** Guérin-Méneville, 1855

Description: Manning, 1963:58, figs. 5, 6.  
Type-locality: Cuba.  
Distribution: Bermudas, southern Florida, Gulf of Mexico, and Caribbean Sea; Canary Islands and Indo-Pacific region from the Red Sea to the Tuamotu Archipelago (Chace, 1972).

***Gnathophyllum circellum*** Manning, 1963

Description: Manning, 1963:54, figs. 3, 4.

Type-locality: Alligator Reef, Monroe County, Florida.

Distribution: Florida Keys and Great Exuma Island, Bahamas (Chace, 1972).

***Gnathophyllum modestum*** Hay, 1917

Description: Williams, 1984:90, fig. 62.

Type-locality: 20 mi. SW Beaufort, North Carolina.

Distribution: Off Beaufort, North Carolina (Williams, 1984); Florida Middle Grounds, Panama City and Biscayne Bay Florida (Dardeau et al., 1980).

## FAMILY PALAEMONIDAE

***Anchistiooides antiquensis*** (Schmitt, 1924)

Description: Williams, 1984:78, fig. 52.

Type-locality: English Harbor, Antigua.

Distribution: Off Charleston, South Carolina (Wenner and Read, 1982); off west Florida through West Indies to Maranhao, Pernambuco, and Alagoas, Brazil (Coelho and Ramos, 1972); Bermuda (Williams, 1984).

***Brachycarpus biunguiculatus*** (Lucas, 1849)

Description: Williams, 1984:63, fig. 42.

Type-locality: Oran and Bone, Algeria.

Distribution: Virtually pantropical (Bruce, 1974); east and west American coasts, Mediterranean; West Africa; and Indo-Pacific region. Western Atlantic distribution: Cape Fear, North Carolina, western Gulf of Mexico (Ray, 1974; Pequegnat and Ray, 1974) through West Indies to Curaçao and Old Providence Island; Bermuda (Williams, 1984).

***Leander paulensis*** Ortmann, 1897

Description: Manning, 1961b:525.—Chace, 1972: 19.

Type-locality: São Paulo, Brazil.

Distribution: Sandy Key Basin, in Florida Bay off Flamingo, Florida; São Paulo, Brazil.

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

Description: Williams, 1984:65, fig. 43.

Type-locality: Newfoundland Banks.

Distribution: Tropical and subtropical waters all over world except for west coast of Americas; Newfoundland Banks (occasionally mouth of Bay of Fundy and New England; Wigley, 1970; Williams and Wigley, 1977) to Falkland Islands in Western Atlantic (Holthuis, 1952; Bruce, 1974; Williams, 1984).

***Lipkebe holthuisi*** Chace, 1969

Description: Chace, 1969:263, figs. 8, 9.—Shaw et al., 1977:284, figs. 1-2.

Type-locality: Gulf of Mexico: west-northwest of Dry Tortugas, 25°13'N, 83°55'W.

Distribution: Northeastern Gulf of Mexico off Florida; Dry Tortugas; Brazil (Shaw et al., 1977).

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

Description: Williams, 1984:66, fig. 44-45.

Type-locality: Brazilian coast.

Distribution: Neuse River estuary, North Carolina, to Rio Grande do Sul, Brazil (Williams, 1984).

***Macrobrachium carcinus*** (Linnaeus, 1758)

Description: Holthuis, 1952:114, pl. 30, pl. 31: figs. a-c.

Type-locality: "in Americal fluviis" (restricted to Jamaica by Holthuis, 1952).

Distribution: Distribution of this species lies largely beyond the temperate east coast of the United States. The range extends from St. Augustine, St. Johns County, and Silver Glen Springs, Marion County, Florida, southward around the Gulf of Mexico and Caribbean Sea to Santa Catarina, Brazil (Williams, 1984).

***Macrobrachium crenulatum*** Holthuis, 1950

Description: Holthuis, 1952:107, pl. 27: figs. a-d, pl. 28.

Type-locality: Rio Peje Bobo, Panama.

Distribution: West Indies, Panama, and Venezuela. Indian River, Ft. Pierce, Florida (personal communication, P. M. Mikkelsen).

***Macrobrachium ohione*** (Smith, 1874)

Description: Williams, 1984:68, fig. 46.

Type-locality: Ohio River at Cannelton, Indiana.

Distribution: A narrow zone along Atlantic seaboard from James River, Hopewell, Virginia (Hobbs and Massmann, 1952), to southern Georgia; widespread from coastal Alabama to Aransas Bay, Texas; Mississippi River and tributaries upstream to McCurtain County, Oklahoma, Fort Smith, Arkansas; St. Louis, Missouri; Washington County, Ohio (Hedgpeth, 1949; Williams, 1984).

***Macrobrachium olfersii*** (Wiegmann, 1836)

Description: Williams, 1984:70, figs. 47-48.

Type-locality: "Brazilian Coast."

Distribution: Lower Cape Fear River near Southport, North Carolina; Florida; Louisiana; Texas; Veracruz, Mexico, to Santa Catarina, Brazil. Villalobos (1969) gave a distributional map for this and related species (Williams, 1984).

***Neopontonides beaufortensis*** Borradale, 1920

Description: Williams, 1984:80, fig. 53.

Type-locality: Beaufort, North Carolina.

Distribution: Beaufort, North Carolina, to Grand

Isle, Louisiana; Caledonia Bay, Panama; Antigua (Williams, 1984).

***Palaemon floridanus*** Chace, 1942

Description: Holthuis, 1952:197, pl. 48: figs. a-j.  
Type-locality: Captiva Island, W Florida.

Distribution: West coast of Florida.

***Palaemon northropi*** (Rankin, 1898)

Description: Holthuis, 1952:192, pl. 47.—Chace, 1972:21.

Type-locality: Nassau, New Providence, Bahama Islands.

Distribution: Bermudas and Florida to Estado de São Paulo, Brazil (Chace, 1972).

***Palaemonetes intermedius*** Holthuis, 1949

Description: Williams, 1984:75, fig. 50.

Type-locality: Iron Box Bay, Chincoteague Bay, Virginia.

Distribution: Vineyard Sound, Massachusetts, to Port Aransas, Texas (Holthuis, 1952); Bahia de la Ascension, Quintana Roo, Mexico (Chace, 1972; Williams, 1984).

***Palaemonetes paludosus*** (Gibbes, 1850)

Description: Holthuis, 1952:207, pl. 51: figs. e-j.

Type-locality: St. Andrews, Charleston County, South Carolina.

Distribution: Fresh-waters E of Alleghenies, from New Jersey to Florida. Indian River lagoon, Florida (personal communication, P. M. Mikkelsen).

***Palaemonetes pugio*** Holthuis, 1949

Description: Williams, 1984:76, fig. 51.

Type-locality: Lagoon near Cove Point Light, Chesapeake Bay.

Distribution: Intermittent from Verte River, 3 mi. W St. Modeste (47°51'N, 69°26'W), Quebec, to near Yarmouth, Nova Scotia, Newcastle and East Brunswick, Maine (Bousfield and Laubitz, 1972; Knowlton, 1973; Williams, 1974c), southward to Corpus Christi, Texas (Holthuis, 1952; Williams, 1984).

***Palaemonetes vulgaris*** (Say, 1818)

Description: Williams, 1984:72, fig. 49.

Type-locality: Atlantic coast of United States.

Distribution: Southern Gulf of St. Lawrence from northern Cape Breton Island (Bousfield, 1956) through Northumberland Strait to St. Simons Inlet and Miscou Harbor near Portage Bay (Bousfield and Laubitz, 1972), southward to Cameron County, Texas (Williams, 1984).

***Periclimenaeus ascidiarum*** Holthuis, 1951

Description: Holthuis, 1951b:80, pl. 22: figs. g-l, pl. 23: figs. a-i.

Type-locality: Bird Key Reef, Dry Tortugas, Florida.

Distribution: Colombia, 2 mi. SW of Cape la Vela. 38-40 m; Florida Middle Grounds (Hopkins et al., 1977) and Bird Key Reef, Tortugas, Florida; Dominica.

***Periclimenaeus atlanticus*** (Rathbun, 1901)

Description: Holthuis, 1951b:83, pl. 24: figs. a-p.

Type-locality: Off St. Thomas, Virgin Islands.

Distribution: Known from type-locality, and South Florida, Isla de Cozumel, Bahía de la Ascención.

***Periclimenaeus bermudensis*** (Armstrong, 1940)

Description: Holthuis, 1951b:107, pl. 32: figs. d-g, pl. 33: figs. a-i.

Type-locality: The Reach, St. Georges Island, Bermuda.

Distribution: Coastal waters from Bermuda, Bahamas and Dry Tortugas, Florida.

***Periclimenaeus caraibicus*** Holthuis, 1951

Description: Holthuis, 1951b:110, pl. 32: figs. h-j, pl. 34.

Type-locality: Buccoo Reef, Tobago.

Distribution: Tobago, Barbuda, Antigua Island, Dominica, Saint Lucia Island, Bahia de la Ascension, Florida (personal communication, D. K. Camp).

***Periclimenaeus chacei*** Abele, 1971

Description: Abele, 1971:38, figs. 1, 2.

Type-locality: Northeastern Gulf of Mexico off the west coast of Florida.

Distribution: Known from the type-locality and Indian River, Florida (Personal communication with R. H. Gore).

***Periclimenaeus maxillulidens*** (Schmitt, 1936)

Description: Holthuis, 1951b:87, pl. 26: figs. a-o.

Type-locality: Entrance to Lac, Bonaire.

Distribution: Northeastern Gulf of Mexico and Bonaire (Chace, 1972).

***Periclimenaeus pearsei*** (Schmitt, 1932)

Description: Holthuis, 1951b:93, pl. 28: figs. a-r.

Type-locality: Tortugas, Florida.

Distribution: Tortugas, Florida.

***Periclimenaeus perlatus*** (Boone, 1930)

Description: Holthuis, 1951b:99, pl. 30: figs. a-l, pl. 32: fig. a.

Type-locality: Gonave Bay, Haiti.

Distribution: Dry Tortugas, Florida to Panama (Chace, 1972).

***Periclimenaeus schmitti*** Holthuis, 1951

Description: Williams, 1984:81, fig. 54.

Type-locality: Tortugas, Florida.

Distribution: Bogue Sound, Black Rocks off New River, and Lockwoods Folly River, North Carolina; Tortugas, Florida (Williams, 1984).

***Periclimenaeus wilsoni*** (Hay, 1917)

Description: Williams, 1984:82, fig. 55.

Type-locality: Fishing grounds, 20 mi. off Beaufort Inlet, North Carolina.

Distribution: Off Beaufort, North Carolina; off Sapelo Island, Georgia; off Loggerhead Key, near Tortugas, and Franklin County, Florida (Williams, 1984).

***Periclimenes americanus*** (Kingsley, 1878)

Description: Williams, 1984:83, fig. 56.

Type-locality: Key West, Florida.

Distribution: Beaufort, North Carolina; to western Gulf of Mexico (Felder and Chaney, 1979), and through West Indies to Aruba; Para to São Paulo, Brazil (Coelho and Ramos, 1972; Williams, 1984).

***Periclimenes harringtoni*** Lebour, 1949

Description: Holthuis, 1951b:35, pl. 9: figs.a-k.

Type-locality: Harrington Sound, Bermuda.

Distribution: Harrington Sound, Bermuda, and Dry Tortugas, Florida.

***Periclimenes iridescentes*** Lebour, 1949

Description: Williams, 1984:85, fig. 57.

Type-locality: Off Castle Roads, Bermuda.

Distribution: Northeast off Cape Hatteras, 35°32.9'N, 75°11.9'W (Herbst et al. 1979); southern and northwestern Florida; Tobago; Cubagua Island, Venezuela; Bermuda (Chace 1972; Williams, 1984).

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

Description: Williams, 1984:86, fig. 58.

Type-locality: Coast of Carolina.

Distribution: Cape Hatteras, North Carolina, to southwestern Florida; West Indies to São Paulo, Brazil. There are doubtful records from the Indian Ocean and deeper waters of the Gulf of Mexico (Holthuis, 1951b; Williams, 1984).

***Periclimenes magnus*** Holthuis, 1951

Description: Holthuis, 1951b:52, pl. 15: figs. a-f.

Type-locality: Gulf of Mexico, off Aransas, Texas, 27°40'N, 96°34'W, 50 m, *Pelican* Stn. 42.

Distribution: Type-locality and Murray Key, Florida Bay (Rouse, 1970).

***Periclimenes pandionis*** Holthuis, 1951

Description: Holthuis, 1951b:41, pl. 11: figs. a-i.—

Gore et al., 1981:254, fig. 1.

Type-locality: Gulf stream off Key West, Florida,

24°21'55"N, 81°58'25"W (179 m. *Fish Hawk* Stn. 7279).

Distribution: Indian River and Key West, Florida (Gore et al., 1981).

***Periclimenes pedersoni*** Chace, 1958

Description: Williams, 1984:87, fig. 59.

Type-locality: Simms (Lyford) Cay, New Providence Island, Bahamas.

Distribution: East of Cape Lookout, North Carolina, 34°35.5'N, 75°5.5'W (Herbst et al. 1979); off northwest Florida, Bahamas, through West Indies to Bonaire; Belize (Williams, 1984).

***Periclimenes perryae*** Chace, 1942

Description: Holthuis, 1951b:31, pl. 7: figs. a-o.

Type-locality: Off Sanibel Island, Lee County, W Florida.

Distribution: Florida Middle Grounds (Hopkins et al., 1977) and from shallow water (10 m) off Sanibel Island, Lee County, West Florida.

***Periclimenes rathbunae*** Schmitt, 1924

Description: Holthuis, 1951b:58, pl. 17: figs. a-h.

Type-locality: Spanish Port, Curaçao.

Distribution: Netherlands West Indies, Spanish Port, Curaçao; tentatively Dry Tortugas, Florida.

***Periclimenes yucatanicus*** (Ives, 1891)

Description: Limbaugh, Pederson, and Chace, 1961:240, fig. 2.

Type-locality: Off Progreso, Estado de Yucatan, Mexico.

Distribution: Southern Florida to Colombia (Chace, 1972).

***Pontonia domestica*** Gibbes, 1850

Description: Williams, 1984:88, fig. 60.

Type-locality: South Carolina.

Distribution: Atlantic Beach near Beaufort Inlet, North Carolina, to Gulf of Mexico S of Houma, Terrebonne Parish, Louisiana (USNM); Bahamas; Madeira (Williams, 1984).

***Pontonia margarita*** Smith, 1869

Description: Williams, 1984:89, fig. 61.

Type-locality: Bay of Panama.

Distribution: Atlantic coast: Drumm Inlet to Beaufort Inlet, North Carolina; east and west Florida. Pacific coast: Gulf of California to Colombia; Galapagos Islands (Williams, 1984).

***Pontonia unidens*** Kingsley, 1880

Description: Holthuis, 1951b:150, pl. 47: figs. J-k.

Type-locality: Key West, Florida.

Distribution: Known only from the original type-series from Key West, Florida.

***Pontoniopsis paulae* Gore, 1981**

Description: Gore, 1981:139, figs. 1a-p.  
Type-locality: Carys Fort Reef, off Key Largo, Monroe county, Florida.  
Distribution: Known only from the type-locality.

***Pseudocoutierea antillensis* Chace, 1972**

Description: Chace, 1972:43, figs. 11a-b.  
Type-locality: Saba Bank at 17°28'N, 63°13'W.  
Distribution: Known from the type-locality; eastern Florida.

***Tuleariocaris neglecta* Chace, 1969**

Description: Chace, 1969:266, figs. 10, 11.  
Type-locality: St. James, Barbados.  
Distribution: Florida Keys, Dominica, Barbados, Curaçao, Madeira, on *Diadema antillarum* (Chace, 1972).

***Typton carneus* Holthuis, 1951**

Description: Chace, 1972:46, fig. 12.  
Type-locality: Tortugas, Florida.  
Distribution: South and west coasts of Florida and Bahamas to Tobago (Chace, 1972).

***Typton distinctus* Chace, 1972**

Description: Chace, 1972:49, figs. 13, 14.  
Type-locality: Los Arroyos, Provincia de Pinar del Rio, Cuba.  
Distribution: Western Cuba and Yucatan Peninsula, Mexico (Chace, 1972). Florida (personal communication, D. A. Camp).

***Typton gnathophylloides* Holthuis, 1951**

Description: Holthuis, 1951b:159, pl. 50: figs. a-l.  
Type-locality: Dry Tortugas, Florida.  
Distribution: Same as the type-locality.

***Typton prionurus* Holthuis, 1951**

Description: Holthuis, 1951b:165, pl. 52: figs. a-l.  
Type-locality: Tortugas, Florida between Middle Ground and White Shoal, 18 m. (W. L. Schmitt coll., Stn 45-30).  
Distribution: Same as the type-locality.

***Typton tortugae* McClendon, 1911**

Description: Holthuis, 1951b:153, pl. 48: figs. a-o.  
Type-locality: Dry Tortugas, Florida.  
Distribution: Outside Castle Harbour, Bermuda (Gurney, 1936), Dry Tortugas, Florida (McClendon, 1911; Schmitt, 1930; Pearse, 1932); Gulf of California (Holthuis, 1951).

***Typton vulcanus* Holthuis, 1951**

Description: Holthuis, 1951b:157, pl. 49: figs. a-n.  
Type-locality: Dry Tortugas, Florida.  
Distribution: South of Tortugas, Florida.

***Veleroniopsis kimallynae* Gore, 1981**

Description: Gore, 1981:147.  
Type-locality: Elbow Reef, off Key Largo, Monroe County, Florida.  
Distribution: Known only from the type-locality.

**FAMILY ALPHEIDAE**

***Alpheopsis labis* Chace, 1972**

Description: Chace, 1972:55, fig. 15.  
Type-locality: Charlotte Point, English Harbor, Antigua Island.  
Distribution: Bermuda, Cuba, Hispaniola and Antigua Island (Chace, 1972). Florida Middle Grounds (Hopkins et al., 1977); Florida. (27°37'N, 83°59'W, 54.8 m) (personal communication, D. K. Camp). Looe Key, Florida (personal communication, D. L. Felder).

***Alpheopsis trispinosus* (Stimpson, 1861)**

Description: Banner and Banner, 1973:337, fig. 14.  
Type-locality: Port Jackson, Australia.  
Distribution: Probably pantropical (Gore, 1981).

***Alpheus ambyonyx* Chace, 1972**

Description: Chace, 1972:59, fig. 16.  
Type-locality: Near center of Arrecife Nicchehabin, Bahia de la Ascension, Territorio de Quintana Roo, Mexico, on or under coral in 1-5 feet of water.  
Distribution: Territorio de Quintana Roo, Mexico; Puerto Rico; Saint Thomas; and Dominica; (Chace, 1972). Eastern and Southern Florida (personal communication, P. M. Mikkelsen).

***Alpheus armatus* Rathbun, 1901**

Description: Zimmer, 1913:295, figs. W-Z, A<sup>1</sup>, B<sup>1</sup>.  
Type-locality: Ponce, Puerto Rico.  
Distribution: Throughout the West Indian region from the Bahamas and southern Florida to Tobago and westward to the Yucatan Peninsula (Chace, 1972).

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

Description: Williams, 1984:92, fig. 63.  
Type-locality: Antilles.  
Distribution: North Carolina, through Gulf of Mexico and West Indies to Cananeia, São Paulo, Brazil; Bermuda (Holthuis, 1956).

***Alpheus bouvieri* A. Milne Edwards, 1878**

Description: Crosnier and Forest, 1966:273, fig. 22.  
Type-locality: Cape Verde Islands.  
Distribution: Bermudas and Antigua Island to Tobago and Fernando de Noronha; eastern Atlantic from the Cape Verde Islands and Guinea to São

Tomé and Congo (Chace, 1972). Eastern and Southern Florida.

***Alpheus candei*** Guérin-Méneville, 1855

Description: Coutière, 1910:486, fig. 1.

Type-locality: Cuba.

Distribution: Apparently known only from the Dry Tortugas, Florida and Cuba (Chace, 1972).

***Alpheus cristulifrons*** Rathbun, 1900

Description: Crosnier and Forest, 1966:260, figs. 17, 18.

Type-locality: Fernando de Noronha.

Distribution: Western tropical Atlantic from the Dry Tortugas, Florida to Fernando de Noronha and westward to the Yucatan Peninsula; also the islands of São Tomé and Pricipe in the eastern Atlantic (Chace, 1972).

***Alpheus cylindricus*** Kingsley, 1878

Description: Crosnier and Forest, 1966:257, fig. 16.

Type-locality: Archipiélago de las Perlas, Gulf of Panama.

Distribution: Bermudas and Florida to Barbados; eastern Atlantic from the islands of Príncipe, São Tomé, and Annobón; eastern Pacific from the Gulf of California, the Gulf of Panama, and the Galapagos Islands (Chace, 1972).

***Alpheus estuariensis*** Christoffersen, 1984

Description: Christoffersen, 1984:191, figs. 1, 2.

Type-locality: Rio Potengi estuary, Natal, State of Rio Grande do Norte, Brazil.

Distribution: Florida; Mississippi to Texas; Cuba; Dominican Republic; Curaçao; Trinidad; Ceará to Paraná, Brazil.

***Alpheus floridanus*** Kingsley, 1878

Description: Chace, 1972:65, figs. 17-20.—

Crosnier and Forest, 1966:267, 269, figs. 20, 21.

Type-locality: Fort Jefferson, Dry Tortugas, Florida.

Distribution: Gulf of Mexico to Estado da Bahia, Brazil; eastern Atlantic from Guinea to Congo (Chace, 1972).

***Alpheus formosus*** Gibbes, 1850

Description: Williams, 1984:94, fig. 64.

Type-locality: Key West, Florida.

Distribution: Near Beaufort, North Carolina through Gulf of Mexico (Ray, 1974; Felder and Chaney, 1979) and West Indies to São Paulo, Brazil.

***Alpheus heterochaelis*** Say, 1818

Description: Williams, 1984:95, fig. 65.—

Christoffersen, 1984:200, figs. 5-7.

Type-locality: Amelia Island, Nassau County, Florida.

Distribution: North Carolina to the State of Paraíba, Brazil (Christoffersen, 1984).

***Alpheus malleator*** Dana, 1852

Description: Crosnier and Forest, 1966:240, fig. 10.

Type-locality: Rio de Janeiro, Brazil?.

Distribution: Puerto Rico to Estado de São Paulo, Brazil; eastern Atlantic from Senegal to Congo; eastern Pacific from the Gulf of California, Ecuador, and the Galapagos Islands (Chace, 1972).

***Alpheus normanni*** Kingsley, 1878

Description: Williams, 1984:97, fig. 66.

Type-locality: Pacific coast of Panama.

Distribution: Bermuda; around Cape Charles, Virginia, and lower Chesapeake Bay through Gulf of Mexico (Ray, 1974) and West Indies to São Paulo, Brazil (Christoffersen, 1979); Gulf of California and Panama (Chace, 1972; Williams, 1984).

***Alpheus nuttingi*** (Schmitt, 1924)

Description: Schmitt, 1924b:78, pl. 2: figs. 4-6.

Type-locality: Pelican Island, Barbados.

Distribution: Florida Keys to Estado de Alagoas, Brazil and westward to Isla de Providencia and Panama (Chace, 1972).

***Alpheus paracrinatus*** Miers, 1881

Description: Crosnier and Forest, 1966:253, fig. 15.

Type-locality: Goree, Senegal.

Distribution: Virtually pantropical; to a depth of 18 m. In Western Atlantic, from the Bermudas and the northeastern Gulf of Mexico to Tobago (Chace, 1972).

***Alpheus peasei*** (Armstrong, 1940)

Description: Verrill, 1922:68, fig. 68, fig. 5b, pl. 19: figs. 3a-d, pl. 20: fig. 1, pl. 21: figs. 6, 6a, pl. 24: figs. 2-4, pl. 29: fig. 1a-t.

Type-locality: Castle Harbour, Bermudas.

Distribution: Bermudas and Florida Keys to Tobago and westward to Isla de Providencia and the Yucatan Peninsula (Chace, 1972).

***Alpheus schmitti*** Chace, 1972

Description: Chace, 1972:70, figs. 21, 22.

Type-locality: Grand Anse Bay outside Saint Georges Harbour, Grenada, in partially exposed conglomerate rock and coral ledge along shore.

Distribution: Known from the type-series, the Florida Keys, Antigua Island, and Tobago (Chace, 1972).

***Alpheus thomasi*** Hendrix and Gore, 1973

Description: Hendrix and Gore, 1973:413, figs. 1-3.

Type-locality: Virginia Beach, Virginia Key, Miami, Florida.

Distribution: Cape Florida, Key Biscayne, Dade County; and from Jupiter Inlet in Palm Beach County, and Walton Rocks, St. Lucie County, about 5 miles south of Ft. Pierce, Florida (Hendrix and Gore, 1973).

***Alpheus viridari* (Armstrong, 1949)**

Description: Armstrong, 1949:8, fig. 2.

Type-locality: Barahona, Dominican Republic. Distribution: Florida Keys to Trinidad and westward to Curaçao and the Yucatan Peninsula (Chace, 1972).

***Alpheus websteri* Kingsley, 1880**

Description: Rankin, 1898:249, pl. 30: fig. 6 (as *Alpheus nigrospinatus*).—Crosnier and Forest, 1966:236 (as *Alpheus ridleyi*).

Type-locality: Key West, Florida.

Distribution: Bahamas to Fernando de Noronha, Brazil and westward to the Yucatan peninsula (Chace, 1972). Looe Key, Florida (personal communication, D. L. Felder).

***Automate evermanni* Rathbun, 1901**

Description: Williams, 1984:99, fig. 67.

Type-locality: Off Aguadilla, Puerto Rico.

Distribution: North Carolina(?); Georgia to Texas and Puerto Rico; eastern Atlantic from Cape Verde Islands and Liberia to Nigeria (Chace, 1972).

***Automate gardineri* Coutière, 1902**

Description: Banner and Banner, 1966:37, fig. 8.—Chace, 1972:74, fig. 23.—Williams, 1984:100, fig. 68.

Type-locality: Maldives and Laccadive Islands.

Distribution: North Carolina; Virgin Islands, Antigua Island, Barbados and the Yucatan Peninsula; Indo-Pacific region from the Red Sea to Samoa (Chace, 1972). Florida.

***Automate rectifrons* Chace, 1972**

Description: Chace, 1972:75, fig. 24.

Type-locality: Inner side of Arrecife Nicchehabin, Bahia de la Ascension, Territorio de Quintana Roo, Mexico.

Distribution: The type-locality; possibly Antigua Island (Chace, 1972). Southern Florida (personal communication, P. A. McLaughlin).

***Leptalpheus forceps* Williams, 1965**

Description: Williams, 1984:101, fig. 69.

Type-locality: Gallants Point, Newport River, Carteret County, North Carolina.

Distribution: Drum Inlet, Beaufort, Banks Channel near Wrightsville Beach, and Lockwoods

Distribution: Southern Florida to Surinam westward to the Yucatan Peninsula (Chace, 1972).

***Metalpheus rostratipes* (Pocock, 1980)**

Description: Crosnier and Forest, 1966:246, figs. 12-14.

Type-locality: Fernando de Noronha.

Distribution: Southern Florida; Puerto Rico and the Yucatan Peninsula to Fernando de Noronha; probably pantropical (Chace, to Surinam westward to the Yucatan Peninsula (Chace, 1972).

***Synalpheus agelass* Pequegnat and Heard, 1979**

Description: Pequegnat and Heard, 1979:110, figs. 1-4.—Dardeau, 1984:12, figs. 3-6.

Type-locality: West Flower Garden Bank, Gulf of Mexico (27°52'N, 93°48'W) in 25 m.

Distribution: Atlantic: Grand Bahama Island; Gulf of Mexico; Florida Middle Ground, Sonnier Bank, 28 Fathom Bank, West Flower Garden Bank, North Hospital Bank and Hospital Rock (Pequegnat and Heard, 1979); Caribbean, off Puerto Rico (Dardeau, 1984).

***Synalpheus apioceros* Coutiere, 1909**

Description: Coutiere, 1909:27, fig. 9.

Type-locality: Marco, Florida.

Distribution: Southern Florida to Surinam westward to the Yucatan Peninsula (Chace, 1972).

***Synalpheus bousfieldi* Chace, 1972**

Description: Chace, 1972:86, figs. 29, 30.

Type-locality: West side of reef east of anchorage, Bahia del Espíritu Santo, Territorio de Quintana Roo, Mexico.

Distribution: Atlantic: Grand Bahama Island (Dardeau, 1984) and possibly south to Brazil (Christoffersen, 1979); Gulf of Mexico: Florida Middle Ground, Sonnier Bank, Bright Bank, and West Flower Garden Bank (Dardeau, 1984); Caribbean: Yucatan Peninsula and Virgin Islands (Chace, 1972).

***Synalpheus brevicarpus* (Herrick, 1891)**

Description: Coutière, 1909:50, fig. 29.—Christoffersen, 1979:333, fig. 19.

Type-locality: Nassau, New Providence, Bahamas; in green sponge.

Distribution: Bermudas; east Florida to Dry Tortugas; southwest Florida; Bahama Islands; Cuba to Virgin Islands; Los Roques Islands; Curaçao; Panama; Pernambuco to the north of Rio Grande do Sul; eastern Pacific, Bay of Panama (Christoffersen, 1979).

***Synalpheus brooksi* Coutière, 1909**

Description: Coutière, 1909:69, fig. 41.—Dardeau, 1984:26, figs. 11-14.

Type-locality: Sugar Loaf Key, Florida.  
Distribution: Gulf of Mexico, Florida Keys, Bahamas and the Yucatan Peninsula to Estado do Rio Grande do Norte Brazil (Chace, 1972).

***Synalpheus curacaoensis* Schmitt, 1924**

Description: Schmitt, 1924a:66, fig. 3.  
Type-locality: Spaansche Water, Curaçao.  
Distribution: Curaçao; Bonaire, (Chace, 1972).  
Eastern Florida.

***Synalpheus fritzmuelleri* Coutière, 1909**

Description: Williams, 1984:102, fig. 70.  
Type-locality: Marco, Florida.  
Distribution: Off Beaufort, North Carolina to Santa Catarina, Brazil; Bermuda; St. Helena Island, South Atlantic; Baja California (Chace, 1972).

***Synalpheus goodei* Coutière, 1909**

Description: Coutière, 1909:58, fig. 33.—Dardeau, 1984:40, figs. 18-21.  
Type-locality: Bermudas.  
Distribution: Bermudas and the Gulf of Mexico to Curaçao and Panama (Chace, 1972).

***Synalpheus heardi* Dardeau, 1984**

Description: Dardeau, 1984:47, figs. 23-26.  
Type-locality: Florida Middle Ground, Gulf of Mexico.  
Distribution: Eastern Gulf of Mexico, off central western Florida; Grand Bahama Island (Dardeau, 1984).

***Synalpheus hemphilli* Coutière, 1909**

Description: Coutière, 1909:38, fig. 20.  
Type-locality: Off the west coast of Florida (27°04'N, 83°21'W).  
Distribution: Bermudas and the eastern Gulf of Mexico to Curaçao and Islas Los Roques (Chace, 1972).

***Synalpheus herricki* Coutière, 1909**

Description: Coutière, 1909:74, fig. 44.—Dardeau, 1984:55, figs. 27-30.  
Type-locality: "Off Anclote, Florida" presumably Anclote Key off Tarpon Springs.  
Distribution: Atlantic: questionably from Eleuthera, Bahama Islands (Chace, 1972); Gulf of Mexico: questionably from Florida Bay (Tabb and Manning, 1961); off central western Florida from Sanibel Island to Cape San Blas (Coutière, 1909; Dardeau, 1984).

***Synalpheus longicarpus* (Herrick, 1891)**

Description: Williams, 1984:104, fig. 71.—Dardeau, 1984:64, figs. 32-35.

Type-locality: Bahamas, probably Nassau, New Providence Island.

Distribution: Beaufort, North Carolina to west Flower Garden Reef, SSE of Galveston, Texas; Yucatan, Mexico through West Indies to Rio de Janeiro, Brazil (Williams, 1984).

***Synalpheus mcclendoni* Coutière, 1910**

Description: Chace, 1972:95, figs. 33, 34.—Dardeau, 1984:74, figs. 37-39.

Type-locality: Dry Tortugas, Florida.

Distribution: Atlantic: Grand Bahama Island; Gulf of Mexico: Dry Tortugas (Coutière, 1910) and Isla de Lobos Reef, off Veracruz (Ray, 1974); Caribbean: Yucatan Peninsula, Windward Islands (Chace, 1972) and Barbados (Schmitt, 1924a; Dardeau, 1984).

***Synalpheus minus* (Say, 1818)**

Description: Williams, 1984:105, fig. 72.

Type-locality: "Coasts of the southern states and off East Florida."

Distribution: Near Cape Hatteras, North Carolina to São Paulo, Brazil (Christoffersen, 1979); Bermuda (Williams, 1984).

***Synalpheus pandionis* Coutière, 1909**

Description: Coutière, 1909:67, fig. 39.—Dardeau, 1984:78, figs. 40-43.

Type-locality: Off Saint Thomas, 36-42 m.

Distribution: Eastern Gulf of Mexico to Barbados and Curaçao (Chace, 1972).

***Synalpheus paraneptunus* Coutière, 1909**

Description: Coutière, 1909:86, fig. 52.—Dardeau, 1984:92, figs. 47-50.

Type-locality: Off Golfo de Morrosquillo, Colombia (9°30'15"N, 76°20'30" W) in 77 m.

Distribution: Dry Tortugas, Florida and the Yucatan Peninsula to the Grenadines and Colombia (Chace, 1972). Possibly from the Gulf of Mexico, off central western Florida, and the West Flower Garden Bank (Dardeau, 1984).

***Synalpheus pectiniger* Coutière, 1907**

Description: Coutière, 1909:78, figs. 48, 49.—Dardeau, 1984:98, figs. 51-53.

Type-locality: Curaçao.

Distribution: Gulf of Mexico, Florida keys and Bahamas to Curaçao (Chace, 1972).

***Synalpheus rathbunae* Coutière, 1909**

Description: Coutière, 1909:84, fig. 51.

Type-locality: Off Saint Thomas in 37-55 m.

Distribution: Bahamas to the Grenadines westward

to the Yucatan Peninsula; (Chace, 1972). Looe Key, Florida (personal communication, D. L. Felder).

***Synalpheus sanctithomae*** Coutière, 1909

Description: Coutière, 1909:61, fig. 35.— Christoffersen, 1979:352, figs. 29 -30. Type-locality: Off Saint Thomas in 37-42 m. Distribution: Saint Thomas; Atol dos Rocas and Pernambuco to the south of Bahia, Brazil (Christoffersen, 1979). Florida Keys (Gore, 1981).

***Synalpheus townsendi*** Coutière, 1909

Description: Williams, 1984:106, fig. 73. Type-locality: Gulf of Mexico south of Cape San Blas, Florida ( $29^{\circ}14'00''N$ ,  $85^{\circ}29'15''W$ ) in 46 m. Distribution: Off Beaufort, North Carolina to Rio de Janeiro, Brazil; Bermuda; Gulf of California (Williams, 1984)

***Thunor simus*** (Guérin-Méneville, 1856)

Description: Armstrong, 1949:13, figs. 3, 4A-J, L, (as *Thunor rathbunae*).—Chace, 1972:104, fig. 39, (as *Thunor rathbunae*). Type-locality: Cuba. Distribution: Key West, Florida and Yucatan Peninsula to Barbados (Chace, 1972); Piscadera Bay, Curaçao (Holthuis, 1980a).

## FAMILY HIPPOLYTIDAE

***Bythocaris nana*** Smith, 1885

Description: Smith, 1885:449; 1886:600, pl. 12: fig. 2. Type-locality: Massachusetts, off Martha's Vineyard; 263 m. Distribution: Off Martha's Vineyard, Massachusetts to Southern Florida and northeastern Gulf of Mexico.

***Exhippolysmata oplophoroides*** (Holthuis, 1948)

Description: Williams, 1984:114, fig. 79. Type-locality: Mouth of Suriname River near Resolutie, Surinam. Distribution: Off Cape Fear River, North Carolina, to Port Aransas, Texas; Guyana to the north of Uruguay (Williams, 1984).

***Hippolyte coerulescens*** (Fabricius, 1775)

Description: Williams, 1984:116, fig. 80. Type-locality: "Pelago inter Tropicos" Distribution: Widespread in tropical and subtropical Atlantic Ocean (Chace 1972).

***Hippolyte curaçaoensis*** Schmitt, 1924

Description: Williams, 1984:117, fig. 81. Type-locality: West Punt, Curaçao. Distribution: Beaufort and Sneads Ferry, North

Carolina; West Indies from Cuba to Curaçao (Williams, 1984).

***Hippolyte nicholsoni*** Chace, 1972

Description: Chace, 1972:113, figs. 46, 47. Type-locality: Milford Bay, between Pigeon Point and Crown Point, Tobago, in 9-12 m. Distribution: Puerto Rico, Antigua Island, Saint Lucia Island, and Tobago (Chace, 1972). Looe Key, Florida (personal communication, D. L. Felder).

***Hippolyte pleuracanthus*** (Stimpson, 1871)

Description: Williams, 1984:117, fig. 82. Type-locality: Norfolk Harbor, Virginia, and Somers Point, Great Egg Harbor, New Jersey. Distribution: Connecticut to North Carolina (Williams, 1984).

***Hippolyte zostericola*** (Smith, 1873)

Description: Chace, 1972:118, figs. 49-50. Type-locality: Vineyard Sound, Massachusetts. Distribution: Southern Massachusetts; North Carolina to Yucatan; Trinidad and Curaçao; Ceara, Brazil (Fausto-Filho, 1975); Bermuda.

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

Description: Williams, 1984:119, fig. 84. Type-locality: Floating gulfweed. Distribution: Western North Atlantic between  $10^{\circ}$  and  $50^{\circ}$  N; Azores and Cape Verde Islands (Chace, 1972).

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

Description: Williams, 1984:120, fig. 85. Type-locality: St. Joseph Island, Texas. Distribution: Beaufort, North Carolina, to Rio de Janeiro, Brazil; West Africa (Williams, 1984).

***Lysmata amboinensis*** (De Man, 1888)

Description: Limbaugh, Pederson, and Chace, 1961:247, fig. 5.—Hayashi, 1975:285, figs. 1-4, pl. 4. Type-locality: Amboina, Indonesia. Distribution: Circumtropical (Bruce, 1974; Hayashi, 1975). In Florida: northern Gulf of Mexico through the Florida Keys.

***Lysmata intermedia*** (Kingsley, 1878)

Description: Sivertsen, 1933:5, pl. 2: fig. 9-15. Type-locality: Dry Tortugas, Florida. Distribution: The Florida Middle Grounds (Dardeau et al., 1980) to the Florida Keys to Tobago and Curaçao; Azores; Galapagos Islands (Chace, 1972). The Galapagos Islands record is questionable (Abele, 1975).

***Lysmata rathbunae*** Chace, 1970

Description: Williams, 1984:126, fig. 89.

Type-locality: Off Boynton Beach, Florida, 26°31'N, 80°1'W, 55-64 m.  
Distribution: Typical form: SE Cape Fear, North Carolina, 33°30'24"N, 77°24'30"W, 25 m; east coast of Florida to Yucatan. Bermuda; Miami, Florida, Venezuela (Williams, 1984).

***Lysmata wurdemanni* (Gibbes, 1850)**

Description: Williams, 1984:127, fig. 90.  
Type-locality: Key West, Florida.  
Distribution: Great Egg Harbor, New Jersey, to Port Aransas, Texas; Surinam; French Guiana; Mamanguape, São Paulo, Brazil (Williams, 1984).

***Merhippolyte americana* Holthuis, 1961**

Description: Holthuis, 1961:1, fig. 1.  
Type-locality: 20°59'30"N, 86°23'45"W, Yucatan Channel, 237.6 m, coral.  
Distribution: North Carolina; South Florida; Yucatan Channel; São Paulo; Rio Grande do Sul to Province of Buenos Aires (Christoffersen, 1979).

***Thor amboinensis* (De Man, 1888)**

Description: Chace, 1972:130, figs. 55, 56.  
Type-locality: Ambon, Indonesia.  
Distribution: Florida Keys to Tobago and Yucatan; Bay of Bengal, Indonesia, and Caroline Islands (Chace, 1972).

***Thor dobkini* Chace, 1972**

Description: Williams, 1984:134, fig. 94.  
Type-locality: Punta Rassa (near mouth of Caloosahatchee River), Lee County, Florida.  
Distribution: Off Shackleford Bank, North Carolina, to Yucatan; Louisiana; north coast of Cuba (Williams, 1984).

***Thor floridanus* Kingsley, 1878**

Description: Williams, 1984:135, fig. 95.  
Type-locality: Key West, Florida.  
Distribution: Black Rocks off New River, North Carolina (?) to Yucatan (Williams, 1984).

***Thor manningi* Chace, 1972**

Description: Williams, 1984:137, fig. 96.  
Type-locality: English Harbour, Antigua Island.  
Distribution: Beaufort, North Carolina, to Yucatan and through West Indies to Curaçao; Islas Tres Marias, off west coast of Mexico (Chace 1972).

***Tozeuma carolinense* Kingsley, 1878**

Description: Williams, 1984:138, fig. 97.  
Type-locality: Fort Macon, North Carolina.  
Distribution: Vineyard Sound, Massachusetts, through Gulf of Mexico to Yucatan and southward to Colon, Panama; through West Indies to Curaçao; Pernambuco to Bahia, Brazil (Coelho and Ramos 1972).

***Tozeuma cornutum* A. Milne Edwards, 1881**

Description: A. Milne Edwards, 1881:16; 1883, pl. 32.—Chace, 1972:141.  
Type-locality: Off Barbados.  
Distribution: Off Barbados, in 73 m; in deep water east of Florida Keys; in Great Lameshur Bay, St. John, Virgin Islands (Chace, 1972).

***Tozeuma serratum* A. Milne Edwards, 1881**

Description: Williams, 1984:140, fig. 98.  
Type-locality: Off Barbados.  
Distribution: Nonamesset Island, Massachusetts; Off Capes Hatteras and Lookout, North Carolina (Herbst et al., 1979; USNM), Cape Canaveral, extreme southern and northwestern Florida, Colombia and Barbados (Chace, 1972; USNM; Williams, 1984).

***Trachycaris restrictus* (A. Milne Edwards, 1878)**

Description: Holthuis, 1949b:233, figs. 2, 3.  
Type-locality: Cape Verde Islands.  
Distribution: Bermudas; Cape San Blas, Florida (Dardeau et al., 1980) south to Estado do Para, Brazil; eastern Atlantic from the Canary Islands to St. Helena Island (Chace, 1972).

## FAMILY OGYRIDIDAE

***Ogyrides alphaerostris* (Kingsley, 1880)**

Description: Williams, 1984:107, fig. 74.  
Type-locality: Northampton County, Virginia, eastern shore, Atlantic side.  
Distribution: Eastern shore of Accomack County, and lower James River, Virginia, through Gulf of Mexico to Rio Grande do Sul, Brazil (Christoffersen 1979). Florida (26 m) (personal communication, P. M. Mikkelsen).

***Ogyrides hayi* Williams, 1981**

Description: Williams, 1984:109, fig. 75.  
Type-locality: Off Bogue Bank W of Ft. Macon, North Carolina, ~ 3.5 m.  
Distribution: Beaufort, North Carolina, to Sebastian Inlet, Florida; northwestern Florida to Mississippi; Puerto Rico (Williams, 1984).

## FAMILY PROCESSIDAE

***Ambidexter symmetricus* Manning and Chace, 1971**

Description: Manning and Chace, 1971:3, figs. 1, 2.  
Type-locality: Matheson Hammock Wading Beach, Biscayne Bay, Miami, Florida.  
Distribution: Gulf of Mexico to Trinidad (Chace, 1972).

***Nikoides schmitti* Manning and Chace, 1971**

Description: Williams, 1984:141, fig. 99.

Type-locality: 1. 25 km south of Garden Key, Tortugas, Monroe County, Florida.  
Distribution: E of Cape Lookout, North Carolina (Herbst et al., 1979; USNM), Biscayne Bay and Dry Tortugas; Guadeloupe and the Guianas (Williams, 1984).

***Processa bermudensis* (Rankin, 1900)**

Description: Williams, 1984:143, fig. 100.  
Type-locality: Harrington Sound, Bermuda.  
Distribution: Bermuda; North Carolina near Cape Hatteras to northwestern Florida; Veracruz, Mexico (Ray, 1974); Cuba; Puerto Rico; Guadeloupe; Peninsula de Arago, Estado Sucre, Venezuela, in *Sargassum* (UNC-IMS 1854); Bahia and Rio de Janeiro, Brazil (Christoffersen, 1979; Williams, 1984).

***Processa fimbriata* Manning and Chace, 1971**

Description: Williams, 1984:144, fig. 101.  
Type-locality: Off East Key, Tortugas, Monroe County, Florida.  
Distribution: Off New River, North Carolina, to Rio de Janeiro, Brazil (Christoffersen 1979).

***Processa guyanae* Holthuis, 1959**

Description: Williams, 1984:145, fig. 102.  
Type-locality: NW of the Coppename River (Surinam)  $6^{\circ}54'N$ ,  $56^{\circ}14'W$ , 49 m.  
Distribution: Off Cape Hatteras, North Carolina, to eastern Gulf of Mexico, including northern coast of Cuba; Surinam, Ceara, Brazil, to Uruguay (Williams, 1984). Florida (40-200 m) (personal communication, P. M. Mikkelsen).

***Processa hemphilli* Manning and Chace, 1971**

Description: Williams, 1984:146, fig. 103.  
Type-locality: Marco, Collier County, Florida.  
Distribution: E Cape Lookout, and Bogue Sound, North Carolina; E coast of Florida; NW Florida (Saloman, 1979); Guadeloupe; Rio de Janerio, Brazil, to Province of Buenos Aires, Argentina (Christoffersen, 1979; Williams, 1984).

***Processa profunda* Manning and Chace, 1971**

Description: Williams, 1984:147, fig. 104.  
Type-locality: Gulf of Mexico off the west coast of Florida, 202 m.  
Distribution: Southeast of Cape Hatteras; off South Carolina; Gulf of Mexico off southern and western Florida; Surinam (Williams, 1984).

***Processa riveroi* Manning and Chace, 1971**

Description: Manning and Chace, 1971:28, fig. 16.  
Type-locality: Maguey Island, La Parguera, Puerto Rico.

Distribution: Puerto Rico. Looe Key, Florida (personal communication, D. L. Felder).

***Processa vicina* Manning and Chace, 1971**

Description: Williams, 1984:148, fig. 105.  
Type-locality: Off North Carolina,  $34^{\circ}35'30"N$ ,  $75^{\circ}45'30"W$ , 59 m.  
Distribution: SE Cape Lookout, North Carolina, northwest Florida, off Isla Margarita, Venezuela (Williams, 1984).

## FAMILY PANDALIDAE

***Pantomus parvulus* A. Milne Edwards, 1883**

Description: Williams, 1984:157, fig. 110.  
Type-locality: Northern part of Yucatan Bank,  $23^{\circ}13'N$ ,  $89^{\circ}16'W$ , 153.6 m.

Distribution: Cape Lookout, North Carolina, to Yucatan, Mexico; Puerto Rico; St. Croix, Virgin Island; Surinam (Williams, 1984).

***Plesionika acanthonotus* (Smith, 1882)**

Description: Holthuis, 1951a:62, figs. 13b-t.—Pequegnat, 1970:91.  
Type-locality: Off South Carolina,  $32^{\circ}43'N$ ,  $77^{\circ}21'W$ , 426 m. *Blake* Stn. 321.  
Distribution: Western Atlantic: from off South Carolina to off southern Florida and off Nicaragua and Brazil, NE and NW Gulf of Mexico. Eastern Atlantic: off Portugal and Spain in the north; and off Angola and Rio Mundi, Africa, in the south and in the Mediterranean (Pequegnat, 1970).

***Plesionika edwardsii* (Brandt, 1851)**

Description: Chace, 1985:62, fig. 26.  
Type-locality: Unknown.  
Distribution: In the western and eastern Atlantic (including the Gulf of Mexico and the Mediterranean) and in the IndoPacific region (Chace, 1985).

***Plesionika ensis* (A. Milne Edwards, 1881)**

Description: Holthuis, 1951a:55, fig. 11.  
Type-locality: Off Barbados, 434m. *Blake* Stn. 283.  
Distribution: Western Atlantic: east coast of Florida, Florida Straits and eastern Gulf of Mexico, off Barbados, and NE Brazil. Eastern Atlantic: off Morocco and the Gulf of Guinea. Indian Ocean near Andaman Island. Pacific: Hawaiian Islands (Pequegnat, 1970).

***Plesionika escatilis* (Stimpson, 1860)**

Description: Crosnier and Forest, 1973:221, fig. 69a.  
Type-locality: Madeira Islands, Eastern Atlantic.

Distribution: The exact status and range of this species is yet to be determined. It occurs in the eastern and western Atlantic regions. Mesopelagic.

***Plesionika longicauda* (Rathbun, 1901)**

Description: Rathbun, 1901:117, fig. 24.—Pequegnat, 1970:86.

Type-locality: Northeast Gulf of Mexico, 161 m, Albatross Ocean Stn. 2403, 28°42.5'N, 85°29'W.

Distribution: Indigenous to SW North Atlantic: NE Gulf of Mexico, Florida straits, Bahamas, off Puerto Rico, in the Caribbean off Honduras, and off Surinam (Pequegnat, 1970).

***Plesionika martia* (A. Milne Edwards, 1883)**

Description: Holthuis, 1951a:51, fig. 10.

Type-locality: "east Atlantic," Travailleur Stn. 400-1, 200 m.

Distribution: Western Atlantic: off South Carolina to Florida and off Bermuda; NE and SW Gulf of Mexico. Eastern Atlantic: off SW Ireland, Bay of Biscay, throughout Mediterranean, Gulf of Guinea, and Cape of Good Hope. Indo-West Pacific: from Gulf of Aden and east African coast to Japan and Hawaii (Pequegnat, 1970).

***Plesionika tenuipes* (Smith, 1881)**

Description: Smith, 1881:441; 1882:59, pl. 13: fig. 12.—Pequegnat, 1970:103, figs. 4-15.

Type-locality: Off Block Island, Rhode Island, 183-461 m, Fish Hawk Stn. 870, 871, 873, 877, 880.

Distribution: Western Atlantic: off east coast of United States from Rhode Island to southern tip of Florida; eastern and western Gulf of Mexico, (Pequegnat, 1970).

***Stylopandalus richardi* (Coutière, 1905)**

Description: Chace, 1985:136, fig. 62.

Type-locality: West of Madeira at 32°13'N, 23°58'W, 2000-0 m, and Canary Islands at 27°43'N, 18°28'W, 3000-0 m.

Distribution: Probably occurs in all major tropical and temperate seas (Chace, 1985). Florida (65-300 m) (personal communication, P. M. Mikkelsen).

## FAMILY CRANGONIDAE

***Crangon septemspinosa* Say, 1818**

Description: Williams, 1984:159, fig. 112.

Type-locality: "Bay shores and inlets of the sea" (east coast of the United States).

Distribution: Subarctic-boreal (Haefner, 1979) although extending beyond these limits; northern part of Gulf of St. Lawrence, doubtfully Baffin Bay (Squires, 1965) to east Florida; Arctic Alaska

southward to Shumagin Islands, Alaska; Sea of Okhotsk, and Ranshima, Hokkaido, Japan (Williams, 1984).

***Metacrangon jacqueti agassizii* (Smith, 1882)**

Description: Crosnier and Forest, 1973:233, figs. 74b, 75a, 76c.

Type-locality: Smith (1882) did not designate a type but described specimens from Blake Stns. 317, 326, 332 and 329 off the east coast of the United States.

Distribution: Western Atlantic from about 41° N south to Florida.

***Parapontocaris caribbaea* (Boone, 1927)**

Description: Boone, 1927:125, fig. 28.—Dardeau and Heard, 1983:10, figs. 2f,-3.

Type-locality: Caribbean Sea, off Honduras, north of Glover Reef, 870 m, Pawnee Stn. 1

Distribution: Western Atlantic, Bahama Islands and Straits of Florida; northwestern Gulf of Mexico, off Galveston Bay; Caribbean Sea, off Honduras (Dardeau and Heard, 1983).

***Philoceras gorei* (Dardeau, 1980)**

Description: Williams, 1984:161, fig. 114.

Type-locality: 135 km due west of Sanibel Island Light, [Florida], 26°24'N, 83°22'W, 55 m.

Distribution: Off Georgia; off SW Florida, Cape San Blas and Padre Island, Texas (Williams, 1984). 61°48'30"W, 761 m.

***Pontophilus brevirostris* (Smith, 1881)**

Description: Williams, 1984:161, fig. 113.

Type-locality: Material described from a series of United States Fish Commission Stns. (***Fish Hawk***) 865-867, 870-874, 877 and 878, 119 to 283 m, off Martha's Vineyard, Massachusetts, constitutes the type-series (Smith, 1881). In 1882, Smith essentially repeated the original description, gave locality data for specimens studied from Stns. 314-315, 321, 327, 333, 344-345, and illustrated a mature female from Stn. 873, one of the stations listed in the original description. Two females from this lot, 40°02'N, 70°57'W, 183 m, are in the type collection of the USNM as are many syntypes from Stns. 865-67, 871, and 872 (Williams, 1984).

Distribution: Gulf of Maine to Gulf of Mexico off Dry Tortugas and Cuba (Williams and Wigley, 1977; Pequegnat, 1970).

## FAMILY GLYPHOCRANGONIDAE

***Glyphocrangon haematotonotus* Holthuis, 1971**

Description: Holthuis, 1971:315, figs. 6,7.

Type-locality: From *Gerda* Stn. 649, Straits of Florida, 26°34'N, 79°43'W, 494 m.  
Distribution: From the east coast of South Carolina and the Bahama Islands to the Caribbean coast of Colombia and St. Vincent (Holthuis, 1971).

***Glyphocrangon longleyi* Schmitt, 1931**

Description: Schmitt, 1931:393.--Holthuis, 1971:309, figs. 6,7.

Type-locality: South of Dry Tortugas, Florida  
Distribution: East coast of Florida, Bahamas, Gulf of Mexico south to Santa Lucia (West Indies), Yucatan and Colombia (Holthuis, 1971).

***Glyphocrangon spinicauda* A. Milne Edwards, 1981**

Description: A. Milne Edwards, 1981:3.--Holthuis, 1971:295, figs. 6,7.

Type-locality: St. Kitts (17°19'27"N, 62°50'30"W, 458 m, fine gray sand and ooze)..

Distribution: Western Atlantic from the east coast of Florida south to Barbados and into the Caribbean area as far west as Yucatan, Honduras, and Nicaragua (Holthuis, 1971).

## INFRAORDER ASTACIDEA

### FAMILY NEPHROPIDAE

***Acanthacaris caeca* (A. Milne Edwards, 1881)**

Description: Holthuis, 1974:741, figs. 4-8.

Type-locality: Off Grenada, 12°03'15"N, 61°48'30"W, 761 m.

Distribution: Throughout the Gulf of Mexico and the Caribbean Sea, including the Straits of Florida (Holthuis, 1974).

***Metanephrops binghami* (Boone, 1927)**

Description: Holthuis, 1974:827, figs. 25, 26.

Type-locality: From north of Glover Reef, British Honduras (Belize).

Distribution: From the Bahama Islands to French Guiana, including the Gulf of Mexico and the Caribbean Sea (Holthuis, 1974).

***Nephropsis aculeata* Smith, 1881**

Description: Holthuis, 1974:776, figs. 15, 16A, 16B.  
Type-locality: East of New Jersey, United States of America, 40°02'N, 70°57'W, 183 m, bottom soft sticky mud.

Distribution: From east of New Jersey, to French Guiana, including the entire Gulf of Mexico and Caribbean Sea (Holthuis, 1974).

## INFRAORDER THALASSINIDEA

### FAMILY AXIIDAE

***Axiopsis hirsutimana* (Boesch and Smalley, 1972)**

Description: Boesch and Smalley, 1972:45, figs. 1-9.  
Type-locality: Off British Guiana, 6°50'N, 54°47'W.

Distribution: Off British Guiana; SE Pascagoula Sea Buoy, Mississippi; about 80 km northeast of tip of Mississippi River delta (Boesch and Smalley, 1972). Tortugas shrimp grounds, Florida (Williams, 1974c).

***Axiopsis oxypleura* (Williams, 1974)**

Description: Williams, 1974c:457, figs. 11-18.

Type-locality: Straits of Florida west of Riding Rocks, 25°15'N, 79°13'W, 365 m.

Distribution: Known only from the type-locality.

***Axiopsis serratifrons* (A. Milne Edwards, 1873)**

Description: Kensley, 1981:1253, figs. 1-5.

Type-locality: "Upolu [presumably the island in western Samoa] et les iles Sandwich" [presumably the Hawaiian Islands].

Distribution: See Kensley, 1981:1260

***Coralaxius abelei* Kensley and Gore, 1981**

Description: Kensley and Gore, 1981:1278, figs. 1-6.

Type-locality: Atlantic Ocean, French Reef, off Key Largo, Monroe County, Florida; 25°02'N, 80°19'W; 76 m.

Distribution: French Reef, off Key Largo, Florida; Caribbean Sea, Carrie Bow Cay, Belize.

### FAMILY CALLIANASSIDAE

***Callianassa acanthochirus* (Stimpson, 1866)**

Description: Biffar, 1971a:655, figs. 3,4.

Type-locality: Florida Keys.

Distribution: Miami; Florida Keys; Dry Tortugas, Puerto Rico; Jamaica; Barbados; Antigua; Venezuela (Biffar, 1971a).

***Callianassa atlantica* Rathbun, 1926**

Description: Williams, 1984:180, fig. 125.

Type-locality: "Our species ranges from the coast of Southern [United] States north to Long Island Sound" (Smith, 1873).

Distribution: Bass River, Nova Scotia, to Georgia; Franklin County, Florida (Williams, 1984).

***Callianassa bifurmis* Biffar, 1971**

Description: Williams, 1984:182, fig. 126.

Type-locality: South end of Sapelo Island, mouth

of Doboy Sound, McIntosh County, Georgia.  
Distribution: Bass River, Yarmouth and Nantucket Sound, Massachusetts (Williams and Wigley, 1977); Chesapeake Bay(?); North Inlet, South Carolina (Holland and Polgar, 1976), to McIntosh County, Georgia; Franklin County, NW Florida (Williams, 1984).

***Callianassa branneri* (Rathbun, 1900)**

Description: Rathbun, 1900:150, pl. 8: figs. 5-8.—Biffar, 1971a: 661, figs. 5, 6.  
Type-locality: Mamanguape Stone Reef, Brazil.  
Distribution: Bermuda, southeastern Florida, including Keys and Dry Tortugas; Bimini; Little San Salvador; Puerto Rico; Barbados; Curaçao; Tobago; Brazil (Biffar, 1971a).

***Callianassa fragilis* Biffar, 1970**

Description: Biffar, 1970:45, fig. 3; 1971a:667, figs. 7, 8.  
Type-locality: Punta Arenas, Puerto Rico.  
Distribution: Southeastern Florida; Puerto Rico; Antigua; Venezuela (Biffar, 1971a).

***Callianassa guassutinga* Rodrígues, 1966**

Description: Rodrígues, 1966:45, figs. 41c-60.—Biffar, 1971a: 674, figs. 9, 10.  
Type-locality: São Sebastiao, Brazil.  
Distribution: Southeastern Florida, Puerto Rico; Brazil (Biffar, 1971a).

***Callianassa jamaicense* Schmitt, 1935**

Description: Schmitt, 1935b:9, pl. 1: fig. 2, pl. 2: figs. 6-8, pl. 4: figs. 1, 4.  
Type-locality: Brackish pond at Montego Bay, Jamaica.  
Distribution: Grand Isle, Louisiana to Brazil; Jamaica.

***Callianassa longiventris* A. Milne Edwards, 1870**

Description: Biffar, 1971a:685, figs. 13,14.  
Type-locality: Martinique.  
Distribution: Bermuda; southeastern Florida; Jamaica; Martinique (Biffar, 1971a).

***Callianassa marginata* Rathbun, 1901**

Description: Rathbun, 1901:92, fig. 15.—Biffar, 1971a:689, figs. 15, 16.  
Type-locality: Mayaguez Harbor, Puerto Rico, 315 m.  
Distribution: Southeastern Florida, Arrowsmith Bank; Puerto Rico; Barbados (Biffar, 1971a).

***Callianassa quadracuta* Biffar, 1970**

Description: Biffar, 1970:40, fig. 2; 1971a:694, figs. 17, 18.  
Type-locality: Cumana, Venezuela.  
Distribution: Southeastern Florida; Venezuela (Biffar, 1971a).

***Callianassa rathbunae* Schmitt, 1935**

Description: Schmitt, 1935b:15, pl. 1: fig. 5, pl. 2: fig. 2, pl. 3: fig. 1, pl. 4: fig. 2.—Biffar, 1970:699, figs. 19, 20.

Type-locality: Bluefields, Jamaica.

Distribution: Miami; Jamaica (Biffar, 1970).

***Callianassa trilobata* Biffar, 1970**

Description: Biffar, 1970:36, fig. 1; 1971a:704, figs. 21, 22.

Type-locality: Off Pinellas Point, Tampa Bay, Florida, 2-3 m.

Distribution: Miami, Tampa Bay, and Lemon Bay, Florida (Biffar, 1971a).

***Callichirus islagrande* (Schmitt, 1935)**

Description: Schmitt, 1935b:5, pl. 1: fig. 3, pl. 3: fig. 2, pl. 4: fig. 5.

Type-locality: Grand Isle, Louisiana.

Distribution: Grand Isle, Louisiana; Alligator Harbor, Florida.

***Callichirus major* (Say, 1818)**

Description: Williams, 1984:183, fig. 127.

Type-locality: Bay Shore of St. Johns River in east Florida, near low-water mark.

Distribution: Beaufort Inlet, North Carolina, to Cape Canaveral, Florida; Grand Terre Island to Timbalier Island, Louisiana; Espírito Santo and São Paulo, Brazil (Rodrígues, 1965, 1971; Williams, 1984).

***Gourretia latispina* (Dawson, 1967)**

Description: Dawson, 1967b:190, fig. 1.—Biffar, 1971a:679, figs. 11, 12.

Type-locality: Grand Isle, Louisiana, 14 m.

Distribution: Grand Isle, Louisiana; off southwestern Florida; Honduras (Biffar, 1971a).

**FAMILY UPOGEBIIDAE**

***Upogebia affinis* (Say, 1818)**

Description: Williams, 1984:191, fig. 133.

Type-locality: Georgia.

Distribution: Wellfleet, Massachusetts, to Rockport, Texas (Hedgpeth, 1950); through West Indies to Estado de São Paulo, Brazil (Coelho, 1966, 1970; Gomes Corrêa, 1968; Williams, 1984).

***Upogebia operculata* Schmitt, 1924**

Description: Schmitt, 1924b:91, pl. 5: figs. 1-4.

Type-locality: Okra Reef, Barbados.

Distribution: Okra Reef, Barbados; St. Thomas, Savannah Passage; Dry Tortugas, Florida (Schmitt, 1935a). Looe Key, Florida (personal communication, D. L. Felder).

## INFRAORDER PALINURA

### FAMILY PALINURIDAE

*Justitia longimanus* (H. Milne Edwards, 1837)

Description: Bouvier, 1925:442, pl. 8: fig. 1.—Manning, 1978:24.

Type-locality: The Antilles.

Distribution: Bermuda and from southern tip of Florida through most of the Antilles (Manning, 1978).

*Panulirus argus* (Latreille, 1804)

Description: Williams, 1984:170, fig. 120.

Type-locality: Erroneously given as East Indies ("des Grandes-Indies").

Distribution: North Carolina through Gulf of Mexico and West Indies to Rio de Janeiro, Brazil; Bermuda (Williams, 1984).

*Panulirus guttatus* (Latreille, 1804)

Description: Gruvel, 1911:29, fig. 12, pl. 3: fig. 3.—Holthuis, 1959:124, fig. 20.

Type-locality: Surinam.

Distribution: Western Atlantic Ocean from Bermuda and Florida to Brazil and the West Indies (Holthuis, 1959).

*Panulirus laevicauda* (Latreille, 1817)

Description: Gruvel, 1911:45, fig. 21.—Holthuis, 1959:123.

Type-locality: Brazil.

Distribution: Bermuda, Florida, Cuba, Jamaica, Curaçao, French Guiana, and Brazil (Holthuis, 1959).

### FAMILY SCYLLARIDAE

*Parribacus antarcticus* (Lund, 1793)

Description: Holthuis, 1985:73, figs. 21, 25A.

Type-locality: Amboina Moluccas (Holthuis, 1985).

Distribution: The species is known both from the western Atlantic from Florida to Brazil including the West Indies and Caribbean Sea, and from the Indo-West Pacific (E and SE Africa to Formosa) (Holthuis, 1985).

*Scyllarides aequinoctialis* (Lund, 1793)

Description: Lyons, 1970:15, pl. 2: figs. A, B.

Type-locality: Jamaica.

Distribution: West Indies and Caribbean Sea; Gulf of Mexico; southern Florida to Bermuda (Lyons, 1970).

*Scyllarides nodifer* (Stimpson, 1866)

Description: Williams, 1984:174, fig. 121.

Type-locality: Florida Keys.

Distribution: Bermuda; Cape Lookout, North Carolina, to Florida and throughout Gulf of Mexico to Yucatan (Lyons, 1970); a postlarva from south of Long Island (29°11'N, 71°56'W) was taken in the stomach of a lancetfish (*Alepisaurus*) (Williams, 1984).

*Scyllarus americanus* (Smith, 1869)

Description: Williams, 1984:176, fig. 122.

Type-locality: Egmont Key, Florida.

Distribution: Off Bouge Inlet, North Carolina, to Campeche Banks off Mexico, and Venezuela (Williams, 1984).

*Scyllarus chacei* Holthuis, 1960

Description: Williams, 1984:177, fig. 123.

Type-locality: North-northwest mouth of Marowijne River, about 20 mi. off coast of Surinam.

Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico, West Indies, and Caribbean Sea to off Cape São Roque, Brazil (Williams, 1984).

*Scyllarus depressus* (Smith, 1881)

Description: Williams, 1984:178, fig. 124.

Type-locality: South of Martha's Vineyard, 40°5'39"N, 70°23'52"W, 157.3 m.

Distribution: Off Martha's Vineyard, Massachusetts; off Cape Hatteras, North Carolina, through Gulf of Mexico and West Indies to State of São Paulo, Brazil (Williams, 1984). Florida (78 m) (personal communication, P. M. Mikkelsen).

## FAMILY SYNAXIDAE

*Palinurellus gundlachi* (Von Martens, 1881)

Description: Manning, 1978:35.

Type-locality: Cuba, Barbados.

Distribution: Bermuda, southern Florida, most of the West Indies, Yucatan (Manning, 1978).

## INFRAORDER ANOMURA

### FAMILY COENOBITIDAE

*Coenobita clypeatus* (Herbst, 1791)

Description: Provenzano, 1959:359, fig. 3.

Type-locality: West Indies.

Distribution: Florida, Bermuda, West Indies to Venezuela (Provenzano, 1959).

### FAMILY DIOGENIDAE

*Calcinus tibicen* (Herbst, 1791)

Description: Provenzano, 1959:363, fig. 4.

Type-locality: Not given by Herbst.  
Distribution: Bermuda, West Indian region from NW Florida to Brazil (Provenzano, 1959, Abele, 1970).

***Cancellus ornatus*** Benedict, 1901  
Description: Williams, 1984:193, fig. 134.  
Type-locality: Northeast Gulf of Mexico between Mississippi delta and Cedar Keys, Florida, 28°45'N, 85°02'W, 55 m.  
Distribution: Off Cape Fear, North Carolina, 33°43'N, 76°40'W to 33°42.7' N, 76°40.2'W, 90-110 m (Herbst et al., 1979) through eastern Gulf of Mexico, Greater and Lesser Antilles, to near Los Abrolhos off central Brazil (Williams, 1984).

***Cancellus viridis*** Mayo, 1973  
Description: Mayo, 1973:28, figs. 9-11.  
Type-locality: Southwest Caribbean Sea, north of Panama.  
Distribution: Known from the type-locality. Southern Florida (personal communication, P. A. McLaughlin).

***Clibanarius antillensis*** Stimpson, 1862  
Description: Provenzano, 1959:368, fig. 5B.  
Type-locality: Barbados.  
Distribution: Southern Florida through West Indies to Curaçao and Brazil (Provenzano, 1959).

***Clibanarius cubensis*** (Saussure, 1858)  
Description: Provenzano, 1959:369, fig. 5C.  
Type-locality: Cuba.  
Distribution: Florida, from Miami southward, West Indies to South America (Provenzano, 1959).

***Clibanarius tricolor*** (Gibbes, 1850)  
Description: Provenzano, 1959:366, fig. 5A.  
Type-locality: Key West, Florida.  
Distribution: Bermuda, Florida from Miami through the Keys, West Indies (Provenzano, 1959).

***Clibanarius vittatus*** (Bosc, 1802)  
Description: Williams, 1984:194, fig. 135.  
Type-locality: "Les cotes de la Caroline."  
Distribution: Potomac River, Gunston, Virginia, to Florianopolis, Santa Catarina, Brazil (Forest and de Saint Laurent, 1967).

***Dardanus fucosus*** Biffar and Provenzano, 1972  
Description: Williams, 1984:196, fig. 136.  
Type-locality: Off French Guiana-Brazil border, 05°29'N, 51°37'W, 64 m, Oregon Stn. 4202.  
Distribution: Near Cape Hatteras, North Carolina, 35°02'N, 75°26'W, to off Amapa, extreme northern Brazil, 04°02'N, 50°33'W (Williams, 1984).

***Dardanus insignis*** (Saussure, 1858)  
Description: Williams, 1984:197, fig. 137.  
Type-locality: Guadeloupe.  
Distribution: Off Oregon Inlet, North Carolina, 31 m. (Cerame-Vivas et al., 1963), to Port Aransas, Texas; through West Indies to Guadeloupe (Williams, 1984).

***Dardanus venosus*** (H. Milne Edwards, 1848)  
Description: Provenzano, 1959:374, fig. 6.  
Type-locality: Guadeloupe.  
Distribution: Bermuda, southern Florida, West Indies to Brazil (Provenzano, 1959).

***Isocheles wurdemanni*** Stimpson, 1862  
Description: Provenzano, 1959:375, fig. 7.  
Type-locality: Gulf of Mexico, at mouth of Rio Grande.  
Distribution: Texas, Louisiana, west coast of Florida and Venezuela (Provenzano, 1959).

***Paguristes anomalus*** Bouvier, 1918  
Description: Provenzano, 1959:391, figs. 12A-C.  
Type-locality: Near San Diego de Cuba under old coral.  
Distribution: Known only from type-locality and Long Reef, Florida (Provenzano, 1959).

***Paguristes cadenati*** Forest, 1954  
Description: Forest, 1954:353, figs. 1, 3.  
Type-locality: Fort-de-France (Martinique).  
Distribution: Martinique; Florida Keys.

***Paguristes erythrops*** Holthuis, 1959  
Description: Holthuis, 1959:138, figs. 24, 25.  
Type-locality: Between the mouths of the Coppename and Suriname Rivers, 06°42'N, 55°38'W; bottom mud and fine shells; depth 44 m.  
Distribution: From the type-locality and southern Florida (personal communication, P. A. McLaughlin).

***Paguristes grayi*** Benedict, 1901  
Description: Provenzano, 1959:387, fig. 10B.  
Type-locality: San Antonio Bridge, San Juan, Puerto Rico.  
Distribution: Florida Keys, Tortugas, Puerto Rico. Santo Domingo and probably generally throughout the West Indian region (Provenzano, 1959).

***Paguristes hernancortezi*** McLaughlin and Provenzano, 1974  
Description: McLaughlin and Provenzano, 1974a:207, figs. 16a, 17d-f, 18c-d, g-h, 19f-j, 20b, f-h, 21.

Type-locality: 7 mi. off Sanibel Island, Florida, M/V *Hernan Cortez* Stn. L., 26°24'N, 83°22'W, 55m.  
Distribution: Known only from the type-locality.

***Paguristes hummi* Wass, 1955**

Description: Williams, 1984:200, fig. 139.  
Type-locality: Alligator Harbor, Franklin County, Florida.  
Distribution: Newport River, North Carolina, to off Sapelo Island, Georgia; Marco Beach, southwestern Florida, to off Isles Dernieres, Louisiana (28°38'N, 90°55'W) (Williams, 1984).

***Paguristes inconstans* McLaughlin and Provenzano, 1974**

Description: McLaughlin and Provenzano, 1974b:919, figs. 13-15.  
Type-locality: Off east coast of Florida, 27°55'N, 79°05'W.  
Distribution: Western and eastern coasts of Florida, southward through Caribbean to Colombia (McLaughlin and Provenzano, 1974b).

***Paguristes invisissacculus* McLaughlin and Provenzano, 1974**

Description: McLaughlin and Provenzano, 1974a:223, figs. 23b; 24d-f; 25c, d, g, h, 26e-i, 27.  
Type-locality: Ragged Key, Florida.  
Distribution: Florida Keys to Jamaica (McLaughlin and Provenzano, 1974a).

***Paguristes laticlavus* McLaughlin and Provenzano, 1974**

Description: McLaughlin and Provenzano, 1974b:928, figs. 16-18.  
Type-locality: Off Colombia, 11°16.9'N, 74°17'W.  
Distribution: Florida through Caribbean to Colombia and Venezuela (McLaughlin and Provenzano, 1974b).

***Paguristes limonensis* McLaughlin and Provenzano, 1974**

Description: McLaughlin and Provenzano, 1974b:902, figs. 7-9.  
Type-locality: West side Limon Bay, Pulpit Point, Panama.

Distribution: West coast of Florida, Panama, Colombia (McLaughlin and Provenzano, 1974b).

***Paguristes lymani* A. Milne Edwards and Bouvier, 1893**

Description: Williams, 1984:201, fig. 140.  
Type-locality: Sand-Key (Florida), 27 m.  
Distribution: Southeast of Cape Lookout, North Carolina (150-180 m); Florida Keys to Swan Island off Honduras; through West Indies to Guyana (Williams, 1984).

***Paguristes moorei* Benedict, 1901**

Description: Williams, 1984:202, fig. 141.  
Type-locality: Puerto Rico.  
Distribution: Edge of continental shelf off Cape Lookout, North Carolina; Florida Straits (Hazlett, 1966); Puerto Rico (Williams, 1984).

***Paguristes oxyophthalmus* Holthuis, 1959**

Description: Holthuis, 1959:135, figs. 22b, 23.  
Type-locality: About 20 mi. NNW of the mouth of the Coppername River, depth 31 m.  
Distribution: Suriname. Florida (personal communication, P. A. McLaughlin).

***Paguristes puncticeps* Benedict, 1901**

Description: Provenzano, 1959:384, fig. 10A.  
Type-locality: Jamaica.  
Distribution: Along northwestern Florida; South Florida from Miami southward, probably generally in the West Indies (Provenzano, 1959).

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

Description: Williams, 1984:203.  
Type-locality: 23°34'N, 83°16'W, (near Dry Tortugas, Florida), 66m.  
Distribution: Off Cape Lookout, North Carolina; West Flower Garden Bank, NW Gulf of Mexico to Virgin Islands (Williams, 1984).

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

Description: Williams, 1984:204, fig. 143.  
Type-locality: Grenada, 168 m.  
Distribution: Gulf Stream south of Cape Lookout, North Carolina; off Cape Canaveral to Florida Straits, Sarasota, Florida; Barbados to Pernambuco, Brazil (Williams, 1984).

***Paguristes starcki* Provenzano, 1965**

Description: Provenzano, 1965:726, figs. 1, 2.  
Type-locality: One-third mi. south-southwest of Alligator Light, Monroe County, Florida, at a depth of 6 m.  
Distribution: From the type-locality.

***Paguristes tenuirostris* Benedict, 1901**

Description: Bededict, 1901:143, pl. 4: fig. 1.  
Type-locality: *Grampus* Stn. 5077, 125m, Gulf of Mexico, off west coast of Florida.  
Distribution: Known only from the type-locality.

***Paguristes tortugae* Schmitt, 1933**

Description: Williams, 1984:205, fig. 144.  
Type-locality: Off Fort Jefferson Dock, Garden Key, Dry Tortugas, Florida.  
Distribution: Reefs off Beaufort, North Carolina, to southern and southeastern Florida; through West

Indies to northern Brazil; (?) northern Gulf of Mexico (Williams, 1984).

**Paguristes triangulatus** A. Milne Edwards and Bouvier, 1893

Description: Williams, 1984:206, fig. 145.

Type-locality: Barbados, 136 m.

Distribution: Off Oregon Inlet, North Carolina, (12m) to Tortugas, Florida; Barbados; Trinidad (Williams, 1984).

**Paguristes wassi** Provenzano, 1961

Description: Provenzano, 1961:155, fig. 1.

Type-locality: One fourth mi. south-southeast of Alligator Light, Florida Keys, at 8 m, coral and sand bottom.

Distribution: From Virgin Islands and Florida Keys.

**Petrochirus diogenes** (Linnaeus, 1758)

Description: Williams, 1984:198, fig. 138.

Type-locality: Near shores of Bahama Islands [Catesby, 1743 (1754 ed. as cited in Holthuis 1959)]. Distribution: Off Cape Lookout, North Carolina, through Gulf of Mexico and West Indies to off Ilha de São Sebastiao, Brazil, 23°42.5'S, 45°14.5'W (Forest and De Saint Laurent, 1967).

## FAMILY LITHODIDAE

**Paralomis cubensis** Chace, 1939

Description: Chace, 1939:49.

Type-locality: East of Havana, Cuba, 23°12'30"N, 82°12'00"W, 439-549 m.

Distribution: From the type-locality. Florida (26°45'N, 84°55'W, 255-400 m) (personal communication, D. K. Camp).

## FAMILY PAGURIDAE

**Agaricochirus acanthinus** McLaughlin, 1982

Description: McLaughlin, 1982:838, figs. 1g, 2g, 3g, 4, 5a, b, e.

Type-locality: *Gerda* Stn. 1301, 24°57'N, 80°14'W.

Distribution: Straits of Florida, western Caribbean (McLaughlin, 1982).

**Agaricochirus alexandri** (A. Milne Edwards and Bouvier, 1893)

Description: A. Milne Edwards and Bouvier, 1893:87, pl. 6: figs. 23-26.— McLaughlin, 1982:834, figs. 1b, 2b, 3b.

Type-locality: *Blake* Stn. 132, off Santa Cruz (St. Croix), Virgin Islands.

Distribution: Straits of Florida, Caribbean to Barbados and northern coast of South America (McLaughlin, 1982).

**Agaricochirus boletifer** (A. Milne Edwards and Bouvier, 1893)

Description: A. Milne Edwards and Bouvier, 1893:84, pl. 6: figs. 19-22.— McLaughlin, 1982:825, figs. 1a, 2a, 3a.

Type-locality: *Blake* Stn. 231, off St. Vincent, West Indies.

Distribution: Eastern Gulf of Mexico, central Caribbean, St. Vincent, West Indies (McLaughlin, 1982).

**Agaricochirus gibbosimanus** (A. Milne Edwards, 1880)

Description: A. Milne Edwards, 1880:42.— McLaughlin, 1982:836, figs. 1e, 2e, 3e.

Type-locality: *Blake* Stn. 206, off Martinique.

Distribution: Western Atlantic off Dominican Republic; Yucatan Channel and northern Caribbean; Windward Islands (McLaughlin, 1982). Florida (personal communication, P. A. McLaughlin).

**Anisopagurus bartletti** (A. Milne Edwards, 1880)

Description: A. Milne Edwards and Bouvier, 1893:91, pl. 7: figs. 1-9.

Type-locality: Off St. Vincent, 146 fathoms, *Blake* Stn. 223.

Distribution: Southern Florida and the islands of St. Vincent, Grenada and Barbados in the West Indies.

**Anisopagurus pygmaeus** (Bouvier, 1918)

Description: Williams, 1984:223, fig. 159.

Type-locality: Bahia de Socapa (Zocappa) near Santiago de Cuba.

Distribution: Off Little River Inlet, South Carolina; southern Florida, including Tortugas, to Puerto Rico; Curaçao (Williams, 1984).

**Catapagurus sharrei** A. Milne Edwards, 1880

Description: Forest and De Saint Laurent, 1967:151, figs. 124-135.

Type-locality: Antilles

Distribution: Western Atlantic south to Brazil (Forest and De Saint Laurent, 1967).

**Iridopagurus caribbensis** (A. Milne Edwards and Bouvier, 1893)

Description: Williams, 1984:207, fig. 146.

Type-locality: Flannegan Passage, Virgin Islands, *Blake* Stn. 142.

Distribution: ESE of Charleston, South Carolina (32°34'N, 79°05'W); WSW of Panama City, Florida (30°19'N, 86°15.5'W); southern Florida, Virgin Islands, and Guadeloupe (Williams, 1984). East and west coast of Florida; Alabama; Bahama

Islands; Lesser Antilles; Venezuela; Curacao; off Santa Marta, Colombia (García-Gómez, 1983).

***Iridopagurus globulus* De Saint Laurent-Dechancé, 1966**

Description: De Saint Laurent-Dechancé, 1966:169, figs. 28, 33, 38.

Type-locality: Northwest Providence Channel, Bahama Islands, *Gerda* Stn. 522.

Distribution: The Straits of Florida; the Northwest Province Channel, Bahama Islands; off Barbados, and Golfo de Uraba, Colombia (García-Gómez, 1983).

***Iridopagurus iris* (A. Milne Edwards, 1880)**

Description: A. Milne Edwards and Bouvier, 1893:112 (in part), pl. 8: figs. 14-25.—García-Gómez, 1983:16.

Type-locality: Off Barbados, *Blake* Stn. 290.

Distribution: Known in the western Atlantic from southern Florida, off northwest Little Bahama Bank south to North Bahama Islands, Puerto Rico, Saint Vincent in the Windward Islands, Barbados, Trinidad and Tobago, French Guiana, Venezuela, Colombia, off Southwest Cay in the southwestern Caribbean, and Islas Mujeres, off the Yucatan Peninsula, Mexico (García-Gómez, 1983).

***Iridopagurus reticulatus* García Gómez, 1983**

Description: García-Gómez, 1983:37, figs. 3, 4.

Type-locality: Off north coast of Crooked Island, Bahama Islands; 3-5 m.

Distribution: Off the coast of North Carolina; off Bermuda; Hollywood Beach, Florida; Cay Sal; off the Grand Bahama Island, southeast through various localities off the Bahama Islands, Jamaica, Dominican Republic, the United States Virgin Islands, the Leeward Islands and Bonaire in the Lesser Antilles, Venezuela, Curaçao, Colombia, Surinam and to its southern and eastern range, off French Guiana (García-Gómez, 1983).

***Iridopagurus violaceus* De Saint Laurent-**

**Dechancé, 1966**

Description: De Saint Laurent-Dechancé, 1966:165, figs. 16, 22, 26, 31, 36.

Type-locality: Off Fernando do Norhona, Brazil, *Calypso* Stn. 19.

Distribution: Off the west coast of Florida, the Florida Keys, Little Bahama Bank and off Castle Roads, South coast of Bermuda; through the Antillean arc, from Antigua to the Grenadines, off the north coast of Venezuela, Colombia and Panama, and from off the coast of Tobago southeast to French Guiana; Brazil (García-Gómez, 1983).

***Manucomplanus corallinus* (Benedict, 1892)**

Description: Williams, 1984:224, fig. 160.

Type-locality: Off Key West, Florida.

Distribution: Off Cape Lookout, North Carolina, to Gulf of Mexico between Cedar Keys, Florida, and Mississippi delta; off Cape Catoche, Yucatan (Williams, 1984).

***Nematopaguroides pusillus* Forest and Saint**

**Laurent, 1967**

Description: Forest and St. Laurent 1967:159, figs. 142-146.

Type-locality: *Calypso* Stn. 23, Brazil, 08°19.5'S, 34°39'W, 75 m.

Distribution: Southern Florida and the type-locality.

***Ostraconotus spatulipes* A. Milne Edwards, 1880**

Description: A. Milne Edwards and Bouvier, 1893:169, pl. 12.

Type-locality: *Sigsbee* Stn. 50; 119 fathoms 26°31'N, 85°53'E; Florida.

Distribution: Florida and Barbados.

***Pagurus annulipes* (Stimpson, 1860)**

Description: Williams, 1984:210, fig. 148.

Type-locality: Beaufort Harbor, North Carolina.

Distribution: Vineyard Sound, Massachusetts, to at least northern Florida (McLaughlin, 1975).

***Pagurus brevidactylus* (Stimpson, 1859)**

Description: Lemaitre et al., 1982:675.

Type-locality: Bathsheba, Barbados.

Distribution: Western Atlantic from Bermuda, northeastern Florida and Bahamas to Brazil; Caribbean; Gulf of Mexico (Lemaitre et al., 1982).

***Pagurus carolinensis* McLaughlin, 1975**

Description: Williams, 1984:212, fig. 150.

Type-locality: Black Rocks, off New River, North Carolina.

Distribution: Newport River (Kellogg, 1971) and Cape Lookout, North Carolina, to Southern Florida (Williams, 1984).

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

Description: Dana, 1852:448.—Lemaitre et al., 1982:684, figs. 1a, b.

Type-locality: Rio de Janeiro, Brazil.

Distribution: Gulf of Mexico; Caribbean; south Atlantic from Brazil to Argentina (Lemaitre et al., 1982).

***Pagurus defensus* (Benedict, 1892)**

Description: Williams, 1984:213, fig. 151.

Type-locality: Gulf of Mexico between delta of Mississippi River and Cedar Keys, Florida, 55 m.

Distribution: Cape Hatteras, North Carolina, to Georgia; Torgugas, Florida, to Alabama (Williams, 1984).

***Pagurus gymnodactylus*** Lemaire, 1982

Description: Lemaire, 1982:657.—Lemaire et al., 1982:687.

Type-locality: 21.75 mi. northeast Cedar Keys Light, Florida.

Distribution: Gulf of Mexico from Mexico to west Florida (Lemaire et al., 1982).

***Pagurus impressus*** (Benedict, 1892)

Description: Williams, 1984:215, fig. 153.

Type-locality: Boca Ciega Bay, inner shore of Pine Key (mouth of Tampa Bay), Florida (from holotype jar label).

Distribution: Off Diamond Shoals, North Carolina, to near Cape Canaveral, Florida; Florida Bay, near Flamingo, north to vicinity of Pensacola, Florida (Cooley, 1978); Port Aransas, Texas (Williams, 1984).

***Pagurus longicarpus*** Say, 1817

Description: Williams, 1984:216, fig. 154.

Type-locality: "Inhabits bay shore" (east coast of United States).

Distribution: Minas Basin and Chignecto Bay (Bousfield and Leim 1960) to Hutchinson Island, Florida (Camp et al., 1977); southwestern Florida to coast of Texas (Provenzano 1959; Rouse 1970; Whitten et al., 1950; Williams, 1984).

***Pagurus maclaughlinae*** García-Gómez, 1982

Description: García-Gómez, 1982:647, figs. 1, 2.

Type-locality: Wading Beach, Matheson Hammock, Miami, Florida.

Distribution: From northern Gulf of Mexico to Florida Keys, and from central eastern Florida to Puerto Rico (García-Gómez, 1982).

***Pagurus marshi*** Benedict, 1901

Description: Provenzano, 1959:405, fig. 17.—Lemaire et al., 1982:680.

Type-locality: Ponce, Puerto Rico.

Distribution: South Florida, through Caribbean to Colombia (Lemaire et al., 1982).

***Pagurus piercei*** Wass, 1963

Description: Williams, 1984:218, fig. 155.

Type-locality: 39 mi. SE Port Aransas, Texas, 73 m.

Distribution: Texas around the gulf coast of Florida to Georgia.

***Pagurus politus*** (Smith, 1882)

Description: Williams, 1984:219, fig. 156.

Type-locality: Not designated in original description, but syntypes from four localities off New Jersey to Massachusetts were indicated by Smith (1882). The male he illustrated, is in the type collection of USNM (21452), from off Martha's Vineyard, Massachusetts, 40°03'48"N,

70°45'54"W, 130 m, *Fish Hawk* Stn. 922; others in the collection of MCZ, Harvard University, are from United States Fish Commission Stn. 309, 40°11'40"N, 68°22'10"W, 556 m, and Stn. 310, 39°59'16"N, 70°18'30"W, 475.5 m (Williams, 1984).

Distribution: Georges Bank to off Dry Tortugas, Florida (Williams, 1974c).

***Pagurus pollicaris*** Say, 1817

Description: Williams, 1984:220, fig. 157.

Type-locality: (East) "coast of the United States".

Distribution: Grand Manan, New Brunswick, to northeastern Florida; Key West, Florida, to Texas (Provenzano, 1959, in part).

***Pagurus provenzanoi*** Forest and De Saint Laurent, 1967

Description: Forest and De Saint Laurent, 1967:118, figs. 72-77, 93, 94.—Lemaire et al., 1982:672.

Type-locality: *Calypso* Stn. 27, 08°25.5'S, 30°48.5'W.

Distribution: Bermuda southeastern Florida and Bahamas through eastern Caribbean to Brazil, south as far as Uruguay; western Caribbean from Yucatan Peninsula to Colombia (Lemaire et al., 1982).

***Pagurus stimpsoni*** (A. Milne Edwards and Bouvier, 1893)

Description: Lemaire et al., 1982:687, fig. 2. Type-locality: West Coast of Florida.

Distribution: Western Atlantic from North Carolina to Florida; Gulf of Mexico; Caribbean coast of South America (Lemaire et al., 1982).

***Phimochirus holthuisi*** (Provenzano, 1961)

Description: Williams, 1984:225, fig. 161.

Type-locality: Sand patch on coral rock bottom, 4.5 mi. SE Ram's Head, St. John, Virgin Islands, 15-18 m.

Distribution: Off Oregon Inlet, North Carolina (Herbst et al., 1979) to Alabama(?); through West Indies to Surinam (Williams, 1984).

***Phimochirus leurocarpus*** McLaughlin, 1981

Description: McLaughlin, 1981b:356, figs. 4f, 9b, 10b, 11a-f, 12a-e.

Type-locality: *Pillsbury* Stn. 736, 10°57'N, 65°52'W.

Distribution: Bermuda, Straits of Florida, Caribbean Sea south of Puerto Rico and north coast of Venezuela (McLaughlin, 1981b).

***Phimochirus operculatus*** (Stimpson, 1859)

Description: McLaughlin, 1981b:336, figs. 4a, 5a, 7a.

Type-locality: Tortugas, Florida.

Distribution: South Florida, Curaçao, Colombia (McLaughlin, 1981b).

- Phimochirus randalli*** (Provenzano, 1961)  
 Description: Provenzano, 1961:159, fig. 2.—  
 McLaughlin, 1981b: 340, figs. 4b, 5b, 7b.  
 Type-locality: Ridge 5 mi. southeast of Lameshur Bay, St. John, Virgin Islands.  
 Distribution: Bahama Islands; Straits of Florida, eastern and western Caribbean (McLaughlin, 1981b).
- Pylopaguropsis atlantica*** Wass, 1963  
 Description: Wass, 1963:153, fig. 10.  
 Type-locality: Off Surinam, 07°25'N, 54°35'W; 137-146 m; *Oregon* Stn. 2289.  
 Distribution: Known from the type-locality and Florida (27°47.3'N, 79°57.6'W, 95-99m) (personal communication, D. K. Camp).
- Pylopagurus discoidalis*** (A. Milne Edwards, 1880)  
 Description: Williams, 1984:226, fig. 162.  
 Type-locality: Montserrat, 220 m.  
 Distribution: ENE Oregon Inlet, North Carolina (Provenzano, 1963), through eastern Gulf of Mexico and West Indies to mouth of Amazon River, Brazil (Williams, 1984).
- Rhodochirus rosaceus*** (A. Milne Edwards and Bouvier, 1893)  
 Description: Williams, 1984:227, fig. 163.  
 Type-locality: Grenada, 168 m.  
 Distribution: South of Cape Lookout, North Carolina; southern Florida; Grenada and Surinam (Williams, 1984).
- Solenopagurus lineatus*** (Wass, 1963)  
 Description: Wass, 1963:139, fig. 3.  
 Type-locality: 07°25'N 54°35'W; 135-145 m; *Oregon* Stn. 2289.  
 Distribution: North Carolina to Surinam (Wass, 1963).
- Tomopaguropsis problematica*** (A. Milne Edwards and Bouvier, 1893)  
 Description: Williams, 1984:228, figs. 164-165.  
 Type-locality: Near Sand Key (SSW Key West, Florida), 228.6 m.  
 Distribution: NE Cape Lookout, North Carolina; southern Florida and Bahamas; Barbados; off Honduras (16°39'N, 82°29'W) (Williams, 1984).
- Tomopagurus chacei*** (Wass, 1963)  
 Description: McLaughlin, 1981a:21, figs. 1h, 7h, 8g.—Wass, 1963: figs. 11a-g.  
 Type-locality: Off Surinam, *Oregon* Stn. 2289, 07°25'N, 54°35'W.  
 Distribution: Western Atlantic and Caribbean (McLaughlin, 1981a).
- Tomopagurus cokeri*** (Hay, 1917)  
 Description: Hay, 1917:73.—McLaughlin, 1981a:13, figs. 1d, 2a, 3a, 4a, 7a, 8a.

- Type-locality: Thirty miles S of Cape Lookout (lightship), North Carolina.  
 Distribution: Western Atlantic, Gulf of Mexico and Caribbean (McLaughlin, 1981a).
- Tomopagurus cubensis*** (Wass, 1963)  
 Description: Wass, 1963:134, figs. 1a-d.—  
 McLaughlin, 1981a:21, figs. 1e, 7e, 8e.  
 Type-locality: North of Matanzas Province, Cuba, *Atlantis* Stn. 3480, 23°10'N, 81°28'W.  
 Distribution: Western Atlantic and Caribbean; 183-366 m (McLaughlin, 1981a).
- Tomopagurus rubropunctatus*** A. Milne Edwards and Bouvier, 1893  
 Description: A. Milne Edwards and Bouvier, 1893:71, pl. 6: figs. 1-6.—McLaughlin, 1981a:10, figs. 1a, 7d, 8d.  
 Type-locality: Barbados, *Blake* Stn. 290.  
 Distribution: Western Atlantic and Caribbean Sea (McLaughlin, 1981a).
- Tomopagurus wassi*** McLaughlin, 1981  
 Description: McLaughlin, 1981a:14, figs. 1b, 2b, 3b, 4b, 5, 6, 7b, 7c, 8b.  
 Type-locality: Off Venezuela, *Oregon* Stn. 1985, 09°41'N, 59°47'W.  
 Distribution: Southeastern United States, Straits of Florida, Gulf of Mexico, Caribbean, to northern Brazil (McLaughlin, 1981a).

## FAMILY CHIROSTYLIDAE

- Uroptychus armatus*** A. Milne Edwards, 1880  
 Description: A. Milne Edwards and Bouvier, 1897: 132, pl. 11: figs. 3, pl. 12: figs. 8, 9.  
 Type-locality: *Blake* Stn. 241, 163 fathoms, off Cariacou, Venezuela.  
 Distribution: Cariacou, Venezuela; Florida (personal communication, P. A. McLaughlin).

## FAMILY GALATHEIDAE

- Galathea rostrata*** A. Milne Edwards, 1880  
 Description: Williams, 1984:232, fig. 167.  
 Type-locality: 16 mi. north of Jolbos Island (Yucatan Peninsula), at 26 m.  
 Distribution: Off Cape Hatteras, North Carolina to southern Florida, northwestern Florida to Mississippi delta, and off Cape Catoche, Yucatan, Mexico (Gore, 1979).

- Munida angulata*** Benedict, 1902  
 Description: Benedict, 1902:252, fig. 4.  
 Type-locality: *Albatross* Stn. 2406.  
 Distribution: Florida (29°40'N, 80°16'W, 64 m);

29°19.4'N, 80°17.7'W, 45.7 m) (personal communication with D. K. Camp).

***Munida affinis*** A. Milne Edwards, 1880

Description: A. Milne Edwards, 1880:48.—Chace, 1942b:55, fig. 22.

Type-locality: Off St. Kitts, West Indies.

Distribution: Known from the type-locality, north and south coast of Cuba (Chace, 1942b). 100 miles south of Panama City, Florida, 183 m (personal communication, D. K. Camp).

***Munida forceps*** A. Milne Edwards, 1880

Description: A. Milne Edwards, 1880:49.—Chace, 1942b:39, fig. 15.

Type-locality: Off Alacran Reef, north of Yucatan, in 154 m.

Distribution: North coast of Cuba and throughout the Gulf of Mexico (Pequegnat and Pequegnat, 1970). Florida (122-215 m) (personal communication, P. M. Mikkelsen).

***Munida iris iris*** A. Milne Edwards, 1880

Description: Williams, 1984:233, fig. 168.

Type-locality: Off Barbados, 382 m, *Blake* Stn. 274.

Distribution: SSE of Martha's Vineyard, Massachusetts, through southeastern Gulf of Mexico to near Cozumel Island, Yucatan, and through Caribbean islands to off mouth of Amazon River (Williams, 1984).

***Munida irrasa*** A. Milne Edwards, 1880

Description: Williams, 1984:234, fig. 169.

Type-locality: Not designated with certainty; syntypes from 10 localities in the Gulf of Mexico and Caribbean, (MCZ) (Williams, 1984).

Distribution: Off Cape Lookout, North Carolina, through eastern Gulf of Mexico and Caribbean Sea to 34°14'S, 51°40'W off Uruguay; "600 mi. off St. Davids, Bermuda" (USNM) (Williams, 1984).

Distribution: Off Cape Lookout, North Carolina, through eastern Gulf of Mexico and Caribbean Sea to 34°14'S, 51°40'W off Uruguay; "600 mi. off St. Davids, Bermuda" (Williams, 1984).

***Munida longipes*** A. Milne Edwards, 1880

Description: Williams, 1984:235, fig. 170.

Type-locality: Not designated with certainty; syntypes from 7 localities off Cuba and the Lesser Antilles (MCZ).

Distribution: SE Cape Lookout, North Carolina, through Gulf of Mexico to British Honduras, and through West Indies to Curaçao (Williams, 1984).

***Munida miles*** A. Milne Edwards, 1880

Description: A. Milne Edwards, 1880:51.—Chace, 1942b:36.

Type-locality: Gulf of Mexico; *Blake* Stn. 45; of Havana, Cuba, *Blake* Stn. 53.

Distribution: North coast of Cuba; eastern Gulf of Mexico; the Caribbean off Honduras (Pequegnat and Pequegnat, 1970) and throughout the Lesser Antilles; south as far as Pernambuco, Brazil.

***Munida pusilla*** Benedict, 1902

Description: Williams, 1984:236, fig. 171.

Type-locality: *Albatross* Stn. 2405, Gulf of Mexico (south of Cape San Blas, Florida, 28°45'N, 85°02'W, 55 m).

Distribution: Off Cape Lookout, North Carolina, to Straits of Florida and through eastern Gulf of Mexico to Yucatan; Colombia and Trinidad (Williams, 1984).

***Munida santipauli*** Henderson, 1885

Description: Henderson, 1885:411.—Chace, 1942b:38.

Type-locality: Saint Peter and Saint Paul Rocks (00°56'N, 29°22'W), Atlantic Ocean.

Distribution: In Western Atlantic from off Florida to St. Paul's Rocks and in the eastern Atlantic from the Azores to the African coast in the region of the Canary Islands; off South Africa (Chace, 1942b).

***Munida simplex*** Benedict, 1902

Description: Benedict, 1902:272, fig. 19.

Type-locality: *Albatross* Stn. 2169; depth 140 m.

Distribution: Off Havana, Cuba; Florida.

***Munida spinifrons*** Henderson, 1885

Description: Henderson, 1888:144, pl. 15, fig. 1.

Type-locality: *Challenger* Stn. 113A, off Fernando Noronha; 7-25 fathoms.

Distribution: Southern Florida and the type-locality.

***Munida stimpsoni*** A. Milne Edwards, 1880

Description: A. Milne Edwards and Bouvier, 1897:48, pl. 4: figs. 1-13.

Type-locality: The original material was collected from 20 *Blake* stations throughout the West Indies. A type-locality was not designated although the description was apparently based on material from *Blake* Stn. 143, 150 fathoms, 17°30'N, 69°43.5'E (A. Milne Edwards and Bouvier, 1897).

Distribution: From north coast of Cuba through the West Indian regions to Grenada (Chace, 1942b).

100 miles south of Panama City, Florida, 183 m (personal communication, D. K. Camp).

***Munida valida* Smith, 1883**

Description: Williams, 1984:237, fig. 172, 173.

Type-locality: Off Southern New England *Fish Hawk* Stn. 1112, 39°56'N, 70°35'W, 448 m; Stn. 1124, 40°01'N, 68°54'W, 1171 m.

Distribution: Off southern New England through Gulf of Mexico to Golfo de Morrosquillo, Colombia, and Curaçao (Williams, 1984).

***Munidopsis armata* (A. Milne Edwards, 1880)**

Description: Chace, 1942b:74.—Mayo, 1974:72, figs. 6, 7.

Type-locality: Fredericksted (St. Croix, Virgin Islands), *Blake* Stn. 137, 1144m.

Distribution: Known from the Caribbean and from the Straits of Florida south to British Guiana in the western Atlantic (Mayo, 1974).

***Munidopsis platirostris* (A. Milne Edwards and Bouvier, 1894)**

Description: Chace, 1942b:75.—Mayo, 1974:216, fig. 31.

Type-locality: Off Barbados, 183 m.

Distribution: Known in the western Atlantic from the Straits of Florida, Arrowsmith Bank in the northwest Caribbean, north and south of the Dominican Republic, and in the Lesser Antilles (southeastern Caribbean) from Dominica to Barbados (Mayo, 1974).

***Munidopsis polita* (Smith, 1883)**

Description: Smith, 1883:50, pl. 2: fig. 1, pl. 3: figs. 1-5. —Pequegnat and Pequegnat, 1970:155.

Type-locality: Western North Atlantic (off Martha's Vineyard), *Fish Hawk* Stn.

Distribution: Off the east coast of the United States (off Martha's Vineyard) and in NW Gulf of Mexico, Florida (182-212 m) (personal communication, P. M. Mikkelsen).

## FAMILY PORCELLANIDAE

***Euceramus praelongus* Stimpson, 1860**

Description: Williams, 1984:239, fig. 174.

Type-locality: Beaufort, North Carolina.

Distribution: Delaware Bay (USNM; Watling and Maurer, 1976) to Aransas area of Texas coast (Williams, 1984).

***Megalobrachium poeyi* (Guérin-Méneville, 1855)**

Description: Benedict, 1901:136, pl. 3: fig. 8.

Type-locality: Cuba.

Distribution: Widely distributed from eastern Central Florida throughout the eastern Caribbean to Brazil, rarely in Panama (Gore and Abele, 1976).

***Megalobrachium soriatum* (Say, 1818)**

Description: Williams, 1984:240, fig. 175.

Type-locality: St. Catherines Island, Georgia.

Distribution: Off Cape Hatteras, North Carolina, to Port Aransas, Texas; West Indies to Barbadoes; Contoy, Mexico; Bahaia Caledonia and Galeta Island, Panama (Williams, 1984).

***Neopisosoma angustifrons* (Benedict, 1901)**

Description: Benedict, 1901:135, pl. 3: fig. 6.

Type-locality: Trinidad.

Distribution: Known from the southwestern Gulf of Mexico, the Lesser Antilles, Trinidad, Cubagua, Islas La Tortuga, Bonaire, Curacao, Panama and Venezuela; littoral (Gore and Abele, 1976). Florida (personal communication, P. A. McLaughlin).

***Pachycheles ackleianus* A. Milne Edwards, 1880**

Description: A. Milne Edwards and Bouvier, 1923:295, pl. 2: fig. 12, pl. 4: fig. 2.

Type-locality: *Blake* Stn. 11, off west coast of Florida, and Stn. 39, Jolbos Islands.

Distribution: Tampa Bay, Florida; Gulf of Mexico; North of Dry Tortugas; Jolbos Islands, North of Yucatan; Jamaica; St. Thomas; Barbados (Haig, 1956).

***Pachycheles monilifer* (Dana, 1852)**

Description: Dana, 1852:413; 1855, pl. 26: fig. 3.

Type-locality: Rio de Janeiro, Brazil.

Distribution: Outer Hillsboro Reef, Florida; Contoy, Mexico; Isla Cubagua, Venezuela; Mamanguape, Brazil; Pernambuco; Rio de Janeiro; Bahia, Brazil (Haig, 1956).

***Pachycheles pilosus* (H. Milne Edwards, 1837)**

Description: Williams, 1984:241, fig. 176.

Type-locality: Vicinity of Charleston, South Carolina.

Distribution: Charleston, South Carolina; Key West to Sarasota Bay, Florida; through West Indies to Tobago and Aruba (Williams, 1984).

***Pachycheles riisei* (Stimpson, 1858)**

Description: Schmitt, 1935a:188, fig. 48.

Type-locality: St. Thomas.

Distribution: Florida, Key West; Puerto Rico; St. Thomas; Barbados; Ilha Trindade; Maceio, Alagoas, Brazil (Haig, 1956).

***Pachycheles rugimanus* A. Milne Edwards, 1880**

Description: Williams, 1984:242, fig. 177.

Type-locality: Contoy and W of Florida.

Distribution: Off Cape Lookout, North Carolina, through Florida to St. Thomas, Virgin Islands, and Contoy Island, Mexico; Pernambuco, Brazil (Coelho, 1964; Williams, 1984).

***Parapetrolisthes tortugensis* (Glassell, 1945)**

Description: Glassell, 1945:228, fig. 2.

Type-locality: In and around Tortugas, Florida.

Distribution: Dry Tortugas, Florida; off Isla La Tortuga, Venezuela; Virgin Islands.

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

Description: Haig, 1960:50, pl. 19: fig. 2.

Type-locality: Florida.

Distribution: Widely distributed from the tropical western coast of Africa, the east central coast of Florida, the Gulf of Mexico and throughout the Caribbean as far south as Santa Catharina, Brazil; in the eastern Pacific from the Gulf of California, Mexico, to Peru (Gore and Abele, 1976).

***Petrolisthes galathinus* (Bosc, 1802)**

Description: Williams, 1984:243, fig. 178.

Type-locality: Unknown.

Distribution: Cape Hatteras, North Carolina, through Gulf of Mexico and Caribbean Sea to Rio de Janeiro, Brazil; Ilha Trinidade off Brazil; Pacific Ocean from Isla San Lucas, Costa Rica, to off La Libertad, Ecuador (Williams, 1984).

***Petrolisthes jugosus* Streets, 1872**

Description: Schmitt, 1935a:185.—Gore and Abele, 1976:11.

Type-locality: Saint Martin Islands.

Distribution: Known from the southwestern Gulf of Mexico, the Antilles in the eastern Caribbean, Trinidad, Tobago, and some islands along the northern coast of South America, westward to Panama; Boca Raton, Palm Beach County, Florida (Gore and Abele, 1976).

***Petrolisthes politus* (Gray, 1831)**

Description: Schmitt, 1935a:187.—Gore and Abele, 1976:12.

Type-locality: Not designated.

Distribution: Florida Keys; Vera Cruz, Mexico; Puerto Rico; West Indies; Panama; Curacao.

***Polyonyx gibbesi* Haig, 1956**

Description: Williams, 1984:244, fig. 179.

Type-locality: Coast of South Carolina.

Distribution: Woods Hole, Massachusetts, to Uruguay (Coelho and Ramos, 1972).

***Porcellana sayana* (Leach, 1820)**

Description: Williams, 1984:245, fig. 180.

Type-locality: Coast of Georgia and Florida.

Distribution: Cape Hatteras, North Carolina, around Gulf of Mexico and Caribbean Sea to Rio Grande de Sul, Brazil (Coelho and Ramos, 1972).

***Porcellana sigsbeiana* A. Milne Edwards, 1880**

Description: Williams, 1984:246, fig. 181.

Type-locality: Blake Stn. 49, off delta of Mississippi River, 216 m; 36, north of Yucatan, 154 m; 142, Flannegan Passage (Virgin Islands), 49 m.

Distribution: Off Martha's Vineyard, Massachusetts, to southwestern Caribbean Sea off Colombia (Gore, 1970); West Indies to Virgin Islands (Williams, 1984).

***Porcellana stimpsoni* A. Milne Edwards, 1880**

Description: A. Milne Edwards and Bouvier, 1923:292, pl. 1: figs. 4-5.

Type-locality: Woman Key, Florida.

Distribution: Florida, Woman Key.

## FAMILY ALBUNEIDAE

***Albunea gibbesii* Stimpson, 1959**

Description: Williams, 1984:248, fig. 182.

Type-locality: St. Augustine, Florida.

Distribution: East of Cape Lookout, North Carolina, to Texas; through West Indies to São Sebastiao, São Paulo, Brazil (Williams, 1984).

***Albunea paretii* Guérin-Méneville, 1853**

Description: Williams, 1984:249, fig. 182, 183.

Type-locality: (Uncertain), America.

Distribution: Beaufort Inlet, North Carolina, to Corpus Christi, Texas; through West Indies to Santa Catarina, Brazil (Coelho and Ramos, 1972); West Africa from Cape Verde Islands and Senegal to Ghana (Williams, 1984).

***Lepidopa benedicti* Schmitt, 1935**

Description: Efford, 1971:76, figs. 1a, 23, 3a, 43, p, q, 5a, 63, n, 7a.

Type-locality: The outer beach of Santa Rosa Island, Pensacola, Florida.

Distribution: Florida; Gulf of Mexico; SE of Veracruz, near Mocambo, Mexico.

***Lepidopa websteri* Benedict, 1903**

Description: Williams, 1984:250, fig. 184.

Type-locality: Beach near Fort Macon (Carteret County), North Carolina.

Distribution: Around mouth of Chesapeake Bay (larvae); Drum Inlet, North Carolina, to Sapelo Island, Georgia; Tampa Bay, Florida; Ship Island

and Petit Bois Island, Mississippi (Efford, 1971; Sandifer and Van Engle, 1972; Sandifer 1973; Williams, 1984).

#### *Zygora michaelis* Holthuis, 1960

Description: Holthuis, 1960:22, fig. 1, 2.

Type-locality: Sint Michiels Baai, south coast of Curaçao, Netherlands Antilles; sandy-bottom; depth about 4 m.

Distribution: From Curacao, in southern Caribbean, to southern Florida and eastern Gulf of Mexico.

### FAMILY HPPIDAE

#### *Emerita benedicti* Schmitt, 1935

Description: Williams, 1984:251, fig. 185.

Type-locality: Tampa Bay, Florida.

Distribution: Charleston County, South Carolina to Veracruz, Mexico (Efford, 1976).

#### *Emerita portoricensis* Schmitt, 1935

Description: Schmitt, 1935a:215, figs. 72a, b.  
Type-locality: Mayaguez, Puerto Rico.

Distribution: South and West Florida; Texas; Honduras; Colombia; Puerto Rico; Jamaica; Trinidad (Schmitt, 1935a).

#### *Emerita talpoida* (Say, 1817)

Description: Williams, 1984:252, fig. 186.

Type-locality: (East) coast of United States.

Distribution: Harwich [Barnstable County], Massachusetts to Horn Island, Mississippi; Progreso, Yucatan, Mexico (Schmitt, 1935a; Efford, 1976).

#### *Hippa cubensis* (Saussure, 1857)

Description: Schmitt, 1935a:217.

Type-locality: Cuba.

Distribution: Florida to Brazil; West Indies; Ascension Island; Bahamas; West Africa; Puerto Rico, Hucares, St. Thomas (Schmitt, 1935a).

### INFRAORDER BRACHYURA

### FAMILY DROMIIDAE

#### *Dromia erythropus* (George Edwards, 1771)

Description: Rathbun, 1937:31, fig. 11, pl. 6: figs. 1, 2, pl. 8: figs. 1, 2.

Type-locality: Not indicated.

Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; off Louisiana and Texas; north coast of Cuba; Jamica; Haiti; Puerto Rico; St. Thomas to Barbados; Netherlands Antilles; Pernambuco to São Paulo, Brazil (Powers, 1977).

#### *Dromidia antillensis* Stimpson, 1858

Description: Williams, 1984:255, fig. 187.

Type-locality: St. Thomas, Virgin Island, Key Biscayne and Dry Tortugas, Florida.

Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico and Caribbean Sea to Rio de Janeiro, Brazil; Bermuda; Saint Helena (Forest, 1974; Williams, 1984).

#### *Hypoconcha arcuata* Stimpson, 1858

Description: Williams, 1984:257, fig. 188.

Type-locality: South Carolina sandy shores and St. Thomas (Virgin Island).

Distribution: Off Cape Lookout, North Carolina, to west Florida; St. Thomas, Virgin Island; Surinam (Holthuis, 1959) to Espirito Santo, Brazil (Williams, 1984).

#### *Hypoconcha sabulosa* (Herbst, 1799)

Description: Williams, 1984:258, fig. 189.

Type-locality: Listed as "Africa" (probably an error).

Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico to Bahia, Brazil (Williams, 1984).

#### *Hypoconcha spinosissima* Rathbun, 1933

Description: Williams, 1984:258, fig. 190.

Type-locality: Off Cape Hatteras, North Carolina, 89.6 m.

Distribution: Off Cape Hatteras, North Carolina, to Gulf of Mexico off Mississippi delta and Yucatan; Jamaica (Williams, 1984).

### FAMILY HOMOLODROMIIDAE

#### *Dicranodromia ovata* A. Milne Edwards, 1880

Description: Rathbun, 1937:60, fig. 15, pl. 13: figs. 3-4.

Type-locality: Barbados, 329 m.

Distribution: East and west coasts of Florida; Florida Keys and Straits; off north coast of Cuba; northwest Caribbean Sea; Guadeloupe; Barbados (Powers, 1977).

### FAMILY CYMONOMIDAE

#### *Cymonomus quadratus* A. Milne Edwards, 1880

Description: Rathbun, 1937:98, fig. 23, pl. 30: fig. 3, pl. 31: fig. 3.

Type-locality: Havana to Grenada, 320-930 m.

Distribution: Northwest of Dry Tortugas; Cuba; Puerto Rico; Lesser Antilles, from St. Croix to Grenada (Powers, 1977).

#### *Cymopolus agassizi* A. Milne Edwards and Bouvier, 1899

Description: Rathbun, 1937:100, pl. 30: fig. 2, pl. 31: fig. 2.

Type-locality: Sand Key, 137 m.

Distribution: Florida Straits; Florida Keys; Puerto Rico (Powers, 1977).

## FAMILY CYCLODORIPPIDAE

*Clythrocerus granulatus* (Rathbun, 1898)

Description: Williams, 1984:259, fig. 191.

Type-locality: Off Trinidad.

Distribution: ESE Cape Lookout, and SE Cape Fear, North Carolina; Honduras; southern Florida through Antilles to Venezuela and Trinidad (Williams, 1984).

*Clythrocerus nitidus* (A. Milne Edwards, 1880)

Description: Rathbun, 1937:109, figs. 26, 27, pl. 33: figs. 1, 2.

Type-locality: Florida Keys and Grenada.

Distribution: South Carolina to west Florida; Florida Keys; Grenada; 12-479 m.

*Clythrocerus stimpsoni* Rathbun, 1937

Description: Rathbun, 1937:121, fig. 32, pl. 34: figs. 1, 2.

Type-locality: West coast of Florida; 183 m.

Distribution: Known only from the type specimen.

*Tymolus antennaria* (A. Milne Edwards, 1880)

Description: Rathbun, 1937:104, fig. 24, pl. 32: figs. 1, 2.

Type-locality: Twenty stations, ranging from Havana to Barbados, 158 to 517 m.

Distribution: West coast of Cuba; north coast of Yucatan (Gulf); north coast of Cuba; Puerto Rico; Lesser Antilles, from Dominica to Grenada (Powers, 1977). Florida (26°48'N, 84°37'W, 190.5-210 m) (personal communication, D. K. Camp).

## FAMILY HOMOLIDAE

*Homola barbata* (Fabricius, 1793)

Description: Williams, 1984:261, fig. 193.

Type-locality: Bay of Naples.

Distribution: Off southeastern Massachusetts to Rio de Janeiro, Brazil; eastern Atlantic Ocean from Portugal and Azores to Cape Verde Islands and Angola; South Africa; Mediterranean Sea (Williams, 1984).

## FAMILY LATREILLIIDAE

*Latreillia manningi* Williams, 1982

Description: Williams, 1984:262, fig. 194.

Type-locality: American Shoal Light, Florida, about 10 mi. N by W, 192-201 m.

Distribution: Nantucket Shoals off Massachusetts

to off Havana, Cuba; Venezuela; Ascension Island; Frost (1936) reported a megalopa off Newfoundland (Williams, 1984). Florida (64 m) (personal communication, P. M. Mikkelsen).

## FAMILY RANINIDAE

*Lysirude nitidus* (A. Milne Edwards, 1880)

Description: A. Milne Edwards, 1880:34.—Goeke, 1980:149.

Type-locality: Grenada, British West Indies, uuStn. 259, 288m.

Distribution: Martha's Vineyard; Gulf of Mexico; Greater Antilles; off Tortugas, Florida; off Surinam, NE of Paramaribo; north coast of Venezuela, off Puerto Cabello.

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

Description: Williams, 1984:265, fig. 196.

Type-locality: Near Sombrero (Florida?), 86 m. (see Rathbun, 1937).

Distribution: SE of Cape Fear, North Carolina, 33°42'N, 76°39.5'W, 140 m; Palm Beach, Florida, to Florida Straits and Yucatan Channel; Cuba; off Barbados; Ascension Island; eastern Atlantic from Sierra Leone and Annobon Island (Manning and Holthuis, 1981).

*Ranilia muricata* H. Milne Edwards, 1837

Description: Williams, 1984:266, fig. 197.

Type-locality: Unknown.

Distribution: North Carolina; Bahamas; Florida Straits; southern to northwestern Florida; Swan Island (Caribbean), Colombia.

*Raninooides loevis* (Latreille, 1825)

Description: Williams, 1984:267, fig. 198.

Type-locality: Unknown.

Distribution: S Cape Hatteras, 35°03.2'N, 75°35.1'W; around Gulf of Mexico and southern Caribbean Sea, including Leeward Islands, to Bahia, Brazil (Williams, 1984).

*Raninooides louisianensis* Rathbun, 1933

Description: Rathbun, 1937:12, figs. 6, 7, pl. 1: figs. 5, 6.

Type-locality: East of Mississippi delta, 122 m.

Distribution: Gulf of Mexico, from the Mississippi delta to Campeche Banks (Powers, 1977). South of Appalachicola Bay, Florida (personal communication, D. K. Camp).

*Sympethis variolosa* (Fabricius, 1793)

Description: Williams, 1984:264, fig. 195.

Type-locality: "In oceano Indico."

Distribution: SE Cape Lookout, North Carolina,

34°10'N, 76°10'W, through western Gulf of Mexico (Goeke, 1980) to Bahia, Brazil; Fernando de Noronha.

## FAMILY DORIPPIDAE

*Ehusa mascarone americana* A. Milne Edwards, 1880

Description: Williams, 1984:269, fig. 199.  
Type-localities: West Florida, 23.7 m, and West Florida, 26°16'N, 36.6 m (A. Milne Edwards, 1880).  
Distribution: S of Cape Lookout, North Carolina (34°06'N, 76°15'W) to Gulf of Mexico and West Indies; Maranhao to Bahia, Brazil; Golfo de California; Taboga Island, Panama (Williams, 1984).

*Ehusa microphthalmia* Smith, 1881

Description: Williams, 1984:269, fig. 200.  
Type-locality: Off Martha's Vineyard, Massachusetts, 260.6 m, Stn. 878, *Fish Hawk*, 39°55'00"N, 70°54'15"W.  
Distribution: Off Martha's Vineyard, Massachusetts, to Cuba and around Gulf of Mexico (Pequegnat et al., 1971).

*Ehusa tenuipes* Rathbun, 1897

Description: Williams, 1984:270, fig. 201.  
Type-locality: Off Key West, 91.5m.  
Distribution: ESE Cape Lookout, North Carolina (94-77 m); East Florida to Gulf of Mexico E of Mississippi River delta; Cuba (Chace, 1940b; Williams, 1984).

*Ehusa truncata* A. Milne Edwards and Bouvier, 1899

Description: Rathbun, 1937:85, pl. 28: figs. 1-2.  
Type-locality: Gulf of Mexico (Not Antilles) 217-218 m.  
Distribution: Off west coast of Florida; off Mississippi delta and Louisiana; northwest of Trinidad (Powers, 1977).

## FAMILY CALAPPIDAE

*Acanthocarpus alexandri* Stimpson, 1871

Description: Williams, 1984:271, fig. 202.  
Type-locality: Off Quicksands, Florida Keys, 135 m.  
Distribution: George Bank off Massachusetts to west coast of Florida; Puerto Rico to Grenadines; Rio de Janeiro, Brazil (Coelho and Ramos, 1972).

*Acanthocarpus bispinosus* A. Milne Edwards, 1880

Description: Rathbun, 1937:224, pl. 68: figs. 1-3.  
Type-locality: Reefs of the Grenadines, 256 m.  
Distribution: Off West and northwest coasts of Florida; Dry Tortugas; Grenadines, Windward Islands (Powers, 1977).

*Calappa angusta* A. Milne Edwards, 1880

Description: Williams, 1984:273, fig. 203.  
Type-locality: Barbados.  
Distribution: Off Cape Lookout, North Carolina, through eastern and southwestern Gulf of Mexico, to Venezuela (Turkay, 1968) and Grenada (Williams, 1984).

*Calappa flammea* (Herbst, 1794)

Description: Williams, 1984:273, figs. 204-205.  
Type-locality: America.  
Distribution: Woods Hole region, Massachusetts, to Florida Keys; Gulf coast of United States and Mexico; Bahamas; Bermuda (Williams, 1984).

*Calappa gallus* (Herbst, 1803)

Description: Rathbun, 1937:214, pl. 65:  
figs. 2, 3.  
Type-locality: "East Indies."  
Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; northwest Cuba; Jamaica; Puerto Rico; St. Croix to Barbados; Off Campeche snapper banks (Gulf of Mexico); Panama (Caribbean) to Venezuela; Netherlands Antilles; Ceara to Bahia, Brazil; St. Helena Island (South Atlantic); off Western Africa, from Senegal to Angola; South Africa; Red Sea; Reunion and Seychelles, in Persian Gulf; off India and Maldives; Philippines; Formosa; Japan; Marshall Islands; Samoa; Hawaiian Islands (Powers, 1977).

*Calappa ocellata* Holthuis, 1958

Description: Williams, 1984:275, figs. 206-207.  
Type-locality: Klein Bonaire, Dutch West Indies.  
Distribution: Cape Hatteras, North Carolina, to Rio de Janeiro, Brazil; Bermuda (Williams, 1984).

*Calappa sulcata* Rathbun, 1898

Description: Williams, 1984:276, figs. 208-209.  
Type-locality: Off Louisiana 29°24'30"N, 88°01'00"W, 64 m.  
Distribution: Cape Hatteras, North Carolina, through Gulf of Mexico to Sergipe, Brazil (Williams, 1984).

*Cycloes bairdii* Stimpson, 1860

Description: Williams, 1984:278, fig. 210.  
Type-locality: Cape St. Lucas, Mexico.  
Distribution: Bermuda; ESE Cape Lookout, North Carolina, to Espírito Santo, Brazil, in west Atlantic; tip of Baja California to Ecuador and Galapagos Islands, including Clarion, Socorro and Cocos Islands, in eastern Pacific (Williams, 1984).

*Hepatus epheliticus* (Linnaeus, 1763)

Description: Williams, 1984:279, fig. 211.

Type-locality: Carolina.  
Distribution: Chesapeake Bay to western Bay of Campeche, Mexico (Rickner, 1977); Cuba; Jamaica; Dominican Republic (Williams, 1984)

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

Description: Williams, 1984:280, figs. 212, 213.  
Type-locality: Martinique.  
Distribution: Georgia to State of São Paulo, Brazil, (Coelho and Ramos, 1972).

***Osachila antillensis* Rathbun, 1898**

Description: Rathbun, 1937:251, pl. 77: fig. 2.  
Type-locality: Off Havana, 209m.  
Distribution: North coast of Cuba; St. Croix, Virgin Islands; Montserrat; Dominica; Barbados; Grenada (Powers, 1977). Florida (personal communication, P. A. McLaughlin).

***Osachila semilevis* Rathbun, 1916**

Description: Williams, 1984:281, fig. 214.  
Type-locality: Gulf of Mexico, 48 m.  
Distribution: Off Beaufort, North Carolina, to northwest Florida (Williams, 1984).

***Osachila tuberosa* Stimpson, 1871**

Description: Williams, 1984:282, fig. 215.  
Type-locality: Five stations among the south Florida reefs.  
Distribution: Off Cape Hatteras, North Carolina, to northwest Florida and Yucatan Channel (Pequegnat 1970; Springer and Bullis, 1956).

## FAMILY LEUCOSIIDAE

***Callidactylus asper* Stimpson, 1871**

Description: Williams, 1984:289, fig. 224.  
Type-locality: Three stations off Florida keys, 29-69 m.  
Distribution: S of Cape Lookout, North Carolina (Williams et al., 1968), through SE Gulf of Mexico to Panama and southeastward to Alagoas, Brazil (Coelho and Ramos, 1972).

***Ebalia cariosa* (Stimpson, 1860)**

Description: Williams, 1984:284, fig. 216.  
Type-locality: Beaufort, North Carolina.  
Distribution: Beaufort, North Carolina, to west Florida; western Gulf of Mexico (Rickner, 1977); Jamaica; northeastern South America to São Paulo, Brazil (Williams, 1984).

***Ebalia stimpsonii* A. Milne Edwards, 1880**

Description: Williams, 1984:284, fig. 217.  
Type-locality: Barbados, 13.72 to 91.45 m.  
Distribution: SE Cape Lookout, North Carolina; west Florida to Barbados; off mouth of Amazon River, Brazil (Williams, 1984).

***Iliacantha intermedia* Miers, 1886**

Description: Williams, 1984:290, fig. 225.  
Type-locality: Bahia, Brazil.  
Distribution: Off Beaufort, North Carolina, to NW Florida; St. Thomas, Virgin Islands; Venezuela; Ceara and Bahia, Brazil (Williams, 1984).

***Iliacantha liodactylus* Rathbun, 1898**

Description: Rathbun, 1937:186, text-fig. 41, pl. 55: figs. 1-2.  
Type-locality: North of Trinidad, West Indies.  
Distribution: West coast of Florida; ?Haiti; Puerto Rico; St. John, Virgin Islands; Trinidad; Algoas to Bahia, Brazil (Powers, 1977).

***Iliacantha sparsa* Stimpson, 1871**

Description: Rathbun, 1937:190, pl. 56: figs. 1-2.  
Type-locality: West of Tortugas, 55 m.  
Distribution: Northwest of the Dry Tortugas; off north and southeast coasts of Puerto Rico; Barbados; Maranhao to Bahia, Brazil (Powers, 1977).

***Iliacantha subglobosa* Stimpson, 1871**

Description: Williams, 1984:290, fig. 226.  
Type-locality: Three stations in Florida reefs, 73-146 m.  
Distribution: Off Cape Hatteras, North Carolina, to northwest Florida; through eastern Gulf of Mexico and Caribbean Sea south to Alagoas, Brazil (Williams, 1984).

***Lithadia cadaverosa* Stimpson, 1871**

Description: Rathbun, 1937:137, pl. 38: figs. 3-6.  
Type-locality: West of Tortugas, 64 m, and off Conch Reef, Florida, 72 m.  
Distribution: Bahamas; northwest coast of Florida and northeast portion of Gulf of Mexico (Powers, 1977).

***Lithadia granulosa* A. Milne Edwards, 1880**

Description: Rathbun, 1937:140, fig. 36.  
Type-locality: Off St. Croix Island, 210 m.  
Distribution: Known from type specimen and southern Florida (personal communication, P. A. McLaughlin).

***Myropsis quinquespinosa* Stimpson, 1871**

Description: Williams, 1984:287, fig. 222.  
Type-locality: Tennessee Reef, Florida Keys.  
Distribution: South of Martha's Vineyard, through Gulf of Mexico and Caribbean Sea to Surinam (Williams, 1984).

***Persephona crinita* Rathbun, 1931**

Description: Rathbun, 1937:163, pl. 43: figs. 2, 3, pl. 44: figs. 1-3.  
Type-locality: Horn Island Pass, Mississippi, 5 m.

Distribution: Northwest Florida to Texas; Trinidad; Ilha São Sebastiao, Brazil (Powers, 1977).

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

Description: Williams, 1984:288, fig. 223.

Type-locality: Erroneously, Mediterranean Sea.

Distribution: New Jersey through Gulf of Mexico and Caribbean Sea to Santa Catarina, Brazil (Williams, 1984).

***Spelaeophorus elevatus* Rathbun, 1898**

Description: Rathbun, 1937:145, pl. 39: figs. 7-9.

Type-locality: Off Key West.

Distribution: Florida Keys; Jamaica; off Cape St. Roque and from Maranhao to Alagoas, Brazil (Powers, 1977).

***Spelaeophorus nodosus* (Bell, 1855)**

Description: Williams, 1984:285, figs. 218-219.

Type-locality: Unknown.

Distribution: Florida; West Indies (Williams, 1984).

***Spelaeophorus pontifer* (Stimpson, 1871)**

Description: Williams, 1984:286, figs. 220-221.

Type-locality: Barbados.

Distribution: Southeast of Cape Lookout and off Beaufort, North Carolina, to west Florida; West Indies to Barbados (Williams, 1984).

***Uhlia limbatus* Stimpson, 1871**

Description: Rathbun, 1937:150, pl. 36: figs. 3-5.

Type-locality: St. Thomas.

Distribution: West of Key West, Florida; north coast of Cuba; Jamaica; Haiti; St. Thomas, Virgin Islands (Powers, 1977).

## FAMILY MAJIDAE

***Acanthonyx petiverii* H. Milne Edwards, 1834**

Description: Rathbun, 1925:142, fig. 52, pl. 44, pl. 222: figs. 1-6.

Type-locality: Antilles.

Distribution: Bahamas; southeast and northwest Florida; Texas; Cuba; Jamaica; Puerto Rico; Virgin Islands; Netherlands Antilles; Panama (Caribbean) to Rio de Janeiro, Brazil. Along the Pacific coast, from Baja California to Caldera, Chile; Galapagos Islands (Powers, 1977).

***Achaeopsis thomsoni* (Norman, 1873)**

Description: Rathbun, 1925:29, text-fig. 7, pl. 10.

Type-locality: Deep water between the Faroes and Scotland.

Distribution: Western Atlantic from Nantucket Shoals to Grenada. Eastern Atlantic from Faroe Islands to Cape Verde; Mediterranean, Gough

Island (South Atlantic); Agulhas Bank, near cape of Good Hope. Indian Ocean. West and South Pacific Ocean. South Australia (Rathbun, 1925).

***Aepinus septemspinosis* (A. Milne Edwards, 1879)**

Description: Williams, 1984:292, fig. 227, 241c.

Type-locality: Florida Strait, 24°55'N, 83°25'W, 67.7 m.

Distribution: S Cape Lookout, North Carolina, 34°10'N, 76°10'W; SW Cape San Blas, Florida, and Bahama Banks to Bahia, Brazil (Williams, 1984).

***Anasimus latus* Rathbun, 1894**

Description: Williams, 1984:293, fig. 228, 241n.

Type-locality: Gulf of Mexico, east of delta of Mississippi River, 29°14'30" N, 88°09'30" W, 124.4 m. Distribution: Off Cape Lookout, North Carolina, through Gulf of Mexico (Felder, 1973) to Amapa, Brazil (Coelho and Ramos, 1972).

***Anomalothir furcillatus* (Stimpson, 1871)**

Description: Williams, 1984:294, fig. 229, 241a.

Type-locality: Off "The Samboes" (southern Florida), 225 m.

Distribution: Off Cape Lookout, North Carolina, through eastern Gulf of Mexico and West Indies to Grenada (Williams, 1984).

***Arachnopsis filipes* Stimpson, 1871**

Description: Williams, 1984:295, fig. 230, 241d.

Type-locality: Off Conch, Carysfort and French reefs, Florida.

Distribution: SE Capes Hatteras and Lookout, North Carolina; Gulf of Mexico off NW Florida; through West Indies to off Rio Grande do Norte, Brazil.

***Batrachonotus fragosus* Stimpson, 1871**

Description: Williams, 1984:296, 297, fig. 231, 241e.

Type-locality: South of Tortugas, (Florida), 24°36'40"N, 80°02'20"W, 29.3 m.

Distribution: Cape Hatteras, North Carolina, to southern and western Florida; West Indies to Barbados (Williams, 1984).

***Chorinus heros* (Herbst, 1790)**

Description: Rathbun, 1925:305, fig. 101, pl. 107, pl. 246: figs. 3-5; 1933:20, fig. 21.

Type-locality: "Der Ocean."

Distribution: Bermuda; Florida Keys and Dry Tortugas; Cuba; Caribbean coast of Yucatan, Mexico; Jamaica; Hispaniola; Puerto Rico; St. Croix; Barbados; Ceara to Bahia, Brazil (Powers, 1977).

- Coelocerus spinosus*** A. Milne Edwards, 1875  
 Description: Williams, 1984:315, figs. 251, 259i.  
 Type-locality: Off Florida, 34.75 m.  
 Distribution: Off Cape Fear, North Carolina, to near Cape Canaveral, Florida; W Florida to E of Mississippi River delta (Williams, 1984).
- Collodes leptochelus*** Rathbun, 1894  
 Description: Rathbun, 1925:117, fig. 42, pl. 38: figs. 5-6.  
 Type-locality: Gulf of Mexico, 124-309 m.  
 Distribution: All quadrants of Gulf of Mexico except southeast, off coasts of Florida, Alabama, and Texas; off Vera Cruz, Mexico (Powers, 1977).
- Collodes nudus*** Stimpson, 1871  
 Description: Rathbun, 1925:110.  
 Type-locality: Off Carysfort Reef, 73 m.  
 Distribution: Known only from the male holotype off Carysfort Reef, Florida, 25°13'40"N, 80°10'45"W; 73 m; sand.
- Collodes obesus*** A. Milne Edwards, 1878  
 Description: Rathbun, 1925:109, pl. 36: figs. 3, 4, pl. 217: figs. 2-5.  
 Type-locality: Near Sombrero, Florida Strait, 99 m.  
 Distribution: Known only from the type-locality.
- Collodes robustus*** Smith, 1883  
 Description: Rathbun, 1925:114, text-fig. 36-41, pl. 29.—Williams, 1984:297, fig. 241g.  
 Type-locality: Twenty-one stations between off Martha's Vineyard to off Chesapeake Bay, 1-2 to 285 m.  
 Distribution: North of Cape Cod, 42°12'N, 70°13'W, to southeast of Cape Lookout, North Carolina (Williams, 1984). Florida (27°37'N, 83°58'W, 73 m) [personal communication, D. K. Camp].
- Collodes trispinosus*** Stimpson, 1871  
 Description: Williams, 1984:297, fig. 232, 241f.  
 Type-locality: Off the Quicksands, Carysfort Reef, and French Reef (Florida), 62.1 to 91 m.  
 Distribution: Near Cape Hatteras, North Carolina, to south and west Florida near Apalachicola (Williams, 1984).
- Epialtus bituberculatus*** H. Milne Edwards, 1834  
 Description: Rathbun, 1925:148, figs. 53a, 54, pl. 45: figs. 3, 4.  
 Type-locality: Chile.  
 Distribution: East coast of Florida; Key West, Florida; Puerto Rico; Panama (Caribbean) to Colombia; Ceara to Pernambuco, Brazil (Powers, 1977).

- Epialtus dilatatus*** A. Milne Edwards, 1878  
 Description: Williams, 1984:313, figs. 249, 259d.  
 Type-locality: St. Thomas.  
 Distribution: Off Beaufort Inlet and New River, North Carolina; southwest Florida; Yucatan; Bahamas to St. Thomas (Williams, 1984).
- Epialtus dilatatus forma elongata*** Rathbun, 1923  
 Description: Rathbun, 1925:154, fig. 53k, pl. 48.  
 Type-locality: Off Duck Key, Florida.  
 Distribution: Florida Keys; south, west, and northwest coasts of Florida.
- Epialtus kingsleyi*** Rathbun, 1923  
 Description: Rathbun, 1925:152, pl. 45: fig. 1.  
 Type-locality: Florida.  
 Distribution: Florida.
- Epialtus longirostris*** Stimpson, 1860  
 Description: Rathbun, 1925:151, figs. 53g, 56.  
 Type-locality: Ensenada Honda, Culebra Island.  
 Distribution: Key West and west coast of Florida; Cuba; Jamaica; St. Thomas, Virgin Islands; northeast Brazil (Powers, 1977).
- Euprognatha gracilipes*** A. Milne Edwards, 1878  
 Description: Rathbun, 1925:101, pl. 34: figs. 3, 4.  
 Type-locality: 23°32'N, 88°05'W, 174 m.  
 Distribution: Florida Keys; north coast of Yucatan; off north coast of Cuba; Puerto Rico; St. Croix, Virgin Islands; Barbados; Amapa to São Paulo, Brazil (Powers, 1977).
- Euprognatha rastellifera*** Stimpson, 1871  
 Description: Williams, 1984:298, figs. 233, 241b.  
 Type-locality: Southwest of Martha's Vineyard, Massachusetts, 40°00'N, 70°57'W, 155 m.  
 Distribution: Off Georges Bank (40°35'N, 67°37'W) to São Paulo, Brazil (Coelho and Ramos, 1972).
- Hemus cristulipes*** A. Milne Edwards, 1875  
 Description: Williams, 1984:325, fig. 261.  
 Type-locality: Near Contoy (Yucatan), at the entrance to the Gulf of Mexico, 21.9 to 32.9 m.  
 Distribution: Off Cape Lookout, North Carolina and South Carolina; northwest of Gulf of Mexico and Yucatan, through West Indies to Pernambuco, Brazil (Powers, 1977; Herbst et al., 1979).
- Inachoides forceps*** A. Milne Edwards, 1879  
 Description: Williams, 1984:299, figs. 234, 240i.  
 Type-locality: Guiana and Desterro, Brazil.  
 Distribution: SE Cape Lookout, North Carolina; west coast of Florida to Desterro (= Florianopolis), Brazil (Williams, 1984).

***Leptopisa setirostris*** (Stimpson, 1871)  
Description: Rathbun, 1925:375, pl. 134: figs. 1-3; pl. 253: fig. 2.  
Type-locality: Florida Keys.  
Distribution: From Miami to northern Brazil; Puerto Rico, Vieques, Culebra, St. Thomas (Rathbun, 1933).

***Libinia dubia*** H. Milne Edwards, 1834  
Description: Williams, 1984:316, figs. 252, 259g.  
Type-locality: "Côtes des États-Unis."  
Distribution: Cape Cod, Massachusetts, to southern Texas; Bahamas and Cuba (Williams, 1984).

***Libinia emarginata*** Leach, 1815  
Description: Williams, 1984:318, figs. 253, 259h.  
Type-locality: Unknown.  
Distribution: Windsor, Nova Scotia, to western Gulf of Mexico (Williams, 1984).

***Libinia erinacea*** (A. Milne Edwards, 1879)  
Description: Rathbun, 1925:321, pl. 109.  
Type-locality: 24°44'N, 83°26'W, between Florida and Cuba, 69 m.  
Distribution: Florida Keys; southeast to northwest Florida; north coast of Cuba (Powers, 1977).

***Macrocoeloma camptocerum*** (Stimpson, 1871)  
Description: Williams, 1984:326, figs. 262, 275m.  
Type-locality: Near Key West (Florida), 3.7 to 9.2 m.  
Distribution: Beaufort Harbor, North Carolina, around southern Florida to Alligator Harbor, Florida (Williams, 1984).

***Macrocoeloma diplacanthum*** (Stimpson, 1860)  
Description: Rathbun, 1925:478, pl. 169: fig. 1, pl. 269: fig. 1-3.  
Type-locality: St. Thomas.  
Distribution: Key West, Florida; Cuba; Jamaica; Puerto Rico; Virgin Islands; Guadeloupe; Curaçao, Netherlands Antilles; Old Providence Island (Caribbean) (Powers, 1977).

***Macrocoeloma eutheca*** (Stimpson, 1871)  
Description: Williams, 1984:327, figs. 263, 275k.  
Type-locality: Off French Reef (Florida), 27.4 m., and west of Tortugas, 67.7 m.  
Distribution: SE of Cape Lookout, North Carolina; off NW Florida through Bahama Banks and West Indies; Panama (Williams, 1984).

***Macrocoeloma laevigatum*** (Stimpson, 1860)  
Description: Rathbun, 1925:483, fig. 136, pl. 169: figs. 2, 3.  
Type-locality: St. Thomas.  
Distribution: Florida Keys; north coast of Cuba; Jamaica; St. Thomas, Virgin Islands; Guadeloupe; Piaui to Alagoas, Brazil (Powers, 1977).

***Macrocoeloma septemspinosum*** (Stimpson, 1871)  
Description: Rathbun, 1925:477, pl. 173, figs. 2-3.  
Type-locality: West of Tortugas, 65 m.  
Distribution: South Carolina; Bahamas; Florida Keys; northeast quadrant of Gulf; Ceara to Rio Grande do Norte, Brazil (Powers, 1977).

***Macrocoeloma subparallelum*** (Stimpson, 1860)  
Description: Rathbun, 1925:480, pl. 172.  
Type-locality: St. Thomas.  
Distribution: North coast of Cuba; Jamaica; Haiti; Puerto Rico; St. Thomas, Virgin Islands; Guadeloupe; Barbados; Old Providence Island (Caribbean); Rio Grande do Norte, Pernambuco; Brazil (Powers, 1977).

***Macrocoeloma trispinosum trispinosum*** (Latreille, 1825)  
Description: Rathbun, 1925:466, fig. 132, pl. 166: fig. 1, pl. 167.  
Type-locality: "Nouvelle Hollande" (an error).  
Distribution: North Carolina; Bermuda; south Florida to northwest Florida; off Louisiana and Texas; Gulf and Caribbean coasts of Yucatan, Mexico; Cuba; Jamaica; Puerto Rico; St. Thomas to St. Lucia; Curaçao, Netherlands Antilles; Piaui to Bahia, Brazil (Powers, 1977).

***Macrocoeloma trispinosum nodipes*** (Desbonne, 1867)  
Description: Williams, 1984:328, figs. 264, 275l.  
Type-locality: "Nouvelle Holland" (?) (error).  
Distribution: Beaufort, North Carolina, to Alligator Harbor, Florida; Yucatan; through West Indies to Bahia, Brazil (Williams, 1984).

***Macrocoeloma trispinosum*, Variety**  
Description: Rathbun, 1925:468, pl. 168: fig. 1.  
Type-locality: None designated.  
Distribution: From North Carolina to Gulf of Mexico, including Florida; Yucatan; West Indies and Caribbean Sea (Rathbun, 1925).

***Metoporhaphis calcarata*** (Say, 1958)  
Description: Williams, 1984:300, figs. 235, 240h.  
Type-locality: Bay of Charleston, South Carolina.  
Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico and Caribbean Sea to Rio de Janeiro, Brazil (Williams, 1984).

***Microphrys antillensis*** Rathbun, 1920  
Description: Williams, 1984:329, figs. 265, 275h.  
Type-locality: Off Montego Bay Point, Jamaica.  
Distribution: Near Capes Hatteras and Lookout, North Carolina, to Cape Fear, North Carolina; Cuba; Jamaica; Puerto Rico; Pernambuco, Brazil (Williams, 1984).

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

Description: Williams, 1984:330, figs. 266, 275g.  
Type-locality: "Nouvelle Holland".  
Distribution: Near Beaufort, North Carolina, through Gulf of Mexico (Ray, 1974) to Florianopolis, Santa Catarina, Brazil; Bermuda (Williams, 1984).

***Mithrax acuticornis*** Stimpson, 1870

Description: Williams, 1984:332, figs. 267, 275a.  
Type-locality: Off the Quicksands (Florida), 62.6 m; west of the Tortugas, 67.7 m and 76.8 m.  
Distribution: Off Cape Lookout, North Carolina; west Florida and Yucatan Channel through West Indies to Espirito Santo, Brazil (Williams, 1984).

***Mithrax caribbaeus*** Rathbun, 1900

Description: Rathbun, 1925:409, plates 148, 149.  
Type-locality: St. Thomas.  
Distribution: West Indies to South America, Puerto Rico, St. Thomas, St. Croix. Airport Lagoon, Key West, Dry Tortugas, 29-33 m (personal communication, D. K. Camp).

***Mithrax cinctimanus*** (Stimpson, 1860)

Description: Rathbun, 1925:438, pl. 158.  
Type-locality: Tortugas and St. Thomas.  
Distribution: Bahamas and Florida Keys to West Indies and Curaçao (Rathbun, 1925).

***Mithrax cornutus*** Saussure, 1857

Description: Rathbun, 1925:386, pl. 137: figs. 3-4, pl. 256.  
Type-locality: Antilles.

Distribution: Bermuda; Florida Straits; north coast of Cuba; between Jamaica and Haiti; Dominica; Martinique; off Bahia, Brazil (Powers, 1977).

***Mithrax coryphe*** (Herbst, 1801)

Description: Rathbun, 1925:426, pl. 153.  
Type-locality: Not Known.  
Distribution: Miami to southern Brazil; Puerto Rico, Culebra, St. Thomas, St. Croix (Rathbun, 1933).

***Mithrax forceps*** (A. Milne Edwards, 1875)

Description: Williams, 1984:337, figs. 272, 275f.  
Type-locality: Guiana.  
Distribution: From Cape Hatteras, North Carolina, through Gulf of Mexico to Rio de Janeiro, Brazil; Bermuda (Williams, 1984).

***Mithrax hemphilli*** Rathbun, 1892

Description: Rathbun, 1925:395, pl. 139, pl. 259: fig. 2.  
Type-locality: Indian Key, Florida.  
Distribution: Florida Keys to Rio de Janeiro, Brazil; Culebra (Rathbun, 1933).

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

Description: Williams, 1984:333, figs. 268, 275d.  
Type-locality: Unknown.  
Distribution: Delaware Bay (Say, 1818), off Charleston Harbor, South Carolina, and Georgia (Gibbes, 1850). Northwestern Gulf of Mexico; Bahamas and Florida Keys through West Indies to São Paulo, Brazil; Bermuda (Williams, 1984).

***Mithrax holderi*** Stimpson, 1871

Description: Rathbun, 1925:392, pl. 138: figs. 1, 2, pl. 257: fig. 2.  
Type-locality: Tortugas, 13 m.  
Distribution: Florida Keys and Dry Tortugas; north and south coasts of Cuba; Jamaica; Puerto Rico; Virgin Islands (Powers, 1977).

***Mithrax pilosus*** Rathbun, 1892

Description: Rathbun, 1925:394, pl. 138: fig. 3, pl. 258.  
Type-locality: Abaco, Bahamas.  
Distribution: Bahamas; Florida Keys and Dry Tortugas; Vera Cruz, Mexico; Cuba; Puerto Rico; St. Thomas; Virgin Islands to Barbados; Caribbean coast of Panama; Venezuela (Powers, 1977).

***Mithrax pleuracanthus*** Stimpson, 1871

Description: Williams, 1984:334, figs. 269, 275e.  
Type-locality: Key West, 3.6-9.1 m, Tortugas (Florida), 9.1-11 m; St. Thomas.  
Distribution: Beaufort, North Carolina, to Pensacola, Florida, western Gulf of Mexico to Yucatan Channel off Cape Catoche, Mexico; West Indies to Venezuela; Bermuda (Williams, 1984).

***Mithrax ruber*** (Stimpson, 1871)

Description: Rathbun, 1925:432, pl. 157.  
Type-locality: Cruz del Padre, Cuba.  
Distribution: Cuba to Curaçao and Barbados; Puerto Rico, St. Thomas, Water Island (Rathbun, 1933)

***Mithrax sculptus*** (Lamarck, 1818)

Description: Rathbun, 1925:422, figs. 125, 126, pl. 152.  
Type-locality: Unknown.

Distribution: From Miami to Brazil; Puerto Rico; Vieques; Culebra; St. Thomas; Water Island.

***Mithrax spinosissimus*** (Lamarck, 1818)

Description: Williams, 1984:335, figs. 270, 275b.  
Type-locality: "Ile-de-France," Locality erroneous.  
Distribution: North (?) and South Carolina to Nicaragua, and through West Indies to Barbados and Venezuela (Williams, 1984).

***Mithrax tortugae*** Rathbun, 1920

Description: Rathbun, 1925:417, pl. 147, fig. 2.

- Type-locality: Tortugas.  
 Distribution: Bahamas; Florida Keys; Curaçao.
- Mithrax verrucosus*** H. Milne Edwards, 1832  
 Description: Williams, 1984:336, figs. 271, 275c.  
 Type-locality: Robert Bay, Martinique.  
 Distribution: Charleston, South Carolina; Campeche Banks; through West Indies to Fernando Noronha Island, Brazil (Williams, 1984).
- Mocosoa crebripunctata*** Stimpson, 1871  
 Description: Rathbun, 1925:159, fig. 59, pl. 49: figs. 3-4.  
 Type-locality: Off French Reef, Florida, 27 m.  
 Distribution: Florida Straits; off Cape San Blas, northwest Florida; Maranhao to Espirito Santo, Brazil.
- Nibilia antilocapra*** (Stimpson, 1871)  
 Description: Williams, 1984:320, figs. 254, 259f.  
 Type-locality: Florida, off Carysfort Reef, 95 and 109.7 m; and off Alligator Reef, 251.8 m.  
 Distribution: Off Cape Hatteras, North Carolina, to Gulf of Mexico just east of Mississippi River delta and Gulf of Campeche; Windward Islands, West Indies, off Guyana (Williams, 1984).
- Olopisia spinipes*** A. Milne Edwards, 1879  
 Description: Rathbun, 1925:228, pl. 232: figs. 1, 2.  
 Type-locality: Straits of Florida, 185 m.  
 Distribution: Known only from the type-locality.
- Pelia mutica*** (Gibbes, 1850)  
 Description: Williams, 1984:321, figs. 255, 259a.  
 Type-locality: Charleston Harbor, off White Point Battery, South Carolina.  
 Distribution: Buzzards Bay and Vineyard Sound, Massachusetts, to off Port Mansfield, Willacy County, Texas (Felder, 1973); Cuba, Puerto Rico, and St. Thomas, West Indies (Williams, 1984).
- Picroceroides tubularis*** Miers, 1886  
 Description: Rathbun, 1925:354, fig. 115, pl. 126, pl. 254: figs. 2-5.  
 Type-locality: Fernando Noronha and Bahia, in shallow water.  
 Distribution: Bahamas; southeast Florida; north and south coasts of Cuba; between Jamaica and Haiti; St. Thomas, Virgin Islands; Maranhao to Espirito Santo, Brazil (Powers, 1977).
- Pitho aculeata*** (Gibbes, 1850)  
 Description: Rathbun, 1925:357, fig. 116c, pl. 127, pl. 251: fig. 1.  
 Type-locality: Key West, and "Florida".  
 Distribution: Bahamas; Florida Keys and Dry
- Tortugas; west coast of Florida; north coast of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands; Guadeloupe; Old Province Island (Caribbean); Netherlands Antilles (Powers, 1977).
- Pitho anisodon*** (Von Martens, 1872)  
 Description: Rathbun, 1925:368, figs. 116b, 117d, 118, pl. 131, pl. 251: fig. 2.  
 Type-locality: Cuba.  
 Distribution: Bahamas; south, west and northwest coast of Florida; Florida Keys; north coast of Cuba; Jamaica; Puerto Rico; Guadeloupe; Curaçao, Netherlands Antilles (Powers, 1977).
- Pitho lherminieri*** (Schramm, 1867)  
 Description: Williams, 1984:311, figs. 246, 259a.  
 Type-locality: Guadeloupe.  
 Distribution: Off Beaufort Inlet, North Carolina, to west Florida; Veracruz, Mexico; West Indies to Islet of São Paulo, Brazil (Williams, 1984).
- Pitho laevigata*** (A. Milne Edwards, 1875)  
 Description: Rathbun, 1925:372, pl. 132: figs. 3-4, pl. 133: fig. 3, pl. 250: figs. 11-13. Type-locality: Antilles.  
 Distribution: West and northwest coasts of Florida; Antilles, location unspecified; Colombia; Trinidad (Powers, 1977).
- Pitho mirabilis*** (Herbst, 1794)  
 Description: Rathbun, 1925:366, figs. 116d, 117c, pl. 128: fig. 3; pl. 129: fig. 3; pl. 253: figs. 1.  
 Type-locality: Unknown.  
 Distribution: Bahamas and Florida Keys; Guadeloupe; Puerto Rico (Powers, 1977).
- Pitho quadridentata*** (Miers, 1879)  
 Description: Rathbun, 1925:369, pl. 132: fig. 2, pl. 133: fig. 2; pl. 250: fig. 10.  
 Type-locality: West Indies.  
 Distribution: Jamaica; Puerto Rico; Content Keys, Monroe County, Florida, 5-6 m (personal communication, D. K. Camp).
- Podochela curvirostris*** (A. Milne Edwards, 1879)  
 Description: Rathbun, 1925:58, pls. 19, 210.  
 Type-locality: Barbados, 180 m, and near Havana, 229 m.  
 Distribution: Florida Straits; north coast of Cuba; Caribbean coast of Yucatan; Montserrat; Barbados; Grenadines (Powers, 1977).
- Podochela gracilipes*** Stimpson, 1871  
 Description: Williams, 1984:301, fig. 236, 241j.  
 Type-locality: West of Tortugas, off Pacific and Carysfort Reefs (Florida), 66 to 110 m.

Distribution: Off Cape Lookout, North Carolina, through Gulf of Mexico and Caribbean Sea to Santa Catarina, Brazil (Williams, 1984).

***Podochela lamelligera* (Stimpson, 1871)**

Description: Rathbun, 1925:52, pl. 20: figs. 1-2.  
Type-locality: Off Tennessee Reef, Florida Keys, 38 m.

Distribution: Southeast Florida; off Key West, Florida; off northwest Florida (Powers, 1977).

***Podochela macrodera* Stimpson, 1860**

Description: Rathbun, 1925:44, fig. 11, pl. 16.  
Type-locality: St. Thomas and Key Biscayne, Florida.

Distribution: Bahamas; Florida Keys; west coast of Florida; off Caribbean coast of Yucatan; Cuba; Puerto Rico; Virgin Islands; Guadalupe; Curaçao, Netherlands Antilles; Brazil (Powers, 1977).

***Podochela riisei* Stimpson, 1860**

Description: Williams, 1984:302, figs. 237, 241k.  
Type-locality: Island of St. Thomas (West Indies).  
Distribution: North Carolina to Campeche, Mexico; through West Indies to Trinidad; Rio de Janeiro, Brazil; Bermuda (Williams, 1984).

***Podochela sidneyi* Rathbun, 1924**

Description: Williams, 1984:302, figs. 238, 241l.  
Type-locality: Off Cape Hatteras, North Carolina, 90 m.

Distribution: Off Cape Hatteras, North Carolina, to Veracruz (Ray, 1974); northwestern Cuba; Yucatan Channel (Williams, 1984).

***Pyromiaia arachna* Rathbun, 1924**

Description: Rathbun, 1925:131, pls. 42-43.  
Type-locality: Gulf of Mexico, SW of Cape San Blas, Florida; 309 m.

Distribution: Off South Carolina; off west coast of Florida to off east coast of Mexico, throughout the Gulf of Mexico.

***Pyromiaia cuspidata* Stimpson, 1871**

Description: Williams, 1984:303, figs. 239, 241m.  
Type-locality: Off Sand Key, 150 m; Alligator Reef, 170 m; the Samboes, 170 and 221 m; southwest of Sand Key, 229 m (Florida).

Distribution: Off Cape Lookout, North Carolina, to west Florida; Cuba and Yucatan Channel to off Nicaragua 14°31'N, 80°41'W (Williams, 1984).

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

Description: Williams, 1984:322, figs. 256, 260a.  
Type-locality: Between Cuba and Florida, 24°15'N, 82°13'W.

Distribution: Nantucket Shoals, Massachusetts, to Gulf of Mexico off southern Texas; northern Cuba;

west of Cabo de la Vela, Colombia; off French Guiana (Williams, 1984).

***Rochinia hystrix* (Stimpson, 1871)**

Description: Rathbun, 1925:214, pls. 70, 71.  
Type-locality: Off Sand Key, Florida, 24°16'N, 81°42'W, 252 m.  
Distribution: Off Key West (Rathbun, 1925); off Cuba (Chace, 1940b); Gulf of Mexico.

***Rochinia tanneri* (Smith, 1883)**

Description: Williams, 1984:323, figs. 257, 260b.  
Type-locality: Off Delaware Bay.  
Distribution: Off Martha's Vineyard, Massachusetts, to Straits of Florida (Williams, 1984).

***Rochinia umbonata* (Stimpson, 1871)**

Description: Williams, 1984:323, figs. 258, 260c.  
Type-locality: Off Sand Key, Florida.  
Distribution: Southeast of Cape Lookout, North Carolina, through eastern and northern Gulf of Mexico to northeast of Nicaragua; through West Indies to St. Vincent (Williams, 1984).

***Sphenocarcinus corrosus* A. Milne Edwards, 1875**

Description: Williams, 1984:314, figs. 250, 259c.  
Type-locality: Off Barbados, 180 m.  
Distribution: Off Cape Lookout, North Carolina; Gulf of Mexico (Goeke and Shaw, 1980) to Barbados (Williams, 1984).

***Stenacionops furcata coelata* (A. Milne Edwards, 1878)**

Description: Williams, 1984:338, figs. 273, 275i.  
Type-locality: Ten mi. from Jolbos Islands (Yucatan), and near Havana (Cuba), 320 m.  
Distribution: Shelly reefs off Beaufort, North Carolina, to northwest Florida and Alabama; Yucatan Channel; West Indies to Barbados, (Williams, 1984).

***Stenacionops furcata furcata* (Olivier, 1791)**

Description: Rathbun, 1925:449, text-fig. 131, pls. 160, 161.

Type-locality: Unknown.

Distribution: Georgia; Florida (location unspecified); ?Gulf of Mexico; Jamaica; Puerto Rico; St. Thomas, Virgin Islands; Dominica; Barbados; French Guiana; Paraiba to Rio de Janeiro, Brazil; South Africa (Powers, 1977).

***Stenacionops spinimana* (Rathbun, 1892)**

Description: Williams, 1984:339, figs. 274, 275j.  
Type-locality: Off Cape Lookout, North Carolina, 227m.

Distribution: Off Cape Hatteras, North Carolina, to Florida Straits and Gulf of Mexico off Mobile Bay,

Alabama, and east of Chandeleur Island, off Mississippi (Franks et al., 1972; Williams, 1984).

***Stenacionops spinosissima* (Saussure, 1857)**

Description: Rathbun, 1925:445, pl. 165: fig. 2, pl. 264: figs. 374, pl. 265.

Type-locality: Guadeloupe.

Distribution: North Carolina; south and southwest Florida; off Texas and east coast of Mexico; north coast of Cuba; Haiti; Guadeloupe; Dominica; Rio de Janeiro and Fernando de Noronha, Brazil (Powers, 1977).

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

Description: Williams, 1984:304, fig. 240, 241o.

Type-locality: Guadeloupe (Holthuis 1959).

Distribution: North Carolina to Santa Catarina, Brazil; Bermuda (Williams, 1984).

***Stilbomastax margaritifera* (Monod, 1939)**

Description: Monod, 1939:561, figs. 6-9.— Williams et al., 1977:887.

Type-locality: Basse-Terre, Guadeloupe, 15-20 m.

Distribution: southeast of Cape San Blas to southeast Florida; Guadeloupe (Williams et al., 1977).

***Thoe puella* Stimpson, 1860**

Description: Rathbun, 1925:348, figs. 111, 112, pl. 125: figs. 1, 2.

Type-locality: Tortugas, Florida.

Distribution: Florida Keys and Dry Tortugas; Jamaica; Puerto Rico; St. Thomas; Guadeloupe; Curacao (Powers, 1977).

***Tyche emarginata* White, 1847**

Description: Williams, 1984:312, figs. 247-248, 259b.

Type-locality: West Indies.

Distribution: Off Beaufort Inlet, North Carolina; through Bahamas to west coast of Florida (Williams, 1984).

## FAMILY PARTHENOPIDAE

***Cryptopodia concava* Stimpson, 1871**

Description: Williams, 1984:346, figs. 281, 286a.

Type-locality: Off Conch Reef (Florida), 62.2 m.

Distribution: Southeast of Cape Lookout, North Carolina; central east Florida; Cape San Blas, Florida, to St. Thomas; Ceara to Bahia, Brazil (Williams, 1984).

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

Description: Williams, 1984:347, figs. 282, 286b.

Type-locality: Near Kiawah Island, Sullivans Island, and White Point Shoal, Charleston Harbor, South Carolina.

Distribution: Nantucket Sound, Massachusetts, around peninsular Florida to southern Texas; through West Indies to Trinidad; Ceara to Bahia, Brazil (Williams, 1984).

***Leiolambrus nitidus* Rathbun, 1901**

Description: Rathbun, 1925:545, pl. 199; pl. 281: fig. 1.

Type-locality: Mayaguez Harbor, Puerto Rico, 22-33 m.

Distribution: Gulf of Mexico, from off Alabama to south Texas; Jamaica; Puerto Rico; French Guiana (Powers, 1977).

***Mesorhoea sexspinosa* Stimpson, 1871**

Description: Williams, 1984:348, figs. 283, 286c.

Type-locality: Four mi. southwest of Loggerhead Key, Florida, 20 m.

Distribution: Southeast of Cape Lookout, North Carolina; off northeast Florida, to Flanagan Passage, Virgin Islands (Williams, 1984).

***Parthenope agona* (Stimpson, 1871)**

Description: Williams, 1984:342, figs. 276, 280a.

Type-locality: Off the Marquesas, Carysfort Reef, and Conch Reef, 73 and 89.6 m (southern Florida).

Distribution: Off Capes Hatteras and Lookout, North Carolina, and central eastern Florida; Gulf of Mexico and Pensacola, Florida, to near Ft. Myers; through Florida Straits, West Indies and Caribbean Sea to Surinam (Williams, 1984).

***Parthenope fraterculus* (Stimpson, 1871)**

Description: Williams, 1984:343, figs. 277, 280b.

Type-locality: Off Sand Key, Caryfort and Conch Reefs, west of Tortugas, 47.6-124.4 m (southern Florida).

Distribution: Off Cape Fear, North Carolina; central eastern Florida southward; Gulf of Mexico, off Cape San Blas, Florida, to Florida Straits; off Cape Catoche, Yucatan, Mexico; through West Indies to Mouth of Amazon River (Williams, 1984).

***Parthenope granulata* (Kingsley, 1879)**

Description: Williams, 1984:344, figs. 278, 280c.

Type-locality: Tortugas, Florida.

Distribution: Off the three North Carolina Capes southward around Florida to Louisiana; Bermuda; Bahia Honda, Cuba(?); St. Thomas, Virgin Islands (Gore, 1977).

***Parthenope pourtalesii* (Stimpson, 1871)**

Description: Williams, 1984:345, figs. 279, 280d.

Type-locality: Off Conch Reef, French Reef, and American Shoal (southern Florida) 73-214 m.

Distribution: Off Martha's Vineyard Massachusetts;

New Jersey southward; Gulf of Mexico through West Indies to Grenada.

***Parthenope serrata* (H. Milne Edwards, 1834)**

Description: Gore and Scotto, 1979:57, figs. 24 e-h, 25 B, 26.

Type-locality: “L’ Océan Indien” by original designation; erroneous locality for the West Indies. Veracruz, Mexico by selection of male lectotype (Gore, 1977).

Distribution: Bermuda; Ft. Pierce, Florida, around the Gulf of Mexico; Central America; Cuba; Lesser Antilles; islands off the northern coast of South America, southward to Bahia, Brazil (Gore and Scotto, 1979).

***Solenolambrus decemspinosis* Rathbun, 1894**

Description: Rathbun, 1925:540, pl. 194: figs. 1, 2.

Type-locality: Off Cape San Blas, Florida, 28°44'N, 85°16'W, 110 m.

Distribution: Northeastern Gulf of Mexico and off San Juan, Puerto Rico.

***Solenolambrus typicus* Stimpson, 1871**

Description: Williams, 1984:349, figs. 285, 286e.

Type-locality: Off the Samboes and off Alligator Reef (southern Florida), 146.3 to 201.2 m.

Distribution: SE Cape Lookout; western Gulf of Mexico off Corpus Christi, Texas, and N of Yucatan; Swan Island and Nicaragua Shelf; southern Florida through West Indies to Surinam and Brazil (Gore and Scotto, 1979).

***Solenolambrus tenellus* Stimpson, 1871**

Description: Williams, 1984:348, figs. 284, 286d.

Type-locality: Off Carysfort, Conch, and French Reefs, 64-89.6 m (southern Florida).

Distribution: Off Cape Lookout, North Carolina; central east Florida southward; Gulf of Mexico, near Cape St. George, Florida, to Florida Keys; Bahamas; Barbados (Williams, 1984).

***Tutankhamen cristatipes* (A. Milne Edwards, 1880)**

Description: Rathbun, 1925:530, pl. 277: figs. 3-5.

Type-locality: St. Vincent, Lesser Antilles.

Distribution: Pourtales Plateau, Florida Straits; St. Vincent, Lesser Antilles.

## FAMILY ATELEYCYCLIDAE

***Trichopeltarion nobile* A. Milne Edwards, 1880**

Description: Rathbun, 1930:168, pl. 73.—

Pequegnat, 1970:184, figs. 6-4, 6-5.

Type-locality: Off St. Lucia, 276 m.

Distribution: Off northwest Florida and Mississippi; east coast of Mexico; Bay of Campeche; off St. Lucia (Powers, 1977).

## FAMILY CANCRIDAE

***Cancer borealis* Stimpson, 1859**

Description: Williams, 1984:351, fig. 287.

Type-locality: Nova Scotia to Cape Cod.

Distribution: Nova Scotia to south of Tortugas, Florida; Verrill (1908) judged that a Bermuda record was probably mislabelled (Williams, 1984).

***Cancer irroratus* Say, 1817**

Description: Williams, 1984:353, fig. 288.

Type-locality: “Inhabits the ocean” (Atlantic coast of the United States).

Distribution: Labrador to off Miami, Florida (Williams, 1984).

## FAMILY GERYONIDAE

***Geryon fennieri* Manning and Holthuis, 1984**

Description: Manning and Holthuis, 1984:666, figs. 1, 2a, b, 3a-c, 4a, b.

Type-locality: Off Fernandina, Florida, Albatross Stn. 2669.

Distribution: Around coasts of Florida.

## FAMILY PORTUNIDAE

***Arenaeus cribriarius* (Lamarck, 1818)**

Description: Williams, 1984:362, fig. 292.

Type-locality: Brazil.

Distribution: Vineyard Sound, Massachusetts, to Santa Catarina, Brazil (Williams, 1984).

***Bathynectes longispina* Stimpson, 1871**

Description: Rathbun, 1930:28, plates 9, 10.—

Manning and Holthuis, 1981:80.

Type-locality: Off Sand Key, Key West, and American Shoal, all in the Florida Straits, 183-275 m.

Distribution: Off Martha’s Vineyard, Massachusetts, to Gulf Stream in Florida Straits.

***Benthochason schmitti* Rathbun, 1931**

Description: Rathbun, 1931:125, plates 1, 2.—

Pequegnat, 1970:187, fig. 6-6.

Type-locality: 22.3 mi. south of Loggerhead Key, Tortugas, Florida, 329 m.

Distribution: Off Dry Tortugas; deep waters off Mississippi to Texas; off southern Gulf coast of Mexico; recently found off New England (Powers, 1977).

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

Description: Williams, 1984:365, figs. 293f, 294.

Type-locality: Mullins River, 20 mi. south of Belize, (British) Honduras.

Distribution: Jamaica and Belize to Santa Catarina, Brazil; Florida, Mississippi, North Carolina, United

States of America (Williams, 1974; Perschbacher and Schwartz, 1979; Williams and Williams, 1981).

***Callinectes danae* Smith, 1869**

Description: Williams, 1984:367, figs. 293d, 295.  
Type-locality: Recife [=Pernambuco, Estado de Pernambuco], Brazil.

Distribution: Bermuda; New Hanover County, North Carolina, near Cape Fear, rare (Perschbacher and Schwartz, 1979); southern Florida and eastern side of Yucatan Peninsula to Estado de Santa Catarina, Brazil.

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

Description: Williams, 1984:369, figs. 293e, 296.  
Type-locality: Puerto Cabello, Venezuela.  
Distribution: Duval County, E of Jacksonville, Florida (rarely) (USNM), to Santa Catarina, Brazil; Veracruz, Mexico; Bermuda; also reported from extreme southern Texas (Williams, 1984).

***Callinectes larvatus* Ordway, 1863**

Description: Williams, 1984:371, figs. 293a, 297.  
Type-locality: Key West, Florida; Tortugas; Bahama Islands; Haiti.

Distribution: Beaufort, North Carolina, through Caribbean Sea to south central Brazil off São Paulo; Bermuda. North Carolina records rare (Williams, 1974; Perschbacher and Schwartz, 1979). Florida (intertidal) (personal communication, P. M. Mikkelsen).

***Callinectes ornatus* Ordway, 1863**

Description: Williams, 1984:373, figs. 293c, 298.  
Type-locality: Charleston, South Carolina; Gonaives, Haiti; Cumana, Venezuela; Tortugas and Bahamas also listed in original description.  
Distribution: Bermuda; Virginia, North and South Carolina through southern Florida; northwestern Yucatan to Estado de São Paulo, Brazil (Williams, 1984).

***Callinectes sapidus* Rathbun, 1896**

Description: Williams, 1984:376, figs. 293g, 299.  
Type-locality: East coast of United States.  
Distribution: Occasionally Nova Scotia, Maine, and northern Massachusetts, to northern Argentina, Bermuda, and the Antilles; Resund, Denmark; the Netherlands and adjacent North Sea; northwest and southwest France; Golfo di Genova; northern Adriatic; Aegean, western Black, and eastern Mediterranean Sea; Lake Hamana-ko, central Japan (Williams, 1984).

***Callinectes similis* Williams, 1966**

Description: Williams, 1984:383, figs. 293b, 300.  
Type-locality: Off beach between St. Johns River

jetties and Jacksonville Beach, Florida.

Distribution: Off Delaware Bay to Key West, Florida; northwestern Florida around Gulf of Mexico to off Campeche, Yucatan; also Isla de Providencia, Colombia; reported from northern Jamaica (Norse, 1978; Williams, 1984).

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

Description: Williams, 1984:385, fig. 301.  
Type-locality: Brazil.

Distribution: Vicinity of Little Egg Inlet, New Jersey (Milstein et. al., 1977); Rehoboth Bay, Delaware; Virginia (rare, Van Engel and Sandifer, 1972); South Carolina to Santa Catarina, Brazil; Baja California to Peru; Clipperton, Galapagos Island; West Africa from Mauritania to Angola; Cape Verde, Principe, São Tomé and Annobon Islands (Williams, 1984).

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

Description: Rathbun, 1930:142, pl. 64.  
Type-locality: West of Tortugas, 68 m and off Conch Reef, 73 m.

Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; west coast of Florida; north and south coasts of Cuba; Jamaica; Puerto Rico; Virgin Islands; Netherlands Antilles; Old Province Island (Caribbean); Ceara to Bahia, Brazil (Powers, 1977).

***Ovalipes floridanus* Hay and Shore, 1918**

Description: Turkay, 1971:139, fig. 3.  
Type-locality: Pensacola, Florida.  
Distribution: Southwest Florida to south Texas.

***Ovalipes stephensi* Williams, 1976**

Description: Williams, 1984:361, fig. 291.  
Type-locality: South of Beaufort Inlet, North Carolina, 31°11'N, 76°42'W, 35 m.  
Distribution: Off Accomack County, Virginia, 37°31'N, to near Biscayne Bay, Florida.

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

Description: Williams, 1984:387, fig. 302.  
Type-locality: Cuba.  
Distribution: Cape Hatteras, North Carolina (Park, 1978), to Bahia, Brazil; Bermuda (Williams, 1984).

***Portunus binoculus* Holthuis, 1969**

Description: Holthuis, 1969:409, fig. 1.  
Type-locality: Straits of Florida.  
Distribution: Bahamas; Florida Straits; north coast of Cuba; east of Yucatan, in Caribbean Sea; off Caribbean coasts of Panama and Colombia (Powers, 1977).

***Portunus depressifrons* (Stimpson, 1859)**

Description: Williams, 1984:387, fig. 303.  
Type-locality: South Carolina and Florida Keys.

Distribution: Fort Macon, North Carolina (Coues, 1871; Kingsley, 1878-79), through northwest Florida to Bay of Campeche and Caribbean Sea; Bermuda (Williams, 1984).

***Portunus floridanus* Rathbun, 1930**

Description: Williams, 1984:388, fig. 304.  
Type-locality: Off Key West, Florida, 24°25'45"N, 81°48'00"W.

Distribution: East Cape Lookout, North Carolina, to Honduras and Nicaragua, through West Indies and northern South America to Surinam (Williams, 1984).

***Portunus gibbesii* (Stimpson, 1859)**

Description: Williams, 1984:389, fig. 305.  
Type-locality: South Carolina and St. Augustine, Florida.  
Distribution: Southern Massachusetts through Gulf of Mexico along coast to French Guiana, but reported absent from the Antilles (Park, 1978; Williams, 1984).

***Portunus ordwayi* (Stimpson, 1860)**

Description: Williams, 1984:390, fig. 306.  
Type-locality: Key Biscayne and Tortugas, Florida; St. Thomas (Virgin Islands).  
Distribution: Vineyard Sound, Massachusetts; North Carolina through Gulf of Mexico, West Indies and Caribbean Sea to near Rio de Janeiro, Brazil (Park, 1978); Bermuda; Fernando de Noronha (Williams, 1984).

***Portunus sayi* (Gibbes, 1850)**

Description: Williams, 1984:391, fig. 307.  
Type-locality: South Carolina.  
Distribution: North Atlantic Ocean from Nova Scotia through Gulf of Mexico to the Guianas; Bermuda; mid-Atlantic Ocean; Canary Islands and Morocco. The only record from Brazil is that of Gerstaecker for his *Lupea pudica* (=sayi), and modern collections have not confirmed this (Williams, 1984).

***Portunus sebae* (H. Milne Edwards, 1834)**

Description: Rathbun, 1930:79, plates 34, 35.  
Type-locality: Brazil.  
Distribution: Bermuda; Florida Keys and Straits; Dry Tortugas; south coast of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands; Dominica; Netherlands Antilles (Powers, 1977).

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

Description: Williams, 1984:392, fig. 308.  
Type-locality: Straits of Florida south of Dry Tortugas, 24°23'N, 82°57'W to 24°24'N, 82°56'W, (Holthuis, 1969, restricted).

Distribution: East southeast Oregon Inlet, North Carolina, 35°42'00"N, 74°54'30"W (Musick and McEachren, 1972) to Santa Catarina, Brazil (Williams, 1984).

***Portunus spinimanus* Latreille, 1819**

Description: Williams, 1984:393, fig. 309.  
Type-locality: American waters, common in Brazil.  
Distribution: New Jersey through Gulf of Mexico and West Indies to Santa Catarina, Brazil; Bermuda (Williams, 1984).

***Portunus ventralis* (A. Milne Edwards, 1879)**

Description: Rathbun, 1930:43, pl. 13: figs. 1, 2.  
Type-locality: Guadeloupe.  
Distribution: Georgia to east coast of Florida; Dry Tortugas; ?Texas; north and west coasts of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands; Barbados; Rio Grande do Norte to Rio de Janeiro, Brazil (Powers, 1977).

***Portunus vocans* (A. Milne Edwards, 1878)**

Description: Rathbun, 1930:10, figs. 8, 9, pl. 25.  
Type-locality: Cape Verde Islands.  
Distribution: North coast of Cuba; between Jamaica and Haiti; Ascension Island, in the south Atlantic Ocean (Powers, 1977). Florida (personal communication, P. A. McLaughlin).

## FAMILY GONEPLACIDAE

***Chacellus filiformis* Guinot, 1969**

Description: Guinot, 1969:722, figs. 135-136, pl. 5: fig. 4.

Type-locality: Gulf of Mexico.  
Distribution: Between Bahamas and east coast of Florida; off northwest Florida (Powers, 1977).

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

Description: Rathbun, 1918:52, fig. 22, pl. 12: fig. 3, pl. 159: figs. 1-2.—Guinot, 1969:258, figs. 6, 10, 25.

Type-locality: Rio de Janeiro.  
Distribution: Florida Keys; south and west coasts of Florida; Yucatan; Jamaica; Bahia to Rio de Janeiro, Brazil (Powers, 1977).

***Euphrosynoplax clausa* Guinot, 1969**

Description: Guinot, 1969:720, figs. 127, 139, pl. 4: fig. 3.—Pequegnat, 1970:194.

Type-locality: Florida, Tortugas.  
Distribution: Dry Tortugas; off Alabama and Mississippi; Campeche, Yucatan, (91 to 210 m) (Powers, 1977).

***Euryplax nitida* Stimpson, 1859**

Description: Williams, 1984:432, fig. 343.

- Type-locality: Florida Keys.  
 Distribution: Off Beaufort, North Carolina, to Heald Bank, Texas; West Indies to St. Thomas; Bermuda; specimen from "Bresil, Dertero" [sic] (=Florianopolis?) figured by Guinot, 1969b (Williams, 1984).
- Frevillea barbata*** A. Milne Edwards, 1880  
 Description: Rathbun, 1918:26, pl. 4: figs. 1, 3, pl. 5.—Guinot, 1969:513, pl. 2: fig. 2.  
 Type-locality: 23°13'N; 89°16'W, 154 m. Stn. 36, *Blake*.  
 Distribution: West coast of Florida; Yucatan (Gulf); north coast of Cuba; off Grenada, (55 to 168 m) (Powers, 1977).
- Frevillea hirsuta*** (Borradaile, 1916)  
 Description: Williams, 1984:432, fig. 344.  
 Type-locality: Off Rio de Janeiro, 72 m.  
 Distribution: North Carolina to Rio de Janeiro, Brazil (Williams, 1984).
- Glyptoplax smithii*** A. Milne Edwards, 1880  
 Description: Williams, 1984:434, fig. 346.  
 Type-locality: Reefs west of Florida, 23.8 m.  
 Distribution: From Cape Hatteras, North Carolina, to Gulf of Mexico and Yucatan Channel (Williams, 1984).
- Goneplax sigsbei*** (A. Milne Edwards, 1880)  
 Description: Williams, 1984:433, fig. 345.  
 Type-locality: Grenada.  
 Distribution: East Cape Fear, North Carolina, 33°56'N, 76°26'W, to 33°55.3'N, 76°28.8'W, 130-120 m, *Eastward* Stn. 3213; Grenada, 11°27'N, 62°11'W, and 11°25'00"N, 62°04'15"W (Williams et al., 1968).
- Nanoplax xanthiformis*** (A. Milne Edwards, 1881)  
 Description: Williams, 1984:436, fig. 348.  
 Type-locality: Off Grenada, 168.3 m.  
 Distribution: Cape Hatteras, North Carolina; through Gulf of Mexico and West Indies to Cabo Frio, Rio de Janeiro, Brazil (Williams, 1984).
- Neopilumnoplax americana*** (Rathbun, 1898)  
 Description: Rathbun, 1918:21, figs. 5-6.—Guinot 1969:689, figs. 83-84.  
 Type-locality: Off Georgia, 792 m.  
 Distribution: Off North Carolina and Georgia; Florida Keys and Straits; north coast of Cuba; Guadeloupe; Espirito Santo, Brazil; Arabian Sea (Powers, 1977).
- Panoplax depressa*** Stimpson, 1871  
 Description: Williams, 1984:435, fig. 347.  
 Type-locality: East and Middle Keys, Tortugas, (Florida), 9.1 to 12.8 m.
- Distribution: Southeast of Cape Lookout, North Carolina; off Jacksonville and Cape San Blas, Florida, through West Indies to Barbados (Williams, 1984).
- Pilumnoplax elata*** (A. Milne Edwards, 1880)  
 Description: Guinot, 1969:688.  
 Type-locality: West Florida, 23.4 m.  
 Distribution: Only from the type-locality.
- Pseudorhombila quadridentata*** (Latreille, 1828)  
 Description: Hernandez, 1982:1, figs. 1e, 1d, 2c, 3c, 4c, 5c, 6c.  
 Type-locality: Unknown (Guinot, 1969).  
 Distribution: Specimens are known from southern Florida (Tortugas and northwest of New Grounds Shoal Light) Louisiana (west Delta lease area) and south of Lobos Islands, Mexico; Puerto Rico (North of Arecibo).
- Sotoplax robertsi*** Guinot, 1984  
 Description: Guinot, 1984:92, figs. 1-3.  
 Type-locality: Gulf of Mexico, middle shelf region off Apalachicola Bay, lat. 28°30' long. 84°58', *Tursiops*, cruise T-7109, Stn. 4, 54 m.  
 Distribution: Only from the type locality.
- Speocarcinus lobatus*** Guinot, 1969  
 Description: Guinot, 1969:710, figs. 124-125, pl. 4: fig. 2.—Felder 1973:70, pl. 10, fig. 3.  
 Type-locality: Sabine Pass, Texas.  
 Distribution: Dry Tortugas; off Louisiana and Texas (Powers, 1977).
- Thalassaplax angusta*** Guinot, 1969  
 Description: Guinot, 1969:717; figs. 131-132, pl. 4: fig. 2.—Pequegnat, 1970:192.  
 Type-locality: Southwest of Cape San Blas, Florida, *Albatross*, Stn. 2402.  
 Distribution: East coast of Florida; off northwest Florida, Alabama and Mississippi; off east coast of Mexico; off Campeche, Yucatan (Powers, 1977).
- Trapezioplax tridentata*** (A. Milne Edwards, 1880)  
 Description: Guinot, 1969:713, figs. 128-129, 142.  
 Type-locality: Barbados, 13.5-90 m.  
 Distribution: Florida Keys and Dry Tortugas; west coast of Florida; Barbados (Powers, 1977).

## FAMILY XANTHIDAE

- Actaea acantha*** (H. Milne Edwards, 1834)  
 Description: Rathbun, 1930:261, pl. 105: fig. 5, pl. 106: fig. 1, 2.  
 Type-locality: Unknown.  
 Distribution: Bahamas; Florida Keys and Dry Tortugas; northwest coast of Cuba; Jamaica; Haiti;

Puerto Rico; Guadeloupe; St. Bartholomew; Fernando de Noronha, Brazil (Powers, 1977).

***Actaea bifrons* Rathbun, 1898**

Description: Rathbun, 1930:255, fig. 41, pl. 104: figs. 3-6.

Type-locality: Colon, Panama.

Distribution: Key West, Florida; Puerto Rico; Virgin Islands; St. Bartholomew; Barbados; Curaçao; Colon, Panama (Powers, 1977).

***Allactaea lithostrota* Williams, 1974**

Description: Williams, 1984:397, figs. 311, 331a.

Type-locality: Southeast Cape Lookout, North Carolina, 33°43'N, 76°40.2'W, 90 m to 33°42.7'N, 76°40.2'W, 110m, *Eastward* Stn. 1087.

Distribution: Near edge of continental shelf southeast of Cape Lookout, North Carolina; Florida Straits; off Cape Catoche, Yucatan; off Venezuela and Surinam; Bermuda (Markham and McDermott, 1981; Williams, 1984).

***Banareia palmeri* (Rathbun, 1894)**

Description: Rathbun, 1930:260, pl. 106, fig. 3-6.

Type-locality: Rodriguez Creek, Florida.

Distribution: Bahamas; east coast of Florida; Florida Keys; north coast of Cuba; Haiti; Virgin Islands; Curaçao (Powers, 1977).

***Carpilius corallinus* (Herbst, 1783)**

Description: Rathbun, 1930:240, pls. 97-99.

Type-locality: Unknown.

Distribution: Bermuda; Bahamas; West Flower Garden Bank, off Texas; north coast of Cuba; Jamaica; Puerto Rico; Virgin Islands; Guadeloupe; Dominica; Curaçao; Old Providence Island (Caribbean); Pernambuco and Ceara, Brazil (Powers, 1977). Monroe, County, Florida, lobster trap (personal communication, D. K. Camp).

***Carpoporus papulosus* Stimpson, 1871**

Description: Williams, 1984:399, figs. 313, 331c.

Type-locality: Southwest of Tortugas and off Carysfort Reef, (Florida).

Distribution: Between Capes Hatteras and Lookout, North Carolina; Gulf of Mexico off Mobile Bay southeastward; Cape Catoche, Yucatan (Williams, 1984).

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

Description: Rathbun, 1930:297, pl. 137: figs. 1, 2, pl. 138: fig. 1—Guinot, 1968:706, figs. 20, 23, 29.

Type-locality: Key West, Florida.

Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; northwest coast of Florida; north coast of Cuba; Jamaica; Puerto Rico; Virgin Islands;

Antigua; Barbados; Curaçao; Panama to Colombia (Caribbean coasts; Abolhos Islands to São Paulo, Brazil) (Powers, 1977).

***Chlorodiella longimana* (H. Milne Edwards, 1834)**

Description: Rathbun, 1930:462, pl. 186.

Type-locality: Puerto Rico.

Distribution: Florida to Curaçao and Barbados; West Africa. Puerto Rico, Culebra, St. Thomas, St. Croix (Rathbun, 1933).

***Domecia acanthophora acanthophora* (Desbonne and Schramm, 1867)**

Description: Williams, 1984:417, figs. 330, 331q.

Type-locality: Guadeloupe.

Distribution: Bermuda; Cape Lookout Shoals, North Carolina, NW Gulf of Mexico through West Indies and Caribbean Sea to Alagoas, Brazil (Williams, 1984). Florida (5-6 m) (personal communication, P. M. Mikkelsen).

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

Description: Williams, 1984:419, figs. 332, 333a-c.

Type-locality: Jamaica.

Distribution: North Carolina to Patagonia; Bermuda (Williams, 1984).

***Etisus maculatus* (Stimpson, 1860)**

Description: Rathbun, 1930:295, pl. 136.—Guinot, 1969:234.

Type-locality: Tortugas, Florida.

Distribution: Florida Keys and Dry Tortugas; Bahamas; north coast of Cuba; Puerto Rico; Virgin Islands (Powers, 1977).

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

Description: Williams, 1984:407, figs. 322, 331i.

Type-locality: Barbados, British West Indies.

Distribution: South Carolina, through West Indies and Gulf of Mexico to Santa Catarina, Brazil (Williams, 1984).

***Eurypanopeus depressus* (Smith, 1869)**

Description: Williams, 1984:408, figs. 323, 331j.

Type-locality: New Haven, Connecticut.

Distribution: Massachusetts Bay through Florida to southern Texas; Dutch West Indies; Uruguay; Bermuda (Williams, 1984).

***Eurypanopeus dissimilis* (Benedict and Rathbun, 1891)**

Description: Rathbun, 1930:411, fig. 66, pl. 173: figs. 1-2.

Type-locality: Trinidad.

Distribution: West coast of Florida; north coast of Cuba; Jamaica; Nicaragua; Trinidad; Brazil (Powers, 1977).

***Eurypanopeus turgidus*** (Rathbun, 1930)

Description: Rathbun, 1930:364, pl. 166.

Type-locality: Chandeleur Islands, Louisiana.

Distribution: Northwest coast of Florida to Texas (Powers, 1977).

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

Description: Williams, 1984:416, figs. 329, 331p.

Type-locality: "Inhabits shores of the Northern States".

Distribution: South Carolina to Louisiana through West Indies and Caribbean Sea to São Paulo, Brazil; Bermuda (Williams, 1984).

***Glyptoxanthus erosus*** (Stimpson, 1859)

Description: Williams, 1984:398, figs. 312, 331b.

Type-locality: Florida.

Distribution: Cape Lookout, North Carolina, southward; off Grand Isle, Louisiana, southeastward; Yucatan; through West Indies to Guadeloupe (Williams, 1984).

***Heteractaea ceratopus*** (Stimpson, 1860)

Description: Rathbun, 1930:530, pl. 212: figs. 5-8, pl. 213.—Guinot, 1968:721, figs. 50, 56.

Type-locality: Key Biscayne, Florida.

Distribution: Bahamas; east coast of Florida Keys and Dry Tortugas; north coast of Cuba; Curaçao; Trinidad; Barbados (Powers, 1977).

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

Description: Williams, 1984:415, figs. 327, 331n.

Type-locality: Long Island Sound.

Distribution: Vineyard Sound, Massachusetts, to Port Aransas, Texas; Bahamas; Jamaica (Williams, 1984).

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

Description: Rathbun, 1930:399, pl. 171: figs. 3-5.

Type-locality: St. Thomas.

Distribution: West Indies to state of Santa Catarina, Brazil; Puerto Rico, St. Thomas, (Rathbun, 1933). Florida (intertidal to 10 m) (personal communication, P. M. Mikkelsen).

***Hexapanopeus hemphillii*** (Benedict and Rathbun, 1891)

Description: Rathbun, 1930:400, pl. 171: figs. 1, 2, 6. Type-locality: Indian Key, Florida.

Distribution: Florida and West Indies; Puerto Rico; St. Thomas (Rathbun, 1933).

***Hexapanopeus lobipes*** (A. Milne Edwards, 1880)

Description: Rathbun, 1930:329, fig. 50, pl. 155: figs. 3-5.—Menzies, 1948:23.

Type-locality: South of Florida, 24°43'N, 83°25'W, 68 m.

Distribution: Bahamas; off Key West, in Florida Straits; northwest of Dry Tortugas (Powers, 1977).

***Hexapanopeus paulensis*** Rathbun, 1930

Description: Williams, 1984:416, figs. 328, 331o.

Type-locality: Santos, São Paulo, Brazil.

Distribution: South Carolina, through Gulf of Mexico to Uruguay (Milstein, et al., 1976).

***Hexapanopeus quinquedentatus*** Rathbun, 1901

Description: Rathbun, 1930:402, fig. 62.

Type-locality: Mayaguez, Puerto Rico.

Distribution: Northwest Florida; Puerto Rico.

***Leptodius parvulus*** (Fabricius, 1793)

Description: Rathbun, 1930:305, pl. 141: figs. 1-3; 1933:58, fig. 50.

Type-locality: Islands of South America.

Distribution: Bermuda; Bahamas; Florida Keys; Jamaica; Haiti; Puerto Rico; Barbados; Curaçao; Fernando de Noronha, Brazil (Powers, 1977).

***Lobopilumnus agassizii*** (Stimpson, 1871)

Description: Williams, 1984:429, figs. 340g, 341.

Type-locality: Typical form: East and Middle Keys, Tortugas, Florida.

Distribution: North Carolina; eastern Gulf of Mexico; Yucatan; Cuba; Venezuela and Trinidad; Bermuda (Williams, 1984).

***Melybia thalamita*** Stimpson, 1871

Description: Williams, 1984:430, fig. 342.

Type-locality: Off French Reef, 27.4 m, and west of Tortugas (southern Florida) 64-76.8 m.

Distribution: About 30 mi. south southeast Cape Lookout, North Carolina (34°11'N, 76°09'W); southwest of Mississippi River delta, through West Indies to Bahia, Brazil (Williams, 1984).

***Menippe mercenaria*** (Say, 1818)

Description: Williams, 1984:420, figs. 333d, e, 334.

Type-locality: "The Southern States".

Distribution: Cape Lookout, North Carolina, to Yucatan, Mexico; Bahamas; Cuba; Jamaica (Williams, 1984).

***Menippe nodifrons*** Stimpson, 1859

Description: Rathbun, 1930:479, pl. 198: fig. 3; pl. 199.

Type-locality: Indian River, Florida.

Distribution: East coast of Florida; ?Louisiana; north and south coasts of Cuba; Jamaica; Virgin Islands; Trinidad; Caribbean coasts of Panama and Colombia; Paraíba to São Francisco do Sul, Brazil; Gabon, West Africa (Powers, 1977).

***Micropanope barbadensis*** (Rathbun, 1921)

Description: Rathbun, 1930:446, fig. 72.

Type-locality: Barbados.

Distribution: Dry Tortugas; Barbados.

***Micropanope lobifrons*** A. Milne Edwards, 1880

Description: Rathbun, 1930:429, pl. 178: figs. 4-6.

Type-locality: Off Montserrat, 161 m.

Distribution: South Florida, in Gulf Stream; Dry Tortugas; off northwest Florida; off north coast of Cuba; Puerto Rico; Virgin Islands; Santa Cruz Island (Caribbean); Grenada; Barbados; Colon, Panama (Powers, 1977).

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

Description: Williams, 1984:404, figs. 318, 331g.

Type-locality: Bahama Banks.

Distribution: Cape Hatteras, North Carolina, through Gulf of Mexico and West Indies to Bahia, Brazil (Williams, 1984).

***Micropanope pusilla*** A. Milne Edwards, 1880

Description: Rathbun, 1930:431, pl. 179: figs. 7, 8.

Type-locality: Off west coast of Florida, 31 m.

Distribution: Dry Tortugas; northwest of Key West; west and northwest coasts of Florida; Alabama; north coast of Cuba; Jamaica; Puerto Rico; Virgin Islands (Powers, 1977).

***Micropanope sculptipes*** Stimpson, 1871

Description: Williams, 1984:405, fig. 319.

Type-locality: Seven hauls in Florida Keys, 27.4 to 124 m.

Distribution: SE Cape Lookout, North Carolina, to Port Aransas, Texas; West Indies to Barbados.

***Micropanope spinipes*** A. Milne Edwards, 1880

Description: Rathbun, 1930:443, fig. 71, pl. 181: figs. 1, 2.—Pequegnat and Ray, 1974:238, figs. 18-22.

Type-locality: Abrolhos Islands, Brazil, 55 m.

Distribution: Bermuda; Bahamas; Florida Keys; West Flower Garden Bank, off Texas; Curacao; Alagoas and off the Abrolhos Islands, Brazil (Powers, 1977).

***Micropanope urinator*** (A. Milne Edwards, 1881)

Description: Williams, 1984:405, fig. 320.

Type-locality: Near Santa Cruz (St. Croix), West Indies, 448 m.

Distribution: Off Capes Hatteras and Lookout, North Carolina; Florida Keys to St. Croix, West Indies (Williams, 1984).

***Neopanope packardii*** (Kingsley, 1879)

Description: Abele, 1972b:269, figs. 1B, 3A.

Type-locality: Key West, Florida.

Distribution: Southeast and south Florida; Bahamas; Florida Keys and Dry Tortugas; west and

northwest coasts of Florida; Louisiana; north coast of Cuba (Powers, 1977).

***Neopanope sayi*** (Smith, 1869)

Description: Williams, 1984:409, figs. 324, 331k.

Type-locality: New Haven, Connecticut, and Cape Cod, Massachusetts.

Distribution: Miscou Harbor, mouth of Chaleur Bay, New Brunswick, Prince Edward Island, and Cape Breton Island, Nova Scotia, Canada (Bousfield 1956, Bousfield and Laubitz, 1972), to Florida Keys (Abele, 1972b).

***Neopanope texana*** (Stimpson, 1859)

Description: Abele, 1972b:266, figs. 1A, 2A, 2E, 3B, 3C.—Felder, 1973:68, pl. 9: fig. 19.

Type-locality: St. Joseph's Island, Texas.

Distribution: West coast of Florida (south as far as Charlotte County) to south Texas (Powers, 1977).

***Panopeus americanus*** Saussure, 1857

Description: Rathbun, 1930:357, pl. 164: figs. 3, 4, 6.

Type-locality: Guadeloupe.

Distribution: Bahamas; Florida Keys; west coast of Florida; north coast of Cuba; Jamaica; Dominican Republic; Puerto Rico; St. Thomas, Virgin Islands; Guadeloupe; Trinidad; Caribbean coast of Colombia; Rio Parahyba do Norte to Santa Catarina, Brazil (Powers, 1977).

***Panopeus bermudensis*** Benedict and Rathbun, 1891

Description: Rathbun, 1930:360, fig. 56, pl. 165.

Type-locality: Bermuda.

Distribution: Bermuda; Bahamas; west coast of Florida; ?Texas; north coast of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands; Trinidad; Old Providence Island (Caribbean); Colombia to Santa Catarina, Brazil. In the eastern pacific, from Magdalena Bay, Mexico to Peru (Powers, 1977).

***Panopeus harttii*** Smith, 1869

Description: Rathbun, 1930:355, pl. 164: figs. 1, 2, 5.

Type-locality: Abrolhos Reefs, Brazil.

Distribution: Florida Keys to State to São Paulo, Brazil, Puerto Rico, St. Thomas (Rathbun, 1933).

***Panopeus herbstii*** H. Milne Edwards, 1834

Description: Williams, 1983:866, fig. 3.

Type-locality: "Inhabits oyster beds, & found on oysters (*O. virginica*) in our markets" [by implication the eastern United States] (Say, 1817:58). Holthuis's (1979) selection of the specimen figured by Say (1817, pl. 4, fig. 3) as the lectotype for *P. herbstii* restricts the nominal species to the common mud crab occurring on oyster beds of the eastern United States.

Distribution: Shallow intertidal and subtidal waters

of the eastern United States from Boston Harbor, Massachusetts, to Indian River County, southeastern Florida (Williams, 1983).

***Panopeus lacustris* Desbonne, 1867**

Description: Williams, 1983:868, fig. 11.

Type-locality: The lagoons of Guadeloupe, hiding under rocks.

Distribution: Shallow and subtidal waters from Bermuda and extreme southern Florida, through the West Indies, and along the continental margin of the Caribbean Sea and South America to Cabo Frio, Brazil. The species has been introduced in Hawaii, and, according to a report by Edmonson (1962), apparently has been known on the California coast for a number of years (Williams, 1983).

***Panopeus obesus* Smith, 1869**

Description: Williams, 1983:873, figs. 6, 7.

Type-locality: Egmont Key (mouth of Tampa Bay) Florida (restricted by Williams, 1983).

Distribution: Marsh edge, shallow intertidal, and subtidal waters of the Carolinian Province from environs of Beaufort, North Carolina to Georgia (and perhaps northeastern Florida), and from Sarasota County, Florida, to Louisiana; Texas and northeastern Mexico (Williams, 1983).

***Panopeus occidentalis* Saussure, 1857**

Description: Williams, 1984:413, figs. 326, 331 m.

Type-locality: Guadeloupe.

Distribution: North Carolina to State of Santa Catarina, Brazil; Bermuda (Williams, 1984).

Florida (intertidal) (personal communication, P. M. Mikkelsen).

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

Description: Rathbun, 1930:353, pl. 162, 163.

Type-locality: Bahia. (Brazil).

Distribution: Florida Keys and Dry Tortugas; west and northwest coasts of Florida; north coast of Cuba; Haiti; Virgin Islands; Puerto Rico; Honduras to Nicaragua; Curaçao; Bahia to Santa Catarina, Brazil (Powers, 1977).

***Panopeus simpsoni* Rathbun, 1930**

Description: Williams, 1983:875, fig. 8.

Type-locality: Saint George Sound, Apalachicola, Florida.

Distribution: Shallow intertidal and subtidal waters of the northern Gulf of Mexico: Key West, Florida; Lee County, Florida to Corpus Christi, Texas (Williams, 1983).

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

Description: Williams, 1984:397, fig. 310.

Type-locality: Tortugas, Florida.

Distribution: Southeast Cape Lookout, North Carolina ( $34^{\circ}12.2'N$ ,  $76^{\circ}08'W$ , 90 m, to  $34^{\circ}12.27'N$ ,  $76^{\circ}08'W$ , 50 m;  $33^{\circ}55.5'N$ ,  $76^{\circ}28.4'W$ ); off Mississippi River delta through West Indies to Rio de Janeiro, Brazil; Ascension Island (Williams, 1984).

***Paraliomera dispar* (Stimpson, 1871)**

Description: Rathbun, 1930:244, fig. 38, pl. 101: figs. 4, 5.

Type-locality: Cruz del Padre, Cuba.

Distribution: Florida Keys to north coast of South America; Bermudas, Puerto Rico (Rathbun, 1933).

***Paraliomera longimana* (A. Milne Edwards, 1865)**

Description: Rathbun, 1930:243, pl. 101: figs. 1-3.

Type-locality: Guadeloupe.

Distribution: Florida Keys and Dry Tortugas; Veracruz, Mexico; Puerto Rico; Virgin Islands; Barbados; Curaçao (Powers, 1977).

***Pilumnoides nudifrons* (Stimpson, 1871)**

Description: Rathbun, 1930:538, pl. 218: figs. 1-2.

Type-locality: Off Sombrero Key, 203-229 m.

Distribution: Florida Straits and Keys; Barbados.

***Pilumnus caribaeus* Desbonne and Schramm, 1867**

Description: Rathbun, 1930:491, pl. 200: figs. 3, 4.

Type-locality: Guadeloupe.

Distribution: Bahamas; Florida Keys; north coast of Cuba; Jamaica; Puerto Rico; Vieques and Culebra; Virgin Islands; Guadeloupe; Curaçao; Bahia to São Paulo, Brazil (Powers, 1977).

***Pilumnus dasypodus* Kingsley, 1879**

Description: Williams, 1984:425, figs. 335, 340a.

Type-locality: Key West, Florida.

Distribution: Off Cape Hatteras, North Carolina, through Gulf of Mexico, Caribbean Sea and West Indies to Santa Catarina, Brazil (Williams, 1984).

***Pilumnus floridanus* Stimpson, 1871**

Description: Williams, 1984:426, figs. 336, 340b.

Type-locality: Tortugas, (Florida).

Distribution: Off Cape Lookout, North Carolina, through Gulf of Mexico, and Yucatan Channel, to Honduras; through West Indies to Bahia, Brazil (Williams, 1984).

***Pilumnus gemmatus* Stimpson, 1860**

Description: Rathbun, 1930:513, pl. 207: figs. 1-3.

Type-locality: St. Thomas and Tortugas.

Distribution: Dry Tortugas; Culebra; Virgin Islands; Curaçao (Powers, 1977).

***Pilumnus holosericus* Rathbun, 1898**

Description: Rathbun, 1930:519, fig. 81, pl. 207: figs. 8, 9.

- Type-locality: St. Thomas, Virgin Islands.  
 Distribution: Bahamas; Dry Tortugas; Puerto Rico; Virgin Islands; Trinidad; Curaçao (Powers, 1977).
- Pilumnus lacteus*** Stimpson, 1871  
 Description: Williams, 1984:426, figs. 337, 340c.  
 Type-locality: Cruz del Padre, Cuba, and Key West, Florida.  
 Distribution: Near Beaufort, North Carolina, to Florida; Cuba (Williams, 1984).
- Pilumnus longleyi*** Rathbun, 1930  
 Description: Rathbun, 1930:502, pl. 202: figs. 4-5.  
 Type-locality: South end of Loggerhead Key, Tortugas, Florida.  
 Distribution: Bahamas; Florida Keys and Dry Tortugas (Powers, 1977).
- Pilumnus marshi*** Rathbun, 1901  
 Description: Rathbun, 1930:499, fig. 80.  
 Type-locality: St. Thomas, 37-55 m.  
 Distribution: Tortugas, Florida; St. Thomas, St. Croix.
- Pilumnus nudimanus*** Rathbun, 1900  
 Description: Rathbun, 1930:523, fig. 82.  
 Type-locality: Arroyo, Puerto Rico.  
 Distribution: Known from the type-locality. Dry Tortugas, Florida, 29-33 m (personal communication, D. K. Camp).
- Pilumnus pannosus*** Rathbun, 1896  
 Description: Williams, 1984:427, figs. 338, 340d.  
 Type-locality: Key West, Florida.  
 Distribution: Bogue Sound off Beaufort, North Carolina, to Port Aransas, Texas; West Indies to Virgin Islands (Williams, 1984).
- Pilumnus sayi*** Rathbun, 1897  
 Description: Williams, 1984:428, figs. 339, 340e.  
 Type-locality: Georgia and east Florida.  
 Distribution: North Carolina through Gulf of Mexico and West Indies to Curaçao (Williams, 1984).
- Pilumnus spinosissimus*** Rathbun, 1898  
 Description: Rathbun, 1930:494, fig. 79, pl. 200: figs. 7-8.  
 Type-locality: Off Key West, 10 m.  
 Distribution: Florida Keys and Dry Tortugas.
- Platyactaea setigera*** (H. Milne Edwards, 1834)  
 Description: Rathbun, 1930:251, pl. 103.—Guinot, 1967:561, fig. 36.  
 Type-locality: Antilles.  
 Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; north coast of Cuba; Jamaica; Puerto Rico; Virgin Islands; Antigua; Barbados; Trinidad; Curaçao; Caribbean coast of Colombia (Powers, 1977).
- Platypodiella spectabilis*** (Herbst, 1794)  
 Description: Rathbun, 1930:247, fig. 39, pl. 102: fig. 4.—Guinot, 1967:562.—Felder, 1973:65, pl. 9: fig. 10.  
 Type-locality: Unknown.  
 Distribution: Bermuda; Bahamas; Florida Keys; Texas; Veracruz, Mexico, Jamaica; Puerto Rico; Virgin Islands; Guadeloupe; Martinique; Barbados; Curaçao; Fernando de Noronha, Brazil (Powers, 1977).
- Pseudomedaeus agassizii*** (A. Milne Edwards, 1880)  
 Description: Williams, 1984:400, figs. 314, 331d.  
 Type-locality: Florida Reefs, 21.9-32.9 m.  
 Distribution: Cape Hatteras, North Carolina, to southern Texas (Williams, 1984).
- Pseudomedaeus distinctus*** (Rathbun, 1898)  
 Description: Williams, 1984:400, figs. 315, 331e.  
 Type-locality: Gulf of Mexico, northwest Dry Tortugas, 25°33'N, 84°21'W, 184.7 m.  
 Distribution: Off Cape Hatteras, North Carolina, 34°57'N, 75°19'W, through Straits of Florida to northwest of Dry Tortugas; Puerto Rico; Barbados (Williams, 1984).
- Rhithropanopeus harrisii*** (Gould, 1841)  
 Description: Williams, 1984:401, figs. 316, 317, 331f.  
 Type-locality: Cambridge Marshes and Charles River, Massachusetts.  
 Distribution: The original range of this species is presumed to be in fresh to estuarine waters from the southwestern Gulf of St. Lawrence, Canada, to Veracruz, Mexico. The species has been introduced on the west coast of the United States and in parts of Europe (Williams, 1984).
- Tetraxanthus bidentatus*** (A. Milne Edwards, 1880)  
 Description: Rathbun, 1930:459, pl. 185 (As *T. rugosus*).—Chace, 1939:52.  
 Type-locality: Grenada, 168 m.  
 Distribution: Florida Keys; north and south coasts of Cuba; Grenada (Powers, 1977).
- Tetraxanthus rathbunae*** Chace, 1939  
 Description: Williams, 1984:406, fig. 321.  
 Type-locality: Old Bahama Channel due north Punta Caldera, Camaguey Province, Cuba, 22°44'N, 78°41'W, 274-329 m.  
 Distribution: Off Cape Lookout, North Carolina, to Rio de Janeiro, Brazil (Coelho and Ramos, 1972), including Gulf of Mexico (Pequegnat, 1970; Williams, 1984).

### **Xantho denticulata** White, 1847

Description: Monod, 1956:280, figs. 335-339.—Forest and Guinot, 1961:60, fig. 51.

Type-locality: West Indies.

Distribution: Bermuda; Bahamas; Florida Keys and Dry Tortugas; northwest Florida; Jamaica; Puerto Rico; Virgin Islands; Antigua; Barbados; Colon, Panama; Curaçao; Trinidad; Pernambuco to Abrolhos Islands, Brazil, Gulf of Guinea, west coast of Africa (Powers, 1977).

## **FAMILY GECARCINIDAE**

### **Cardisoma guanhumi** Latreille, 1825

Description: Rathbun, 1918:341, fig. 155, plates 106, 107.—Felder, 1973:79, pl. 12: figs. 1, 4.

Type-locality: Brazil.

Distribution: Bermuda; Bahamas; southeast Florida; Florida Keys; Louisiana and south Texas; eastern Mexico to Colombia; north and south coasts of Cuba; Jamaica; Puerto Rico; St. Thomas, Virgin Islands to Barbados; Trinidad; Netherlands Antilles; Colombia to São Paulo, Brazil (Powers, 1977).

### **Gecarcinus lateralis** (Freminville, 1835)

Description: Rathbun, 1918:355, fig. 161, pls. 119-120.—Turkay, 1973:974, fig. 2.

Type-locality: Martinique, Guadeloupe, Marie Galante, Desirde and Iles do Saintes.

Distribution: Bermuda; Bahamas; southeast Florida; Florida Keys; south Texas to north coast of Yucatan; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico; St. Thomas, Virgin Islands to Barbados; Netherlands Antilles; Honduras to Costa Rica; Caribbean coast of Colombia to Surinam (Powers, 1977).

### **Gecarcinus ruricola** (Linnaeus, 1758)

Description: Rathbun, 1918:352, text-fig. 160, pls. 117-118.—Chace, and Hobbs, 1969:200, figs. 66, 67 h-j.

Type-locality: America.

Distribution: Bahamas; southeast Florida; north and south coasts of Cuba; Cayman Islands; Jamaica; Navassa Island (Caribbean); Hispaniola; Puerto Rico; St. Croix to Barbados; Curaçao; Old Providence and Swan Islands (Caribbean) (Powers, 1977).

## **FAMILY GRAPSIDAE**

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

Description: Rathbun, 1918:323, pl. 96.—Chace and Hobbs, 1969:172, figs. 54, 58a.

Type-locality: Antilles.

Distribution: Bahamas; southeast to southwest Florida; north and south coasts of Cuba; New Province Island (Atlantic); Jamica; Puerto Rico; Virgin Islands to Guadeloupe; Netherlands Antilles; Belize; Rio Parahyba do Norte to São Paulo, Brazil; in eastern Pacific, Nicaragua to Peru (Powers, 1977).

### **Cyclograpsus integer** H. Milne Edwards, 1837

Description: Rathbun, 1918:326, pl. 97: figs. 1, 2.—Chace and Hobbs, 1969:173, figs. 55, 58b-d.

Type-locality: Brazil.

Distribution: Bermuda; Bahamas; south Florida; Florida Keys; Texas; Cuba; Jamaica; Hispaniola; Puerto Rico; St. Croix; Dominica; Islas Los Roques and Caribbean coast of Colombia; Ceara to Pernambuco, Brazil; eastern Atlantic, from Senegal to Zaire (Powers, 1977).

### **Euchirograpsus americanus** A. Milne Edwards, 1880

Description: Williams, 1984:461, fig. 370.

Type-locality: Barbados, 126.2 m, Blake Stn. 278. Distribution: Off Oregon Inlet, North Carolina, Florida through West Indies, and Colombia to Venezuela (Williams, 1984).

### **Euchirograpsus antillensis** Turkay, 1975

Description: Turkay, 1975:112, figs 4-5, 16a, 19, 25.

Type-locality: Cuba, Havana, Playa Baracoa, 23°04'30"N, 82°34'00"W, 414 m.

Distribution: Off Havana, Cuba; Arrowsmith Banks, between Cuba and Yucatan; south of Florida Keys; Bahamas (Powers, 1977).

### **Geograpsus lividus** (H. Milne Edwards, 1837)

Description: Rathbun, 1918:232, pl. 55.—Chace and Hobbs, 1969:157, figs. 48, 52a-c.

Type-locality: Antilles.

Distribution: Bermuda; Florida Keys, north and south coasts of Cuba; Jamaica; Puerto Rico; Virgin Islands to Barbados; Netherlands Antilles to Trinidad; Old Providence Island (Caribbean); Caribbean coast of Colombia to São Paulo, Brazil; eastern Atlantic, from Senegal to Angola; Cape Verde Islands; eastern Pacific, from southern part of Baja California to northern Chile; Clipperton Island; Galapagos Islands; Hawaiian Islands (Powers, 1977).

### **Goniopsis cruentata** (Latreille, 1802)

Description: Rathbun, 1918:237, fig. 136, pl. 57.—Chace and Hobbs, 1969:160, figs. 49, 52d-f.

Type-locality: Islands of South America.

Distribution: Bermuda; Bahamas; northwest Florida (rare); Tampico, Mexico; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico;

Virgin Islands to Barbados; Netherlands Antilles; Belize; Old Providence Islands (Caribbean); Surinam to Rio de Janeiro, Brazil; eastern Atlantic, from Senegal to northern Angola (Powers, 1977).

***Grapsus grapsus* (Linnaeus, 1758)**

Description: Rathbun, 1918:227, fig. 135, pls. 53, 54.—Chace and Hobbs 1969:163, figs. 50, 52 g-i.

Type-locality: America and Ascension Island.

Distribution: Bermuda; Bahamas; southeast and south Florida; Texas; north and south coasts of Cuba; Jamaica; Puerto Rico; Hispaniola; Virgin Islands to Barbados; Netherlands Antilles to Trinidad; Old Providence Island and Swan Island (Caribbean); Colombia to northern Brazil; eastern Atlantic, and from Portugal to Angola; Cape Verde Islands and Azores; St. Helena Island; Ascension Island; eastern Pacific from central Baja California to central Chile; Galapagos Islands; Clipperton Island (Powers, 1977).

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

Description: Rathbun, 1918:249, pl. 60: fig. 3, pl. 61: fig. 1.—Chace and Hobbs, 1969:167, figs. 51, 52j.

Type-locality: St. Thomas.

Distribution: Bermuda; Bahamas; south Florida; Texas; north and south coasts of Cuba; Jamaica; Puerto Rico; Virgin Islands; Caribbean coast of Columbia; Pernambuco to Bahia, Brazil; eastern Atlantic, from Senegal to Zaire (Powers, 1977)

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

Description: Williams, 1984:459, fig. 368.

Type-locality: Key West, (Florida).

Distribution: Cape Lookout, North Carolina, to Montevideo, Uruguay; Bermuda; Mediterranean Sea to northern Angola; eastern Pacific from California to Peru, Galapagos Islands (Williams, 1984).

***Percnon gibbesi* (H. Milne Edwards, 1853)**

Description: Williams, 1984:462, fig. 371.

Type-locality: Antilles.

Distribution: Fort Macon, North Carolina; southern Florida and Bahamas to Brazil; Bermuda; Azores to Angola; Cape San Lucas, Baja California, to Chile; Galapagos Islands (Williams, 1984).

***Plagusia depressa* (Fabricius, 1775)**

Description: Williams, 1984:463, fig. 372.

Type-locality: "In mari mediterraneo" (erroneous).

Distribution: Beaufort, North Carolina, through Gulf of Mexico and West Indies to Pernambuco, Brazil; Bermuda; Azores; Madeira; Morocco to northern Angola; St. Helena Island (Chace 1966; Williams, 1984).

***Planes minutus* (Linnaeus, 1758)**

Description: Chace, 1951:67, figs. 1a, 2a, d, g, j, k, l, 3a-h.

Type-locality: "Habitat in Palgi *Fuco natante*, supra aquam saepius cursitans".

Distribution: From off eastern North America (south of Newfoundland) through the eastern coast of America, Florida to Bahamas; West Indies.

***Platychiropgrapsus spectabilis* De Man, 1896**

Description: Monod, 1956:426, figs. 584-588.

Type-locality: Gabon.

Distribution: Gulf coast of Mexico; west coast of Florida (Powers, 1977); Gabon.

***Sesarma benedicti* Rathbun, 1897**

Description: Rathbun, 1918:316, pl. 93.—Abele, 1973:379, figs. 1A, 1G.

Type-locality: Surinam.

Distribution: Key West, Florida; Guyana and Surinam; Brazil (Powers, 1977).

***Sesarma cinereum* (Bosc, 1802)**

Description: Williams, 1984:465, fig. 373.

Type-locality: "La Caroline."

Distribution: Magothy River, Chesapeake Bay, Maryland, to Palm Beach, east Florida; Collier County, west Florida, to Veracruz Mexico (Abele, 1973). Older records from the West Indies and elsewhere are erroneous (Williams, 1984).

***Sesarma curaçaoense* De Man, 1892**

Description: Rathbun, 1918:293, fig. 147, pl. 78: figs. 1, 2, pl. 160: fig. 3.—Abele, 1973:380, figs. 1C, 1F.

Type-locality: Curaçao.

Distribution: Key West, Florida; south and southwest Florida; north coast of Cuba; Jamaica; Puerto Rico; Curaçao; Bahia, Brazil (Powers, 1977).

***Sesarma miersii* Rathbun, 1897**

Description: Abele, 1972a:166, figs. 1B, 1C, 2B, 2C; 1973:380, fig. 1I.

Type-locality: Bahamas.

Distribution: Bahamas; Key West, Florida; south coast of Cuba; Swan Island (Caribbean); Dominica (Powers, 1977).

***Sesarma reticulatum* (Say, 1817)**

Description: Williams, 1984:466, fig. 374.

Type-locality: Muddy salt marshes (east coast of United States).

Distribution: Woods Hole, Massachusetts, to Volusia County, east Florida; Sarasota, west Florida, to Calhoun County, Texas (Abele, 1973).

***Sesarma ricordi*** H. Milne Edwards, 1853  
Description: Chace and Hobbs, 1969:183, fig. 62k.—Abele, 1973:378, fig. 1J.  
Type-locality: Haiti.  
Distribution: Bermuda; Bahamas; southeast Florida; Florida Keys; west coast of Florida; north coast of Yucatan; Cuba; Jamaica; Hispaniola; Puerto Rico; Virgin Islands to Trinidad; Curaçao; Old Providence Island (Caribbean); Yucatan to Surinam (Powers, 1977).

## FAMILY PINNOTHERIDAE

***Dissodactylus borradalei*** Rathbun, 1918  
Description: Rathbun, 1918:121, fig. 68, pl. 27: figs. 5-8.  
Type-locality: Miami, Florida; 55 m.  
Distribution: Off southeast and southwest coasts of Florida; Jamaica (Powers, 1977).

***Dissodactylus crinitichelis*** Moreira, 1901  
Description: Williams, 1984:438, fig. 350.  
Type-locality: Estado de Rio Grande do Sul, Brazil.  
Distribution: Southeast of Cape Lookout, North Carolina off northwest Florida; Caribbean Sea and South America to Rio de la Plata, Argentina (Coelho and Ramos, 1972).

***Dissodactylus mellitae*** (Rathbun, 1900)  
Description: Williams, 1984:439, fig. 351.  
Type-locality: Pensacola, Florida, on *Mellita quinquesperforata*.  
Distribution: Western part of Vineyard Sound, Massachusetts, to Charleston, South Carolina; Hutchinson Island, east Florida (Camp et al., 1977); western Florida; off Galveston, Texas (Rogers 1968; Williams, 1984).

***Dissodactylus primitivus*** Bouvier, 1917  
Description: Milne Edwards and Bouvier, 1923:346, fig. 8, pl. 8: figs. 3, 4, pl. 9: fig. 1.  
Type-locality: West of Tortugas, Florida.  
Distribution: Known only from the type-locality.

***Dissodactylus rugatus*** Bouvier, 1917  
Description: A. Milne Edwards and Bouvier, 1923:238, fig. 9, pl. 8: figs. 5, 6, pl. 9: figs. 2.  
Type-locality: Dominique.  
Distribution: East coast of Florida; Dominica.

***Dissodactylus stebbingi*** Rathbun, 1918  
Description: Rathbun, 1918:123, fig. 69, pl. 28: figs. 1, 2.  
Type-locality: Sarasota Bay, Florida.  
Distribution: Virginia; west and northwest coasts of Florida (Powers, 1977).

***Fabia byssomiae*** (Say, 1818)  
Description: Rathbun, 1918:105, fig. 56, pl. 24: figs. 6, 8.  
Type-locality: Inhabits the *Byssomia distorta* (southern Atlantic coast of United States).  
Distribution: West coast of Florida; northwest coast of Cuba (Powers, 1977).

***Fabia tellinae*** Cobb, 1973  
Description: Cobb, 1973:70, figs. 1-2.  
Type-locality: Gulf of Mexico off NW Florida, 30°13'N 85°53'W, 12.2 m.  
Distribution: Off northwest Florida to Alabama.

***Orthotheres strombi*** (Rathbun, 1905)  
Description: Rathbun, 1918:90, fig. 45, pl. 20: figs. 1, 2.  
Type-locality: Clearwater Harbor, Florida.  
Distribution: West and northwest coasts of Florida (Powers, 1977).

***Parapinnixa bouvieri*** Rathbun, 1918  
Description: Williams, 1984:447, fig. 357.  
Type-locality: Off Cape Catoche, Yucatan (Mexico), 22°08'30"N, 86°53'30"W, 45.7 m, Albatross Stn. 2362.  
Distribution: Off Charleston, South Carolina; south of Tortugas, Florida; Puerto Rico; and the type-locality (Williams, 1984).

***Parapinnixa hendersoni*** Rathbun, 1918  
Description: Williams, 1984:448, fig. 358.  
Type-locality: Los Arroyos, Cuba.  
Distribution: Southeast Cape Lookout, North Carolina, 34°29'N, 76°13'W, 33 m; 34°34'N, 75°50'W, 64 m); off Tampa Bay, Florida, through West Indies to Curaçao; Maranhao to Bahia, Brazil (Coelho and Ramos, 1972).

***Pinnaxodes floridensis*** Wells and Wells, 1961  
Description: Williams, 1984:449, fig. 359.  
Type-locality: Outer beach near Fort Walton Beach, Florida.  
Distribution: Off North Carolina to Georgia; northwest Florida (Williams, 1984).

***Pinnixa chacei*** Wass, 1955  
Description: Wass, 1955:160, figs. 5-9.  
Type-locality: Gulf Beach, Alligator Point, Franklin County, Florida.  
Distribution: Northwest Florida; Louisiana and Texas (Powers, 1977).

***Pinnixa chaetopterana*** Stimpson, 1860  
Description: Williams, 1984:451, fig. 360.  
Type-locality: Charleston Harbor, South Carolina, on muddy or clayey shores in tubes of *Chaetopterus variopedatus*.

Distribution: Wellfleet, Massachusetts, to Rio Grande do Sul, Brazil (Williams, 1984).

***Pinnixa cristata*** Rathbun, 1900

Description: Williams, 1984:453, fig. 361.

Type-locality: Beaufort, North Carolina.

Distribution: Beaufort, North Carolina, to Edisto Island, South Carolina; Grande Isle, Louisiana, to Long Lake, Blackjack Peninsula, Aransas County, Texas (Hedgpeth, 1950; Williams, 1984).

***Pinnixa cylindrica*** (Say, 1818)

Description: Williams, 1984:453, fig. 362.

Type-locality: Jekyll Island, Georgia.

Distribution: North Falmouth, Massachusetts, to Pensacola, Florida (Cooley 1978), including Dry Tortugas (Williams, 1984).

***Pinnixa floridana*** Rathbun, 1918

Description: Williams, 1984:454, fig. 363.

Type-locality: Marco, Florida, also Sarasota Bay.

Distribution: Southeast off Cape Lookout, North Carolina; Hutchinson Island, east central Florida (Camp et al., 1977); west coast of Florida (Williams, 1984).

***Pinnixa leptosynaptae*** Wass, 1968

Description: Wass, 1968:137, figs. 1-6.

Type-locality: Bald Point at the entrance to Ochlockonee Bay, Franklin County, Florida.

Distribution: West coast of Florida (Powers, 1977).

***Pinnixa lunzi*** Glassell, 1937

Description: Glassell, 1937:3, figs. 1-8.—Williams, 1984:455, figs. 364- 365.

Type-locality: Isle of Palms (about 15 mi. NE of Charleston), South Carolina.

Distribution: Off Delmarva Peninsula, Virginia, North and South Carolina, Georgia; off Mississippi River delta and Seven and One-Half Fathom Reef off Texas near 26°51'N, 96°18'W (Williams, 1984).

***Pinnixa pearsei*** Wass, 1955

Description: Wass, 1955:164, figs. 10-13.

Type-locality: Indian Pass, Apalachicola, Florida.

Distribution: Northwest Florida (Powers, 1977).

***Pinnixa retinens*** Rathbun, 1918

Description: Williams, 1984:456, fig. 366.

Type-locality: Chesapeake Bay, off Poplar Island, Maryland, 36.6 m., soft bottom.

Distribution: Delaware Bay (Watling and Maurer, 1976); Little River Inlet, South Carolina, Alligator Harbor, Florida; Aransas area of Texas coast (Williams, 1984).

***Pinnixa sayana*** Stimpson, 1860

Description: Williams, 1984:457, fig. 367.

Type-locality: Mouth of Beaufort Harbor, North

Carolina, 10.97 m, sandy mud.

Distribution: Vineyard Sound, Massachusetts, to Beaufort, North Carolina; Hutchinson Island, east central Florida (Camp et al., 1977), Sarasota Bay, Florida, to Grand Isle, Louisiana; Amapa, Para, Pernambuco, São Paulo, Brazil (Williams, 1984).

***Pinnotheres hemphilli*** Rathbun, 1918

Description: Rathbun, 1918:99, fig. 51, pl. 23.

Type-locality: Cedar Keys, Florida.

Distribution: Cedar Keys, Florida.

***Pinnotheres maculatus*** Say, 1818

Description: Williams, 1984:441, Fig. 353.

Type-locality: Given as "Inhabits the muricated *Pinna* of our coast."

Distribution: Off Martha's Vineyard, Massachusetts, to Golfo San Matias, Argentina (Fenucci, 1975).

***Pinnotheres moseri*** Rathbun, 1918

Description: Rathbun, 1918:94, text-fig. 47, pl. 21: figs. 3, 4, fig. 47.

Type-locality: Port Royal, Jamaica.

Distribution: West coast of Florida; Jamaica.

***Pinnotheres ostreum*** Say, 1817

Description: Williams, 1984:444, figs. 354-356.

Type-locality: "United States" (see Schmitt, et al., 1973); these authors mentioned six probable syntypes from the United States and Virginia in the British Museum (Natural History) and that, according to DeKay (1844), Say's specimen was from New Jersey.

Distribution: Salem, Massachusetts, to Santa Catarina, Brazil.

***Pinnotheres shoemakeri*** Rathbun, 1918

Description: Rathbun, 1918:95, fig. 48, pl. 22: figs. 1-4.

Type-locality: St. Thomas.

Distribution: West coast of Florida; St. Thomas, Virgin Islands.

## FAMILY OCYPODIDAE

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

Description: Williams, 1984:468, fig. 375.

Type-locality: Jamaica.

Distribution: Block Island, Rhode Island, to Santa Catarina, Brazil (megalopae have been taken at Woods Hole); Bermuda; Fernando de Noronha (Williams, 1984).

***Uca burgersi*** Holthuis, 1967

Description: Crane, 1975:168, figs. 26F, 31H, 54G, 66F, 100, pl. 24E-H, map 12.

Type-locality: Plantage Knip, Westpunt, Curaçao, Netherlands Antilles.

Distribution: Bahamas; east coast of Florida; northeast (Gulf) coast of Yucatan; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico; St. Thomas, Virgin Islands to Trinidad; Curaçao; east coast of Yucatan to Guatamala; Caribbean coast of Panama; Venezuela to Rio de Janeiro, Brazil (Powers, 1977).

***Uca leptodactyla* Rathbun, 1898**

Description: Crane, 1975:304, figs. 37M, 56F, 60N-0, 69K-L, 101, map 17, pl. 41A-D.

Type-locality: Near Fort Montague, Nassau, New Province, Bahamas.

Distribution: West coast of Florida (not recently); east coast of Yucatan; north coast of Cuba; Jamaica; Puerto Rico; St. Croix; Curaçao; Venezuela to Santa Catarina, Brazil (Powers, 1977).

***Uca longisignalis* Salmon and Atsaides, 1968**

Description: Salmon and Atsaides, 1968:279, figs. 1-4, 6, 7.

Type-locality: Ocean Springs, Mississippi.

Distribution: Northwest Florida to south Texas (Powers, 1977).

***Uca minax* (Le Conte, 1855)**

Description: Williams, 1984:473, fig. 377a.

Type-locality: Beesleys Point, New Jersey.

Distribution: Buzzards Bay (Wareham and southwestern Cape Cod), Massachusetts, to northeast Florida, and from the area of Yankeetown, northwest Florida, to Louisiana, and on to Matagorda Bay, Texas (Williams, 1984).

***Uca panacea* Novak and Salmon, 1974**

Description: Novak and Salmon, 1974:316, figs. 1-8.

Type-locality: Panacea, Florida.

Distribution: Northwest Florida to south Texas.

***Uca pugillator* (Bosc, 1802)**

Description: Williams, 1984:475, figs. 376, 377c.

Type-locality: "Caroline."

Distribution: Cape Cod, Massachusetts; (rare on the north shore) southward around the tip of Peninsular Florida to near Pensacola (Heard, 1982); Old Providence Island, Bahamas, and Santo Domingo (Crane, 1975; Williams, 1984).

***Uca pugnax* (Smith, 1870)**

Description: Williams, 1984:478, fig. 377b.

Type-locality: New Haven, (Connecticut).

Distribution: Provincetown, Massachusetts, to Daytona Beach, Florida (Williams, 1984).

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

Description: Crane, 1975:190, figs. 52c-D, 54F, 67C, 86, 91E-F, 100, pls. 27A-D, 45C-F, map 14.

Type-locality: Atlantic coast of Panama: Aspinwall.

Distribution: Bahamas; east coast of Florida; Florida Keys; southwest coast of Florida; northeast coast of Mexico to northeast Yucatan; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico; St. Thomas, Virgin Islands to Trinidad and Tobago; Netherlands Antilles; east coast of Yucatan to Guatamala; Caribbean coast of Panama to Santa Catarina, Brazil (Powers, 1977).

***Uca speciosa* (Ives, 1891)**

Description: Crane, 1975:236, figs. 68G, 101, map 15, pl. 31 A-D.

Type-locality: Port of Silam, Yucatan.

Distribution: Southeast Florida; Florida Keys; west and northwest coasts of Florida; northeast Yucatan and northwest Cuba (Powers, 1977).

***Uca spinicarpa* Rathbun, 1900**

Description: Rathbun, 1918:411, pl. 148.—Crane, 1975:239, figs. 68k, 101, pl. 31E-H, map 15.

Type-locality: Galveston.

Distribution: Alabama to northeastern coast of Mexico (Powers, 1977). Pensacola area, Florida (personal communication, P. M. Mikkelsen).

***Uca thayeri* Rathbun, 1900**

Description: Crane, 1975:112, figs. 46K, 56E, 60H-I, 73A-B, 81I, 82I, 99, map 11, pl. 17.

Type-locality: Rio Parahyba do Norte at Cabedello, Brazil.

Distribution: East and southwest coasts of Florida; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico; Guadeloupe; Trinidad; Tobago; Guatamala and Panama (Caribbean coasts) Venezuela to São Paulo, Brazil.

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

Description: Crane, 1975:27, figs. 66D, 100, pl. 23E-G, pl. 24A-D, map 13.

Type-locality: "Amerika" (restricted by neotype selection of Holthuis, 1959, to Bank of Suriname River at Leosberg, Surinam).

Distribution: Tampico, Mexico; Belize to Guyana; Puerto Rico; Santo Domingo; Guadeloupe; Dominica; Trinidad and Tobago; Paraíba to Pernambuco, Brazil; ?Santa Catarina, Brazil.

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

Description: Rathbun, 1918:347, fig. 158, pl. 110-113, pl. 159: figs. 3, 4.

Type-locality: America.

Distribution: Bahamas; southeast Florida; northeast Mexico to Panama; north and south coasts of Cuba; Jamaica; Hispaniola; Puerto Rico; St. Thomas, Virgin Islands to Grenada; Colombia to Santa Catarina, Brazil.

## FAMILY PALICIDAE

*Palicus affinis* A. Milne Edwards and Bouvier, 1899

Description: Rathbun, 1918:196, fig. 121, pl. 46, pl. 47: fig. 3.

Type-locality: Santa Cruz, 210 m.

Distribution: Southeast and west coasts of Florida; Dry Tortugas; Virgin Islands; Barbados; Guianas to Espírito Santo, Brazil (Powers, 1977).

*Palicus alternatus* Rathbun, 1897

Description: Williams, 1984:482, fig. 378.

Type-locality: 29°11'30"N, 85°29'00"W, 47.6 m. (south of Cape San Blas, Florida).

Distribution: Cape Hatteras to SE Cape Fear, North Carolina; Gulf of Mexico along west coast of Florida from Cape San Blas to Key West (Williams, 1984).

*Palicus cristatipes* (A. Milne Edwards, 1880)

Description: Rathbun, 1918:186, fig. 116.

Type-locality: Grenada, 166 m.

Distribution: Off Grenada, Windward Islands. Florida (personal communication, P. A. McLaughlin).

*Palicus cursor* (A. Milne Edwards, 1880)

Description: Rathbun, 1918:215, figs. 130-131, pl. 52: figs. 1, 2.

Type-locality: Sand Key, Havana, St. Kitts, Dominique, Barbados, 252-448 m.

Distribution: North Carolina; Florida Keys; west and northwest coasts of Florida; north coast of Cuba; St. Christopher; Dominica; Barbados (Powers, 1977).

*Palicus dentatus* A. Milne Edwards, 1880

Description: Rathbun, 1918:202, fig. 124.

Type-locality: Charlotte Harbor, 91 m, and Barbados, 110-176 m.

Distribution: Florida Keys; west coast of Florida; off Alabama; off Barbados (Powers, 1977).

*Palicus faxonii* Rathbun, 1897

Description: Williams, 1984:483, fig. 379.

Type-locality: Off Cape Hatteras, North Carolina, 89.6 m.

Distribution: Off Cape Hatteras, North Carolina, to near Cape Canaveral, Florida; off Yucatan, Mexico;

near Quita Sueno Banks; southwest St. Christopher; off Cabo Frio, Rio de Janeiro (Williams, 1984).

*Palicus floridana* (Rathbun, 1918)

Description: Rathbun, 1918:220, pl. 41: figs. 3, 4.

Type-locality: Off Sand Key, Florida; 216 m.

Distribution: Known only from the type-locality.

*Palicus gracilis* (Smith, 1883)

Description: Rathbun, 1918:218, text-fig. 132, pl. 50, pl. 51: fig. 1.

Type-locality: Martha's Vineyard, Massachusetts, 260 m.

Distribution: Off Massachusetts; east coast of Florida; northwest Florida; Louisiana to central east coast of Mexico; north coast of Cuba; Curaçao (Powers, 1977).

*Palicus obesus* (A. Milne Edwards, 1880)

Description: Rathbun, 1918:205, fig. 125, pl. 49.

Type-locality: 23°13'N, 89°16'W, 154 m.

Distribution: Off northwest Florida and Mississippi; Campeche, Mexico (Powers, 1977).

*Palicus sica* (A. Milne Edwards, 1880)

Description: Williams, 1984:483, fig. 380.

Type-locality: Barbados, 150 m, Blake Stn. 293.

Distribution: Off Charleston, South Carolina, to northeast Cape Canaveral, Florida; west coast of Florida through West Indies to Barbados and Grenada (Williams, 1984).

## FAMILY CRYPTOCHIRIDAE

*Pseudocryptochirus corallicola* (Verrill, 1908)

Description: Shaw and Hopkins, 1977:178, figs. 2b, 3b.

Type-locality: Dominica.

Distribution: Known only from Western Atlantic: Dominica Island on *Mussa*; Bermuda Islands on *Mussa*, *Meandra* (=*Manicina*) and *Dichocognia*; Dry Tortugas, Florida on *Meandra* (=*Manicina*) *areolata* and *Meandrina*; Florida Middle Ground on *Scolymia lacera*, multiple polyp *Scolymia*, and *Manicina areolata* (Shaw and Hopkins, 1977)

*Pseudocryptochirus hypostegus* Shaw and Hopkins, 1977

Description: Shaw and Hopkins, 1977:179, figs. 1, 2a, 3a.

Type-locality: Florida Middle Ground about 137 km west of Tarpon Springs, Florida 28°30'49"N, 84°20'30"W, 27 m, from *Agaricia fragilis*.

Distribution: Known only from the eastern Gulf of Mexico on the Florida Middle Ground, in 25-30 meters, on *Agaricia fragilis* (Shaw and Hopkins, 1977).

## ADDENDUM

The records cited below came to our attention or were published after this volume was completed.

### FAMILY PALAEMONIDAE

#### *Neopontonides chacei* Heard, 1986

Description: Heard, 1986:472, figs. 1A, 2, 3, 4B-D.  
Type-locality: Reef south of Marigot Bay, St. Lucia Island.

Distribution: Florida Keys south to Carrie Bow Cay, Belize, on the gorgonian *Pseudopterogorgia americana*.

#### *Periclimenaeus bredini* Chace, 1972

Description: Chace, 1972:26, fig. 5  
Type-locality: Isla Mujeres off the Yucatan Peninsula.  
Distribution: Known from the type-locality and the Florida Middle Grounds (Dardeau, 19084) where it was collected from a sponge.

#### *Pontonia mexicana* Guérin-Méneville, 1855

Description: Holthuis, 1951b:130, pl. 41.  
Type-locality: Mexico (Holthuis, 1951b).  
Distribution: Bahamas and Dry Tortugas; east coast of Mexico; West Indies (Chace, 1972)

#### *Pseudopontonides principis* (Crailes, 1980)

Description: Crailes, 1980:68.—Heard, 1986:481, figs. 5A-F.  
Type-locality: Awa di Oostpunt, Curacao.  
Distribution: Northeastern Gulf of Mexico; Puerto Rico; Bonaire and Curacao. On antipatharians.

### FAMILY ALPHEIDAE

#### *Alpheus bahamensis* Rankin, 1898

Description: Zimmer, 1913:405, figs. U<sup>1</sup>-Z<sup>1</sup> (as *A. hippothoe* var. *edamensis*?).—Chace, 1972:58.  
Type-locality: New Providence Island, Bahamas.  
Distribution: Bermudas; Dry Tortugas; Yucatan Peninsula; West Indies (Chace, 1972).

#### *Fenneralpheus chacei* Felder and Manning, 1986

Description: Felder and Manning, 1986:498, figs. 1-3.  
Type-locality: Fort Pierce Inlet, St. Lucie County, Florida.

Distribution: Fort Pierce and Key West, Florida (Felder and Manning, 1986).

#### *Salmoneus cavicolus* Felder and Manning, 1986

Description: Felder and Manning, 1986:503, figs. 4-6.

Type-locality: South side of Fort Pierce Inlet, St. Lucie County, Florida.

Distribution: Known only from the type-locality.

#### *Synalpheus scaphoceris* Coutière, 1910

Description: Dardeau, 1986:491, figs. 1-3.

Type-locality: Dry Tortugas, Florida.

Distribution: Gulf of Mexico; Isla de Lobos, West Flower Garden Bank, Florida Middle Grounds, off Sanibel Island, Dry Tortugas; Caribbean; Puerto Rico and Curacao; Brazil (Dardeau, 1986).

### FAMILY GONEPLACIDAE

#### *Chasmocarcinus chacei* Felder and Rabalais, 1986

Description: Felder and Rabalais, 1986:548, figs. 1, 2a-g, 3a-h.

Type-locality: Vicinity of Flower Garden Banks, northwestern Gulf of Mexico (27°53.97'N, 93°34.79'W, 126 m).

Distribution: Gulf of Mexico from the Texas coast to Dry Tortugas, Florida; possibly off Anguilla (Felder and Rabalais, 1986).

#### *Speocarcinus carolinensis* Stimpson, 1859

Description: Williams, 1984:437, fig. 349.—Felder and Rabalais, 1986:572, figs. 11d-f, 12.

Type-locality: Charleston Harbor, South Carolina.

Distribution: South of Cape Hatteras, North Carolina, through the West Indies to Amapá, Brazil (Williams, 1984). Dry Tortugas and the Margueres Keys, Florida (Felder and Rabalais, 1986).

## Key to families of Florida decapods

[Based on Rathbun, 1918, 1930, 1937, Barnard, 1950,  
Holthuis, 1955, and Williams, 1984]

1. General form shrimplike, usually compressed; pleuron of second somite never overlapping that of first somite; first 3 pairs of pereopods usually chelate (except in some Sergestoidea), third pair never unusually robust..... 2  
General form shrimplike, lobsterlike, or crablike; if shrimplike with pleuron of second abdominal somite overlapping that of first somite and third pair of pereopods not chelate or unusually enlarged (except Stenopodidae, with pleuron of second abdominal somite not overlapping that of first somite; third pereopods chelate, stronger than preceding) .. 8
2. (1) Fourth and fifth pereopods well developed ..... 3  
Fourth and fifth pereopods reduced or absent ..... 7
3. (2) Postorbital spine present ..... **Solenoceridae** (page 75)  
Postorbital spine absent ..... 4
4. (3) Integument rigid, of stony appearance; cervical groove very faint or absent ..... **Sicyoniidae** (page 109)  
Integument more or less flexible, not stony and rigid in appearance; cervical groove present and easily discerned ..... 5
5. (4) Eyestalks without tubercles on their mesial (inner) borders; epipods absent behind third pereopods ..... **Penaeidae** (page 71)  
Eyestalks each with tubercle on its mesial (inner) border; epipods on all coxae from second maxillipeds through fourth pereopods..... 6
6. (5) Distal, filamentous portion of upper antennular flagellum extensively developed..... **Benthesicymidae** (page 70)  
Distal, filamentous portion of upper antennular flagellum not extensively developed..... **Aristeidae** (page 70)

7. (2) Anterior region of cephalothorax not greatly elongate; gills present .....  
..... **Sergestidae** (page 79)
- Anterior region of cephalothorax greatly elongate; gills absent.....  
..... **Luciferidae** (page 80)
8. (1) Form shrimplike; usually with body compressed..... 9
- Form lobsterlike or crablike ..... 24
9. (8) Pleuron of second abdominal somite not overlapping that of first somite;  
third pereopods chelate, stronger than preceding .....  
..... **Stenopodidae** (page 116)
- Pleuron of second abdominal somite overlapping that of first somite; third  
pair of pereopods never chelate ..... 10
10. (9) First pair of pereopods chelate or simple..... 11
- First pair of pereopods subchelate ..... 23
11. (10) Fingers of all four chelae slender, their cutting edges pectinate.....  
..... **Pasiphaeidae** (page 82)
- Cutting edges of fingers of chelae not all pectinate..... 12
12. (11) Carpi of second pair of pereopods entire; first pair of pereopods always  
with well-developed chelae ..... 13
- Carpi of second pair of pereopods usually subdivided into two or more  
segments; if not, first pair of pereopods not chelate..... 19
13. (12) First pair of pereopods stronger and heavier though often shorter than  
second ..... 14
- First pair of pereopods usually more slender than, rarely subequal to,  
second ..... 16
14. (13) Ends of fingers of first two pairs of pereopods not dark colored; ultimate  
segment of second maxilliped placed at end of penultimate segment;  
exopod of first maxilliped without flagellum ..... **Bresiliidae** (page 83)
- Ends of fingers of first two pairs of pereopods dark colored; ultimate  
segment of second maxilliped applied as strip alongside of penultimate  
segment; exopod of first maxilliped with distinct flagellum ..... 15

15. (14) Rostrum immovable; exopods on pereopods.....  
..... **Eugonatonotidae** (page 83)
- Rostrum movable; no exopods on pereopods.....  
..... **Rhynchocinetidae** (page 83)
16. (13) Pereopods usually with exopods; if not, fingers of chelae with terminal brushes of long hairs..... 17
- Pereopods without exopods; chelae without terminal brushes of long hairs  
..... 18
17. (16) Mandible without palp; fingers of chelae usually with conspicuous terminal brushes of hairs; last three pairs of pereopods not conspicuously lengthened; pereopods with or without exopods ..... **Atyidae** (page 81)
- Mandible with palp; fingers of chelae without terminal brushes of hairs; pereopod with exopods (last three pairs of pereopods not conspicuously lengthened; carpi of these pereopods distinctly shorter than propodi) .....  
..... **Oplophoridae** (page 81)
18. (16) Mandible usually with incisor process; if not, third maxilliped not expanded or leaf-like ..... **Palaemonidae** (page 85)
- Mandible without incisor process; third maxillipeds expanded and leaf-like  
..... **Gnathophyllidae** (page 84)
19. (12) Chelae of first pair of pereopods microscopically small or absent (mandible bifid, with palp; rostrum laterally compressed, distinctly dentate) ..... **Pandalidae** (page 112)
- Chelae of first pair of pereopods distinct, at least on one side ..... 20
20. (19) First pair of pereopods both chelate; rostrum dentate or unarmed, not with single subdistal dorsal tooth ..... 21
- Usually right first pereopod chelate, the other ending in simple claw-like dactyl; if both chelate, rostrum with subdistal dorsal tooth.....  
..... **Processidae** (page 110)
21. (20) Ends of fingers of first pair of chelae usually dark colored; first pair of chelipeds short and rather heavy but not swollen; eyes free, never extremely elongate..... **Hippolytidae** (page 105)
- Ends of fingers of first pair of chelae not dark colored; eyes either extremely long or partly or wholly covered by carapace ..... 22

22. (21) Eyes extremely elongate, reaching almost to end of antennular peduncle; cornea small; first pair of pereopods shorter than and about as robust as second ..... **Ogyrididae** (page 110)
- Eyes usually partly or wholly covered by carapace, never very elongate; first pair of pereopods distinctly stronger than second, often unequal and swollen..... **Alpheidae** (page 95)
23. (10) Carpi of second pair of pereopods multi-articulate .....  
..... **Glypocrangonidae** (page 115)
- Carpi of second pair of pereopods not subdivided .....  
..... **Crangonidae** (page 114)
24. (8) Body lobsterlike and strongly calcified; abdomen with pleura well developed; first three pairs of pereopods either all chelate or none chelate ..... 25
- Body crablike or lobsterlike, sometimes weakly calcified in part; pleura often reduced or absent; first three pairs of pereopods never alike; first, second, or first and second pereopods chelate or subchelate ..... 28
25. (24) First three pairs of pereopods chelate, first largest; uropods well developed, lateral ramus (uropodal exopod) transversely divided .....  
..... **Nephropidae** (page 117)
- First three pairs of pereopods never chelate; uropods well developed, lateral ramus without transverse division ..... 26
26. (25) Carapace with small rostrum; first pereopods much larger than others (body tubular; antennae cylindrical, shorter than body).....  
..... **Synaxiidae** (page 128)
- Carapace without rostrum; first pereopods not enlarged except in Justitia ..... 27
27. (26) Carapace subcylindrical; antennal flagella long, strong, and spiny .....  
..... **Palinuridae** (page 125)
- Carapace more or less flattened dorsoventrally, lateral margins sharp; antennae short, flagella replaced by plates with dentate or lobulate margins ..... **Scyllaridae** (page 126)

28. (24) Either lobsterlike or crablike; abdomen extended, bent upon itself, or flexed beneath thorax; last thoracic sternite free; uropods present; carapace not fused with epistome; first, second, or first 2 pairs of pereopods chelate or subchelate ..... 29
- Crablike; abdomen permanently flexed beneath carapace; last thoracic sternite fused with preceding; uropods rarely present, never biramous; carapace fused with epistome; first pair of pereopods chelate or subchelate ..... 40
29. (28) Second to fourth pereopods with dactyli conspicuously curved and flattened; abdomen much reduced in size and flexed beneath thorax ..... 30
- Second to fourth pereopods with dactyli not conspicuously curved and flattened; abdomen well developed but may be flexed beneath thorax..... 31
30. (29) First pair of pereopods subchelate; carapace depressed .....  
**Albuneidae** (page 148)
- First pair of pereopods simple; carapace subcylindrical .....  
**Hippidae** (page 149)
31. (29) Abdomen usually asymmetrical (rarely secondarily straightened), usually membranous and with uropods adapted for holding body in hollow objects; rarely leathery, unprotected, and bent under thorax ..... 32
- Abdomen symmetrical and obviously segmented; uropods well developed for swimming, never for holding body in hollow objects ..... 35
32. (31) Third maxillipeds approximated at base; chelipeds subequal, or left much larger than right, rarely with right slightly larger than left ..... 33
- Third maxillipeds widely separated at base by sternum; right cheliped usually much larger than left, left never larger than right, occasionally subequal ..... 34
33. (32) Ventral antennular flagellum ending in filament .....  
**Diogenidae** (page 129)
- Ventral antennular flagellum ending bluntly ... **Coenobitidae** (page 128)

34. (32) Carapace firm anteriorly, more or less membranous posteriorly; rostrum obsolete or nearly so; fourth pereopods unlike third .....  
..... **Paguridae** (page 134)
- Carapace firm all over, spiny in many species; rostrum more or less spiniform; fourth pereopods like third..... **Lithodidae** (page 133)
35. (31) Body subcylindrical; first two pairs of pereopods chelate or subchelate (first only in Upogebiidae); abdomen extended ..... 36
- Body slightly depressed; only first pereopods chelate; abdomen bent under thorax ..... 38
36. (35) No *linea thalassinica*; both movable and fixed antennal thorns present; first pereopods strongly chelate and conspicuously hairy .....  
..... **Axiidae** (page 118)
- Linea thalassinica* present; fixed antennal thorn absent; first pereopods chelate or subchelate but not conspicuously hairy ..... 37
37. (36) First pereopods chelate; rostrum inconspicuous or absent .....  
..... **Callianassidae** (page 122)
- First pereopods subchelate; rostrum well developed, dorsally flattened, spiny, and hairy..... **Upogebiidae** (page 124)
38. (35) Form somewhat lobsterlike; rostrum extended, well developed; abdomen loosely flexed beneath posterior thorax; third maxilliped pediform .... 39
- Form crablike (*Euceramus elongate*) with abdomen completely folded under thorax; rostrum short and broad or wanting; third maxilliped flattened, operculiform ..... **Porcellanidae** (page 144)
39. (38) Antennal peduncle composed of four movable segments; telson subdivided into two or more plates, not folded sharply against itself, without lateral indentation .....  
..... **Galatheidae** (page 141)
- Antennal peduncle with five segments, third segment not being fused with second; telson never subdivided into two or more plates, folded sharply against itself, with lateral indentation..... **Chirostylidae** (page 141)
40. (28) Mouth-frame (buccal cavity) triangular ..... 41
- Mouth-frame (buccal cavity) more or less quadrate..... 46

41. (40) Posterior thoracic sternites narrow, keel-like (bases of 2nd-4th pereopods close together); last pair of pereopods dorsal in position; female genital openings coxal (body elongate in dorsal view, subcylindrical; pereopods adapted for burrowing; orbits hidden ventrolaterally if present; *linea homolica* absent)..... **Raninidae** (page 153)
- Posterior thoracic sternites broad (bases of walking legs far apart); last pair of pereopods normal in position, or last two pairs dorsal; female genital openings sternal (except in Cyclodorippidae) ..... 42
42. (41) Carapace subquadrilateral or subcircular, short, leaving the first 2 or 3 abdominal segments exposed; last two pairs of pereopods dorsal in position, ending in hook-like movable fingers ..... 43
- Carapace of usual crablike shape..... 45
43. (42) Third maxilliped leaving all anterior part of buccal cavity uncovered.....  
..... **Dorippidae** (page 154)
- Third maxilliped greatly elongate and not leaving any appreciable portion of buccal cavity uncovered ..... 44
44. (43) Third maxilliped with flagellum..... **Cymonomidae** (page 151)
- Third maxilliped without flagellum..... **Cyclodorippidae** (page 151)
45. (42) Afferent opening to each gill chamber in front of base of cheliped .....  
..... **Calappidae** (page 154)
- Afferent opening to each gill chamber at base of outer (third) maxilliped ..... **Leucosiidae** (page 157)
46. (40) Last pair of pereopods abnormal, dorsal; female openings coxal; first abdominal limbs of female present; gills usually many ..... 47
- Last pair of pereopods normal, rarely reduced, not dorsal, except in *Palicus* (Palicidae) and *Retropluma*; female openings sternal; first abdominal limbs of female wanting; gills few ..... 50
47. (46) Sternum of female with longitudinal grooves; vestiges of sixth abdominal limbs usually present; eyes usually completely sheltered by orbits when retracted ..... 48
- Sternum of female without longitudinal grooves; no vestiges of sixth abdominal limbs; eyes incompletely or not at all sheltered by orbits when withdrawn against body..... 49

48. (47) Vestiges of sixth abdominal limbs present (except in *Hypoconcha*, where also no mastigobranchs are present); carapace usually not longer than broad, with well-marked side edge [mastigobranchs on first pereopods (chelipeds) only or none] ..... **Dromiidae** (page 150)

No vestige of sixth abdominal limbs; carapace longer than broad, with ill-marked side edge; first three pereopods with mastigobranchs, fourth and fifth small, subdorsal, and prehensile ..... **Homolodromiidae** (page 151)

49. (47) Body rectangular; basal article of eyestalk not much longer than terminal article ..... **Homolidae** (page 152)

Body pyriform; basal article of eyestalk much longer than terminal article ..... **Latreilliidae** (page 152)

50. (46) Forepart of body narrow, usually forming distinct rostrum; body more or less triangular; orbits generally incomplete..... 51

Forepart of body broad; rostrum usually reduced or wanting; body oval, round, or square; orbits nearly always well enclosed ..... 52

51. (50) Chelipeds not much larger than other pereopods; hooked hairs almost always present; second segment of antenna well developed, usually fused with epistome and front ..... **Majidae** (page 160)

Chelipeds very much larger than other pereopods; hooked hairs almost always absent; second segment of antenna small, short, and not fused with epistome or front..... **Parthenopidae** (page 174)

52. (50) Merus of third maxilliped small, bearing terminally carpus of nearly its own width; ischium very broad; body somewhat oblong; antennule not retractile into sockets; parasitic on corals..... **Cryptochiridae** (page 208)

Carpus of third maxilliped articulate at or near antero-lateral angle of merus; body usually rounded or transversely oval; male openings nearly always coxal; right chela larger than left in many species ..... 53

Carpus of third maxilliped not articulating at or near inner angle of merus; body usually square or squarish; male openings sternal except in *Retropluma*, where duct passes along a sternal groove to coxopodite; right chela almost never larger than left (except Palicidae) ..... 57

53. (52) Pereopods more or less distinctly adapted for swimming; usually a small lobe on inner angle of endopod in first maxillipeds; first antenna fold slanting or transverse ..... **Portunidae** (page 177)

Pereopods not adapted for swimming, or if so modified, then male genital duct opening sternally or running in sternal groove; inner lobe on endopod in first maxillipeds wanting ..... 54

54. (53) Antennule folds lengthwise ..... 55

Antennule folds slanting or transversely ..... 56

55. (54) Carapace subcircular; antennal flagella either long and hairy or wanting ..... **Atelecyclidae** (page 176)

Carapace broadly oval or hexagonal; antennal flagella present, short, not hairy ..... **Cancridae** (page 175)

[The following three families are not sharply separated.]

56. (54) Carapace usually transversely oval or transversely hexagonal (xanthoid); male openings coxal; male abdomen greatly narrowed in segments 4-7; tending to occur in shallow water ..... **Xanthidae** (page 184)

Carapace subquadrate to xanthoid; male openings coxal with genital duct lying in groove between sternites 7 and 8 or sternal; male abdomen somewhat more triangular than above; part of sternite 8 visible from above at level of second abdominal segment but variable in size (some species in above family share this character); tending to occur in deeper water near edge of continental shelf ..... **Goneplacidae** (page 181)

Carapace hexagonal to trapezoidal in shape, with anterolateral margins generally armed with three to five teeth, with front bearing four short teeth; orbits and eyes well developed; antennules transverse or transversely oblique; basal antennal article movable and not reaching front of carapace; genital openings in male coxal; pereopods long and compressed ..... **Geryonidae** (page 175)

57. (52) Small, usually commensal crabs, with very small eyes and orbits; body usually more or less rounded ..... **Pinnotheridae** (page 199)

Free-living crabs, with eyes not especially reduced and usually square body ..... 58

58. (57) Last pair of pereopods dorsally placed and weaker than others; interantennular septum very thin; no distinct epistome; exopod of third maxilliped not hidden ..... **Palicidae** (page 207)
- Last pair of pereopods not dorsally placed or markedly weaker than others; interantennular septum not very thin ..... 59
59. (58) Gap of greater or less size between third maxillipeds; front very or moderately broad ..... 60
- Third maxillipeds almost or quite close to mouth; front moderately or very narrow ..... **Ocypodidae** (page 204)
60. (59) Sides of body either straight or very slightly arched; shape squarish; front broad ..... **Grapsidae** (page 196)
- Sides of body strongly arched; shape transversely oval; front narrow.....  
..... **Gecarcinidae** (page 195)

# Keys to Species of Florida Decapods

## Suborder Dendrobranchiata

### Family Aristeidae

Key to genera and species  
[Based on Roberts and Pequegnat, 1970]

Hepatic spine absent (epipod on fourth pereopod large; podobranch on third pereopod large; rostrum tridentate).....  
..... *Plesiopenaeus edwardsianus*

Hepatic spine present (podobranch on third pereopod and epipod on fourth pereopod well developed) ..... *Aristaeomorpha foliacea*

### Family Benthesicymidae

Genus **Betheogennema** Burkenroad, 1936  
[based on Roberts and Pequegnat, 1970]

Podobranchs present on first maxilliped through third pereopod;  
telson with more than single pair of movable lateral spinules but  
without posteriomedian point ..... *B. intermedia*

## Family Penaeidae

Key to genera and species  
[Adapted from Pérez Farfante, 1978]

1. Rostrum toothed on dorsal margin, usually also on ventral margin; pleurobranch present on last thoracic somite..... 2  
Rostrum toothed on dorsal margin only; no pleurobranch on last thoracic somite 3
  2. (l) Carapace hairy ..... *Funchalia villosa*  
Carapace smooth..... *Penaeus*
  3. (l) Telson tridentate, with fixed spine on each side of tip; mesial border of first segment of antennular peduncle bearing spine (parapenaeid spine) ..... 4  
Telson usually without fixed spines; no spine on mesial border of first segment of antennular peduncle ..... 6
  4. (3) Carapace with longitudinal and transverse sutures..... *Parapenaeus*  
Carapace without longitudinal or transverse sutures..... 5
  5. (4) Male with symmetrical petasma; single arthrobranch on last thoracic somite, no trace of second arthrobranch..... *Penaeopsis serrata*  
Male with asymmetrical peasma; 2 arthrobranches present on last thoracic somite, one of them well developed, other vestigial ..... *Metapenaeopsis*
  6. (3) Dactyli of fourth and fifth pairs of pereopods elongate and subdivided ..... *Xiphopenaeus kroyeri*  
Dactyli of fourth and fifth pairs of pereopods of normal shape and undivided.... 7
  7. (6) Carapace without longitudinal sutures ..... *Trachypeneopsis mobilispinus*  
Carapace with longitudinal sutures (upper antennular flagella shorter than carapace and not much longer than lower flagella; fourth and fifth pairs of pereopods about as heavy as 3 anterior pairs; exopod of fifth pair of pereopods well developed) ....  
..... *Trachypenaeus*

## **Genus *Metapenaeopsis* Bouvier, 1905**

### Key to species

[Adapted from Pérez Farfante, 1971]

1. Thelycum with median plate bearing horseshoe-shaped marginal strip and coiled lateral strips; petasma with distoventral projection cleft by deep sinus into 2 long, subequal lobes..... *M. smithi*
  
- Thelycum with median plate lacking marginal and coiled strips; petasma with distoventral projection simple, forming one single lobe or cleft by shallow sinus into 2 short, subequal, or into 2 unequal lobes ..... 2
  
2. (1) Thelycum with anterior part of median plate convex, bearing 2 large pits; petasma with distoventral projection mittenlike in outline, large left lobe extending distally far beyond small right lobule..... *M. gerardoi*
  
- Thelycum with anterior part of median plate long, half or more as long as median plate; petasma with distoventral projection cleft into 2 unequal lobes, right lobe noticeably larger than left ..... *M. goodei*

## **Genus *Parapenaeus* Smith, 1886**

### Key to species

[Adapted from Roberts and Pequegnat, 1970]

- Branchiostegal spine present behind anterior margin of carapace; rostral teeth usually seven; epigastric tooth and hepatic spine not as far behind orbital margin as in *P. americanus* ..... *P. politus*
  
- Branchiostegal spine on anterior margin of carapace; rostral teeth usually six; epigastric tooth and hepatic spine farther behind orbital margin than in *P. politus*..  
..... *P. americanus*

## **Genus *Penaeus* Fabricius, 1798**

Key to species of adults and subadults

[Adapted from Williams, 1984]

1. Lateral rostral grooves reaching only slightly beyond posterior rostral tooth (non-grooved shrimps) ..... *P. setiferus*  
Lateral rostral grooves reaching nearly to posterior margin of carapace (grooved shrimps) ..... 2
2. (1) Petasma with distomesial projection long; distal fold expanded mesially forming large spined lobe; ventral costa with apex free; thelycum with anteromesial corners of lateral plates extended to cover posterior process of median protuberance .....  
..... *P. brasiliensis*  
Petasma with distomesial projection relatively short; distal fold not forming lobe; ventral costa with apex attached to adjacent membranous part; thelycum with anteromesial corners not extended, exposing posterior process of median protuberance ..... 3
3. (2) Petasma armed with minute spines on ventral costa along terminal part of free border; thelycum with anteromesial corners of lateral plates slightly divergent, posterior process of median protuberance with undivided median carina .....  
..... *P. duorarum*  
Petasma unarmed on ventral costa along terminal part of free border; thelycum with anteromesial corners of lateral plates widely divergent, posterior process of median carina bifurcate anteriorly ..... *P. aztecus*

Key to species of juveniles between 17 and 47 mm total length

[Adapted from Williams, 1984]

1. Lateral rostral grooves reaching only slightly beyond posterior rostral tooth; rostrum long and slightly upturned at tip in individuals exceeding 22 mm total length; ground color light gray, sometimes with greenish cast in shrimp taken from beds of vegetation; chromatophores (widely spaced except on spines, ridges, and uropods) colored slate-blue and brown; uropods with reddish-brown to brown areas distally ..... *P. setiferus*  
Lateral rostral grooves reaching almost to posterior margin of carapace (shallow in 17-mm individuals); rostrum relatively short; color gray to light brown, sometimes with greenish cast in shrimp taken from beds of vegetation; chromatophores numerous and closely spaced, often in bands or patches ..... 2

2. (1) Rostrum with toothed dorsal margin straight; tip attenuate and straight.....  
..... *P. brasiliensis*
- Rostrum with toothed dorsal margin slightly arched over eye; tip short or attenuate and slightly upturned ..... 3
3. (2) Rostrum usually not upturned at tip and not extremely attenuate; chromatophores slate-blue and brown; usually with conspicuously pigmented lateral spot at juncture of third and fourth abdominal somites; uropods with uniform sprinkling of chromatophores, degree of transparency uniform throughout (color more dense in older individuals) ..... *P. duorarum*
- Rostrum usually slightly upturned and attenuate at tip; chromatophores brown and olive-green; usually lacking lateral spot at juncture of third and fourth abdominal somites; uropods with reddish-brown to brown areas distally ..... *P. aztecus*

### **Genus *Trachypenaeus* Alcock, 1901**

#### Key to species

[Adapted from Chace, 1972]

- Thelycum pubescent, lips of transverse groove strongly biconvex; male with sternal elevation between coxae of fifth pereopods goblet-shaped, constricted posteriorly  
..... *T. constrictus*
- Thelycum naked, lips of transverse groove subhorizontal; male with sternal elevation between coxae of fifth pereopods triangular, sloping regularly to posterior apex..... *T. similis*

## **Family Solenoceridae**

Key to genera and species  
[Adapted from Pérez Farfante, 1977]

1. Upper and lower antennular flagella lamellate; exopod of uropod lacking distolateral spine ..... *Solenocera*  
Upper antennular flagellum subcylindrical, lower subcylindrical or flattened; exopod of uropod armed with distolateral spine ..... 2
2. (1) Lower antennular flagellum conspicuously depressed, orbital spine present ..... *Mesopenaeus tropicalis*  
Lower antennular flagellum subcylindrical, occasionally depressed; if so, orbital spine lacking ..... 3
3. (2) Epigastric and first rostral teeth separated from remaining teeth by long interval; suprahepatic spine absent ..... *Hymenopenaeus*  
Epigastric tooth separated from first rostral tooth by interval not conspicuously greater or smaller than that between first and second rostral teeth ..... 4
4. (3) Rostrum low, with ventral margin straight or concave; submarginal carina present ..... *Pleoticus robustus*  
Rostrum deep, with ventral margin pronouncedly convex; submarginal carina absent ..... *Hadropenaeus*

## **Genus *Hadropenaeus* Pérez Farfante, 1977**

Key to species

[Adapted from Pérez Farfante, 1977]

Scaphocerite reaching distal end of antennular peduncle or overreaching it by not more than 0.1 of its own length; prosartema extending only to distomesial extremity of first antennular segment; thelycum with median protuberance on sternite between fifth pereopods projecting ventrally, and tooth of median keel of sternite between fourth pereopods directed anteriorly; petasma with distomesial projection of ventromedian lobule directed mesially ..... ***H. affinis***

Scaphocerite overreaching antennular peduncle by about 0.25 of its own length; prosartema conspicuously overreaching distomesial margin of first antennular segment; thelycum with median protuberance on sternite between fifth pereopods projecting anteriorly, and tooth of median keel of sternite between fourth pereopods directed ventrally or posteriorly; petasma with distomesial projection of ventromedian lobule directed distally..... ***H. modestus***

## **Genus *Hymenopenaeus* Smith, 1882**

Key to species

[Adapted from Pérez Farfante, 1977]

Eye with cornea hemispherical and disposed such that imaginary line extending from mesial tubercle parallel to basal margin of ocular peduncle intersects lateral border of latter far proximal to proximolateral extremity of cornea .. ***H. aphoticus***

Eye with cornea subreniform and disposed such that imaginary line extending from mesial tubercle parallel to basal margin of ocular peduncle intersects posterolateral extremity of cornea ..... ***H. debilis***

## **Genus *Solenocera* Lucas, 1849**

Key to species  
[Adapted from Williams, 1984]

1. Rostral + epigastric teeth 8-11; postrostral carina high and sharp, extending almost to posterior margin of carapace ..... *S. vioscai*  
Rostral + epigastric teeth 4-8; postrostral carina low or absent posterior to cervical sulcus ..... 2
2. (I) Anterior part of carapace glossy; scaphocerite exceeding distal end of antennular peduncle by 10% of its own length ..... *S. necopina*  
Anterior part of carapace setose; scaphocerite never exceeding distal end of antennular peduncle by 10% of its own length, usually less ..... *S. atlantidis*

## Family Sicyoniidae

### Genus *Sicyonia* H. Milne Edwards, 1830

#### Key to species

[Adapted from Williams, 1984]

1. First pereopod with basis and ischium armed with spine; abdominal somite 2 with dorsal carina notched at junction of transverse sulci ..... 2  
First pereopod with basis and ischium unarmed; abdominal somite 2 with dorsal carina unnotched..... 3
2. (1) Rostrum (excluding tip) with 2 dorsal teeth anterior to posterior orbital margin; carina of carapace with 3 teeth, first tooth smallest ..... *S. laevigata*  
Rostrum (excluding tip) with 3 dorsal teeth; carina of carapace with 3 evenly spaced, subequal teeth ..... *S. parri*
3. (1) Carapace with 3 large dorsal teeth behind hepatic spine ..... *S. brevirostris*  
Carapace with 1 or 2 large dorsal teeth behind hepatic spine ..... 4
4. (3) Two teeth on dorsal carina behind hepatic spine ..... *S. typica*  
One tooth on dorsal carina behind hepatic spine ..... 5
5. (4) Pleura of abdominal somite 4 with both antero- and posteroventral margins spined or angular ..... *S. dorsalis*  
Pleura of abdominal somite 4 with posteroventral margin rounded..... 6
6. (5) Antennal spine long, acute, buttressed; pleura of abdominal somites 1-4 with ventral spines laterally recurved ..... *S. burkenroadi*  
Antennal spine short, often minute, not buttressed; pleura of abdominal somite 1 rounded, 2-4 angulate, but without laterally recurved marginal spines..... *S. stimpsoni*

## Family Sergestidae

### Key to genera and species

1. Fourth and fifth pereopods absent ..... *Acetes americanus carolinae*
- Fourth and fifth pereopods present ..... 2
2. (1) Specialized luminescent modifications of gastrohepatic gland (organs of Pesta) present; dermal photophores absent; supraorbital and hepatic spines present or absent ..... *Sergestes*  
Specialized luminescent modifications of gastrohepatic gland (organs of Pesta) absent; dermal photophores present or absent; if present, with or without cuticular lenses; supraorbital and hepatic spines absent..... *Sergia*

### Genus *Sergestes* H. Milne Edwards, 1830

#### Key to species

[based on Crosnier and Forest, 1973]

1. Third maxillipeds at most as long as third pereopods ..... 2
- Third maxillipeds much longer than third pereopods..... 4
2. (1) Two distal segments of fifth pereopod setose on only one margin (third segment of antennular peduncle equal to or longer than first; petasma lobes short, stumpy) ....  
*S. atlanticus*  
Two distal segments of fifth pereopod setose on both margins..... 3
3. (2) Supraorbital spines always present, acute and easily visible..... *S. henseni*  
Supraorbital spines nearly always absent or, when present, minuscule .....  
*S. paraseminudus*
4. (1) Two distal segments of fifth pereopod setose on both margins..... 5
- Two distal segments of fifth pereopod setose on only one margin..... 6
5. (4) Dactylus and distal half of propodus of third maxilliped with numerous spines forming comb-like structure; processus ventralis of petasma unarmed .....  
*S. pectinatus*  
Dactylus and distal half of propodus of third maxilliped armed with spines but not forming comb-like structure; processus ventralis of petasma armed distally with numerous spines ..... *S. sargassi*

6. (4) Dactylus of third maxilliped subdivided into 6 segments and with 2 terminal spines; external margin of exopod of uropod entirely fringed..... *S. edwardsii*
- Dactylus of third maxilliped subdivided into 4 segments and with single terminal spine; small proximal portion of external margin of exopod of uropod naked ..... 7
7. (6) About l/3 or a little more of external margin of exopod of uropod naked; first segment of antennular peduncle much shorter than third..... *S. armatus*
- About l/6 or l/7 of external margin of exopod of uropod naked; first segment of antennular peduncle a little longer than third ..... *S. vigilax*

### **Genus *Sergia* Stimpson, 1860**

#### Key to species

[Based on Crosnier and Forest, 1973]

- Third maxillipeds with propodus and dactylus entire ..... *S. splendens*
- Third maxillipeds with propodus and dactylus subdivided, last into 5 to 7 segments ..... *S. extenuatus*

### **Family Luciferidae**

### **Genus *Lucifer* Thompson, 1829**

#### Key to species

[Adapted from Hansen, 1919]

- Distance between labrum and insertion of eye-stalks somewhat or only a little greater than length of eye-stalks with eyes (basal short joint of stalks included); posterior ventral process on sixth abdominal somite in male with its distal part swollen..... *L. typus*

- Distance between labrum and insertion of eye-stalks almost or more than twice length of eye-stalks with eyes; posterior ventral process on sixth abdominal somite tapering to narrow, obtuse end..... *L. faxoni*

## **Suborder Pleocyemata**

### **Infraorder Caridea**

#### **Family Atyidae**

##### **Genus *Potimirim* Holthuis, 1954**

Pereopods without exopods; orbital margin unarmed ..... *P. potimirim*

#### **Family Oplophoridae**

Key to genera and species  
[Adapted from Chace, 1940a]

1. Exopods of at least third maxillipeds and first pair of pereopods foliaceous and often rigid; outer margin of scaphocerite usually armed with series of spines; telson not truncate at tip, but ending in sharp point; eyes large and well pigmented ..... 2  
None of exopods of pereopods foliaceous or rigid..... 3
2. (1) Abdomen with second somite armed with long, carinate posteromesial spines; fifth somite unarmed..... *Janicella spinicauda*  
Abdomen with second somite unarmed; fifth somite with posteromesial tooth, sometimes small ..... *Oplophorus*
3. (1) Last four abdominal somites, at least, dorsally carinate (usually no straight ridge or carina running entire length of lateral surface of carapace along median lateral line; hind margin of hepatic furrow not usually cut off abruptly by oblique ridge or carina; incisor process of mandible toothed for entire length of cutting edge) .....  
..... *Acanthephyra purpurea*  
Sixth abdominal somite not dorsally carinate (eyes very large and well pigmented; anterior margin of first abdominal somite armed with distinct lobe or tooth overlapping hind margin of carapace; telson terminating in sharp-pointed end-piece laterally armed with spines)..... *Systellaspis debilis*

## **Genus *Oplophorus* H. Milne Edwards, 1837**

### **Key to species**

- End of scaphocerite barbed on inner margin; posterolateral angle of carapace with no tooth or spine ..... *O. spinosus*
- No barb on end of scaphocerite; posterolateral angle of carapace with prominent spine..... *O. gracilirostris*

## **Family Pasiphaeidae**

### **Genus *Leptochela* Stimpson, 1860**

#### **Key to species**

[Adapted from Williams, 1984]

1. Sixth abdominal somite bearing movable lappet near anterior end of dorsal surface; third pereopod with exopod reaching nearly or quite to end of ischium ..... *L. carinata*
- Sixth abdominal somite lacking dorsal lappet; third pereopod with exopod not nearly reaching distal end of ischium ..... 2
2. (1) Suborbital angle dentate; orbital margin serrate dorsolaterally..... *L. serratorbita*
- Suborbital angle rounded, unarmed; orbital margin usually entire dorsolaterally 3
3. (2) Fifth abdominal somite with 1-3 low prominences on dorsal margin... *L. papulata*
- Fifth abdominal somite regularly convex or nearly straight in lateral view..... *L. bermudensis*

## **Family Bresiliidae**

Key to genera and species

[Adapted from Chace and Brown, 1978]

Rostrum armed ventrally with at least 1 small tooth; third maxilliped with terminal segment slender, not flattened; first pereopod no longer than second, with elongate fingers ..... *Pseudocheles chacei*

Rostrum unarmed ventrally; third maxilliped with terminal segment broad, flattened; first pereopod longer than second, fingers short and stout ..... *Discias*

## **Genus *Discias* Rathbun, 1902**

Key to species

[Adapted from Wilson and Gore, 1979]

Second abdominal somite with posterior dorsal spine ..... *D. serratirostris*

Abdominal somites without dorsal spines (rostrum narrow with subparallel margins) ..... *D. atlanticus*

## **Family Eugonatonotidae**

### **Genus *Eugonatonotus* Schmitt, 1926**

A well-developed toothed rostrum immovable; exopods present on pereopods (first two pairs of pereopods chelate, with dark fingertips; ultimate segment of second maxilliped applied as strip along side of penultimate segment; exopod of first maxilliped with distinct flagellum; first chela more robust than second; carpus of second chela entire) ..... *Eugonatonotus crassus*

## **Family Rhynchocinetidae**

### **Genus *Rhynchocinetes* H. Milne Edwards, 1837**

Rostrum movable; no exopods on pereopods (first two pairs of pereopods chelate, with dark fingertips; ultimate segment of second maxilliped applied as strip along side of penultimate segment; exopod of first maxilliped with distinct flagellum; first chela more robust than second; carpus of second chela entire) ..... *Rhynchocinetes rigens*

## **Family Gnathophyllidae**

Key to genera and species  
[Adapted from Chace, 1972]

Anterolateral angle of carapace not reaching beyond level of antennal spine; spines on distal margin of telson not very unequal; third maxilliped with exopod considerably overreaching endopod; second pereopod with carpus broader than long; 3 posterior pereopods with dactyli nearly as broad as long, not bifid.....  
..... *Gnathophylloides mineri*

Anterolateral angle of carapace reaching distinctly beyond level of antennal spine; intermediate spines on distal margin of telson nearly twice, or more than twice, as long as median pair; third maxilliped with exopod not overreaching endopod; second pereopod with carpus distinctly longer than broad; 3 posterior pereopods with dactyli distinctly longer than broad and bifid..... *Gnathophyllum*

## **Genus *Gnathophyllum* Latreille, 1819**

Key to species  
[Adapted from Chace, 1972]

1. Posterior tooth of dorsal rostral series situated on rostrum anterior to level of orbital margin; color pattern composed of transverse stripes ..... *G. americanum*

Posterior tooth of rostral series situated on carapace posterior to level of orbital margin; color pattern composed of spots..... 2

2. (1) Pereopods slender, propodus of third and fourth pairs 12-15 times as long as wide; color pattern composed of dark rings on slightly lighter background .....  
..... *G. circellum*

Pereopods not usually slender, propodus of third and fourth pairs 7-8 times as long as wide; color pattern composed of innumerable light dots on dark background (posterior pair of lateral telson spines separated by distinct gap from series of posterior spines; stylocerite falling short of level of articulation between first and second segments of antennular peduncle) ..... *G. modestum*

## Family Palaemonidae

### Key to genera

[Based on Chace, 1972]

1. Third maxilliped with well-developed exopod..... 2  
Third maxilliped without exopod ..... 12
2. (1) Rostrum armed dorsally with series of prominent teeth..... 3  
Rostrum usually unarmed dorsally, at most with 1 or 2 subapical denticles..... 10
3. (2) Carapace with hepatic spine on lateral surface far posterior to anterior margin 4  
Carapace without hepatic spine ..... 7
4. (3) Telson bearing 2 pairs of terminal spines and usually 1 or 2 pairs of setae ..... 5  
Telson bearing 3 pairs of terminal spines ..... 6
5. (4) Three posterior pereopods with biunguiculate dactyli .....  
..... *Brachycarpus biunguiculatus*  
Three posterior pereopods with dactyli simple, without accessory tooth on inferior margin ..... *Macrobrachium*
6. (4) Rostrum without lateral flange; carapace with antennal spine on anterior margin;  
3 posterior pereopods 7-segmented, ischium and merus distinct .... *Periclimenes*  
Rostrum with lateral flange; carapace without antennal spine on anterior margin;  
3 posterior pereopods 6-segmented, ischium and merus indistinguishably fused.  
..... *Tuleariocaris neglecta*
7. (3) Carapace with antennal but without branchiostegal spine on or near anterior margin; telson with 3 pairs of terminal spines; second pereopods massive,  
unequal..... *Periclimenaeus*  
Carapace with both antennal and branchiostegal spines on or near anterior margin; telson with 2 pairs of terminal spines and 1 or 2 pairs of setae; second pereopods elongate, subequal ..... 8

8. (7) Carapace without branchiostegal groove ventral to antennal spine; endopod of first pleopod of male with accessory appendix ..... *Leander*
- Carapace with branchiostegal groove; endopod of first pleopod of male entire, without accessory appendix..... 9
9. (8) Mandible with palp..... *Palaemon*
- Mandible without palp..... *Palaemonetes*
10. (2) Scaphocerite rudimentary ..... *Typton*
- Scaphocerite well developed ..... 11
11. (10) Telson elongate with no dorsal spines; outer margin of uropodal exopod ending in two spines, inner spine movable..... *Pontoniopsis paulae*
- Telson rather broad, generally with large dorsal spines; one tooth at distal end of outer margin of uropodal exopod ..... *Pontonia*
12. (1) Rostrum not expanded laterally in basal portion; strongly dentate both dorsally and ventrally ..... *Anchistiooides antiguensis*
- Rostrum with eavelike expansions over orbits; unarmed ventrally..... 13
13. (12) Second maxilliped with well-developed exopod..... *Veleroniopsis kimallynae*
- Second maxilliped without exopod ..... 14
14. (13) Carapace with hepatic spine on lateral surface far posterior to anterior margin ...  
..... *Lipkebe holthuisi*
- Carapace without hepatic spine ..... 15
15. (14) Basal expansions of rostrum anteriorly acuminate; carapace with longitudinal groove extending almost entire length near lateral margin; abdomen with pleura of at least fourth and fifth somites posterolaterally acuminate  
..... *Pseudocoutierea antillensis*
- Basal expansions of rostrum evenly convex, not acuminate; carapace without longitudinal groove near lateral margin; abdomen with pleura of all 5 anterior somites rounded..... *Neopontonides beaufortensis*

## **Genus *Leander* E. Desmarest, 1849**

### Key to species

Lateral extension of anterior margin of basal antennular segment convex; stylocerite short, barely reaching to middle of basal antennular segment; scaphocerite slender in both sexes; rostrum shallow in both sexes; fingers of second pereopod armed ..... *L. paulensis*

Lateral extension of anterior margin of basal antennular segment concave or straight; stylocerite may reach to distal third of basal antennular segment; scaphocerite slender in male, but broader and tapering less rapidly to apex in female; rostrum shallow in mature male, but very deep in mature female; fingers of second pereopod unarmed ..... *L. tenuicornis*

## **Genus *Macrobrachium* Bate, 1888**

### Key to species

[Based on Williams, 1984]

1. Carpi of second pereopods with maximum length as great or greater than meri .. 2  
Carpis of second pereopods distinctly shorter than meri ..... 4
2. (l) Palms of chelae on second pair of pereopods greatly swollen; prehensile surfaces of noticeably gaping fingers thickly set with long, stiff setae ..... *M. olfersii*  
Palms of chelae on second pair of pereopods cylindrical, not greatly swollen; fingers not noticeably gaping but may be hairy ..... 3
3. (2) Fingers of chelae on second pair of pereopods thickly pubescent throughout length; rostrum with teeth extending to tip..... *M. acanthurus*  
Fingers of chelae on second pair of pereopods with scattered hairs, except thicker on fingers along cutting edges; rostrum with toothless daggerlike tip ... *M. ohione*
4. (l) Adult male with chelae of second pereopods equal in shape ..... *M. carcinus*  
Adult male with chelae of second pereopods very unequal in shape and size; smaller pereopods with fingers gaping, gap being filled by stiff hairs, implanted on cutting edges ..... *M. crenulatum*

## **Genus *Palaemon* Weber, 1795**

### **Key to species**

[Adapted from Holthuis, 1952]

Rostrum high, ventral margin with 3 or 4 teeth; fingers of second pereopods 2/3 length of palm or shorter ..... *P. northropi*

Rostrum slender, ventral margin with 5 to 7 teeth; fingers of second pereopods more than 2/3 length of palm..... *P. floridanus*

## **Genus *Palaemonetes* Heller, 1869**

### **Key to species**

[Adapted from Holthuis, 1952, and Williams, 1984]

1. Fused part of two rami of upper antennular flagellum distinctly longer than free part (branchiostegal spine situated on anterior margin of carapace, just below branchiostegal groove; posterior pair of dosal spines of telson placed midway between anterior pair and posterior margin of telson)..... *P. paludosus*
- Fused part of two rami of upper antennular flagellum shorter than or as long as free part ..... 2
2. (1) Rostrum with 2 teeth of dorsal series behind posterior margin of orbit, teeth reaching to tip, 3 to 5 ventral teeth; carpus of second pereopod in adult female shorter than palm, in male slightly longer (1.1 times) or shorter; dactylus of second pereopod with 2 teeth, immovable finger with 1 tooth on cutting edge..... *P. vulgaris*
- Rostrum with only 1 tooth of dorsal series behind posterior margin of orbit; carpus of second pereopod in adult female much longer than palm (1.3-1.5 times), in male almost as long as whole chela; dactylus of second pereopod with or without single tooth, fixed finger without tooth on cutting edge ..... 3
3. (2) Rostrum with dorsal teeth reaching to often bifurcate tip, 4 or 5, seldom 3, ventral teeth; dactylus of second pereopod with tiny and sometimes blunt tooth ..... *P. intermedius*
- Both margins of rostrum with unarmed stretch before dagger-shaped tip, 2 to 5, generally 3, ventral teeth; fingers of second pereopod without teeth on cutting edge ..... *P. pugio*

## Genus *Periclimenaeus* Borradaile 1915

### Key to species

[Adapted from Chace, 1972]

1. Telson with anterior pair of dorsal spines arising from anterior fourth of segment 2  
Telson with anterior pair of dorsal spines arising at end of anterior third of segment or posterior thereto..... 8
2. (1) Movable finger of major chela of second pereopod extending distinctly beyond tip of immovable finger ..... *P. chacei*  
Movable finger of major chela of second pereopod extending very slightly beyond or reaching to tip of immovable finger ..... 3
3. (2) Telson with 3 pairs of distal spines inserted in continuous line ..... 4  
Telson with lateral pair of distal spines inserted distinctly anterior to intermediate and mesial pairs ..... 6
4. (3) Rostrum with ventral tooth; carapace with small denticle or sharp tubercle posterior to orbit; scaphocerite with anterolateral tooth distinctly overreaching blade.....  
..... *P. caraibicus*  
Rostrum unarmed ventrally; carapace without postorbital denticle; scaphocerite with anterolateral tooth not overreaching blade ..... 5
5. (4) Third maxilliped with 2 distal segments broad, penultimate about two and one-half times as long as broad; first pereopod with movable finger tapering to tip, not strongly convex, carpus about one and one-third times as long as chela; minor second pereopod with movable finger elongate, not semicircular .... *P. ascidiarum*  
Third maxilliped with 2 distal segments unusually slender, penultimate about five times as long as broad; first pereopod with movable finger strongly convex, carpus about one and one half times as long as chela; minor second pereopod with movable finger short and broad, nearly semicircular ..... *P. pearsei*
6. (3) Major second pereopod with large tooth on opposable margin of immovable finger fitting into cavity in movable finger; minor second pereopod with fingers longer than palm ..... *P. bermudensis*  
Major second pereopod with large tooth on opposable margin of movable finger fitting into cavity in immovable finger; minor second pereopod with fingers much shorter than palm ..... 7

7. (6) First pereopod unusually long and slender, carpus nearly twice as long as chela....  
..... *P. perlatus*

First pereopod not abnormally long or slender, carpus less than one and one-half times as long as chela (rostrum with 10-12 dorsal teeth; telson with posterior pair of dorsal spines arising from posteror half of segment) ..... *P. wilsoni*

8. (1) Scaphocerite without anterolateral tooth; third pereopod with dactylus bifid.....  
..... *P. schmitti*

Scaphocerite with anterolateral tooth; third pereopod without distinct accessory tooth on inferior margin of dactylus ..... 9

9. (8) Rostrum with 4 dorsal teeth; scaphocerite with large anterolateral tooth reaching about to level of distal margin of blade ..... *P. atlanticus*

Rostrum with 1 or 2 dorsal teeth; scaphocerite with small anterolateral tooth falling far short of level of distal margin of blade ..... *P. maxillulidens*

## Genus *Periclimenes* Costa, 1844

### Key to species [Adapted from Chace, 1972]

1. Antennular peduncle with only 1 spine at distolateral angle of basal segment (in addition to stylocerite) ..... 2  
Antennular peduncle with 2 or more spines at distolateral angle of basal segment (in addition to stylocerite) ..... 9
2. (1) Carapace with anterior margin unarmed (antennal spine absent; third pereopod with distinctly biunguiculate dactylus) ..... *P. longicaudatus*  
Carapace armed with antennal spine below suborbital lobe ..... 3
3. (2) Fifth abdominal pleuron with posteroventral angle pointed; telson with anterior pair of dorsal spines arising about one-third of length from base of segment; scaphocerite with distal spine overreaching distal margin of blade .....  
*P. americanus*  
Fifth abdominal pleuron with posteroventral angle rounded; telson with anterior pair of dorsal spines arising at, or posterior to, midlength of segment; scaphocerite with distal spine rarely reaching as far as distal margin of blade, usually falling far short ..... 4
4. (3) Third abdominal somite strongly produced posteromesially into laterally compressed hump ..... 5  
Third abdominal somite sometimes moderately produced posteromesially but never forming laterally compressed hump ..... 6
5. (4) Third pereopod with dactylus simple and considerably more than one-third as long as propodus ..... *P. magnus*  
Third pereopod with dactylus distinctly biunguiculate and not more than one-fourth as long as propodus (carapace with hepatic spine usually arising at, or posterior to, level of posterior tooth of rostral series; carpus of major second pereopod usually more than half as long as chela) ..... *P. pedersoni*

6. (4) Rostrum elongate, more than four times as long as maximum height, one or more of ventral teeth prominent (first pereopod with carpus not noticeably longer than chela; sixth abdominal somite less than twice as long as fifth and shorter than telson; scaphocerite with blade far overreaching distal spine; second pereopod with fingers slightly more than half as long as palm, carpus about one-fifth as long as chela) ..... *P. pandionis*
- Rostrum subtriangular in lateral view, less than four times as long as maximum height, ventral teeth inconspicuous or absent ..... 7
7. (6) Telson with dorsal spines rather large and distinct; major second pereopod with fingers no more than one-fourth as long as palm ..... *P. harringtoni*
- Telson with dorsal spines minute and inconspicuous; major second pereopod with fingers more than half as long as palm ..... 8
8. (7) Sixth abdominal somite about twice as long as fifth and longer than telson; telson with anterior pair of dorsal spines arising at about midlength of segment; major second pereopod with movable finger not perceptibly stouter than immovable finger ..... *P. iridesces*
- Sixth abdominal somite slightly more than half again as long as fifth and shorter than telson; telson with anterior pair of dorsal spines arising at least two-thirds of length from base of segment; major second pereopod with movable finger usually stout, nearly twice as high as immovable finger ..... *P. rathbunae*
9. (1) Posterior tooth of rostral series far removed from second tooth and from posterior margin of orbit; third pereopod with dactylus deeply biunguiculate.....  
..... *P. yucatanicus*
- Posterior tooth of rostral series not widely separated from second tooth, situated slightly posterior or anterior to level of orbital margin; third pereopod with dactylus simple or very obscurely biunguiculate (scaphocerite less than twice as long as broad; major second pereopod with fingers less than one-fourth as long as palm) ..... *P. perryae*

**Genus *Pontonia* Latreille, 1829**

Key to species  
[Adapted from Chace, 1972]

1. Carapace pubescent, cervical groove well marked; major second pereopod with large rounded tooth on movable finger fitting into completely enclosed socket in immovable finger..... *P. unidens*

Carapace not pubescent, without cervical groove; enlarged tooth on movable finger of major second pereopod, if present, triangular and fitting into shallow, partially open socket in immovable finger..... 2

2. (I) Telson with dorsal spines minute, inconspicuous..... *P. domestica*

Telson with dorsal spines well developed (three posterior pereopods with dactyli stout, inferior margin convex) ..... *P. margarita*

## Genus *Typton* Costa, 1844

### Key to species

[Adapted from Chace, 1972]

1. Telson with posterior pair of dorsal spines arising anterior to midpoint of segment; exopod of uropod with outer margin serrate in distal portion ..... *T. prionurus*  
Telson with posterior pair of dorsal spines arising at, or posterior to, midpoint of segment; exopod of uropod with outer margin entire, not serrate distally ..... 2
2. (1) Antennal spine broad, toothlike in lateral view, not spiniform; both second pereopods with movable fingers highly arched, nearly semicircular; major second pereopod with carpus crenulate on proximal portion of angulate margin .....  
..... *T. tortugae*  
Antennal spine strong, spiniform; second pereopods with movable fingers only moderately convex, not nearly semicircular; major second pereopod with carpus not crenulate on angulate margin..... 3
3. (2) Anterior margin of carapace produced anteriorly to level of tip of antennal spine; exopod of uropod with outer margin rather regularly convex throughout ..... 4  
Anterior margin of carapace less produced, not nearly reaching level of tip of antennal spine; exopod of uropod with outer margin nearly straight in distal half ..  
..... 5
4. (3) Rostrum deepest near midlength, ventral margin forming obtuse angle in lateral view; mandible with well-developed incisor process; third pereopod with dactylus bearing small accessory tooth on inferior margin, not clearly symmetrically bifid .  
..... *T. carneus*  
Rostrum not deepening near midlength, ventral margin straight or convex; mandible without incisor process; third pereopod with dactylus bearing large accessory tooth on inferior margin, nearly symmetrically bifid.....  
..... *T. gnathophylloides*
5. (3) Mandible with incisor process well developed and distally crenulate, molar process tapering distally; major second pereopod with movable finger bluntly hammer-shaped, not noticeably twisted..... *T. vulcanus*  
Mandible with incisor process reduced to low angulate unarmed lobe, molar process not tapering distally; major second pereopod with movable finger forming pointed hook twisted into plane nearly perpendicular to that of palm .....  
..... *T. distinctus*

## Family Alpheidae

Key to genera and species  
[Adapted from Chace, 1972]

1. Movable plate at posterolateral angle of sixth abdominal somite ..... 2  
No movable plate at posterolateral angle of sixth abdominal somite..... 3
2. (1) Rostrum lacking; antennular peduncle long and slender, stylocerite closely appressed to basal segment; exopod of uropod distally truncate (telson with convex distal margin; first chelipeds carried with chela flexed against merus, opposable margins of fingers of major chela dentate) ..... *Leptalpheus forceps*  
Rostral projection present; antennular peduncle short and stout, stylocerite well separated from basal segment; exopod of uropod distally rounded (first chelipeds carried extended) ..... *Alpheopsis*
3. (1) Eyes completely exposed dorsally; movable finger of major first chela without molar-like tooth fitting into socket in immovable finger..... *Automate*  
Eyes concealed from all but anteroventral view by deflexed frontal margin of carapace; movable finger of major first chela usually provided with large molar-like tooth fitting into socket in immovable finger ..... 4
4. (3) Posterior margin of carapace without "cardiac notch" at base of branchiostegite; exopod of uropod without transverse suture (rostral projection lacking, front unarmed; antepenultimate segment of third maxilliped normal, not unusually expanded; epipods present on at least 2 anterior pairs of pereopods) .....  
..... *Thunor simus*  
Posterior margin of carapace with "cardiac notch"; exopod of uropod with transverse suture ..... 5
5. (4) Pereopods without epipods; second pleopod of male without appendix masculina (front tridentate; antepenultimate segment of third maxilliped normal, not unusually expanded; dactyli of 3 posterior pereopods biunguiculate)..... *Synalpheus*  
Epipods present on at least 2 anterior pairs of pereopods; second pleopod of male with appendix masculina ..... 6

6. (5) Labrum and mandible not unusually enlarged; antepenultimate segment of third maxilliped not unusually expanded; fourth pereopod with mastigobranch epipod; appendix masculina normal, not reaching distal end of either endopod or exopod of male second pleopod ..... *Alpheus*

Labrum greatly swollen and enveloped by expanded incisor process of mandible; antepenultimate segment of third maxilliped broadened to form partial operculum over anterior mouthparts; fourth pereopod without mastigobranch epipod; appendix masculina greatly enlarged and elongate, overreaching distal ends of both endopod and exopod of second pleopod ..... *Metalpheus rostratipes*

### Genus *Alpheopsis* Coutière, 1896

#### Key to species

Anterior region of carapace with rostrum and ocular teeth (chela with longitudinal as well as transverse groove) ..... *A. trispinosus*

Anterior region of carapace without ocular teeth (carpus of second pereopod with first segment about as long as combined lengths of second and third segments) ....  
..... *A. labis*

## Genus *Alpheus* Fabricius, 1798

### Key to species

[Adapted from Chace, 1972]

1. Frontal region evenly convex dorsally, adrostral depressions lacking; fingers of minor first chela strongly curved in vertical plane (rostrum short, subrectangular, not elevated in midline; ocular hoods subrectangular, frontal margin broadly tridentate; major first chela subcylindrical, without marginal notches on palm; proximal article of carpus of second pereopod longer than second segment; third and fourth pereopods with dactylus biunguiculate, merus without distal tooth on inferior margin, ischium without movable spine on lateral surface) .....  
..... *A. cylindricus*
  
- Ocular hoods mesially delimited by adrostal depressions or furrows; fingers of minor first chela not noticeably curved in vertical plane ..... 2
  
2. (1) Rostrum dorsally flat, at least in distal portion; ocular hood armed with spine arising from surface of hood, not from margin, although appearing marginal in *A. malleator* because of receding ventral portion of hood (adrostral furrows sharply defined and partially delimited posteriorly; marginal lobe or projection between rostrum and ocular hood; proximal segment of carpus of second pereopod longer than second segment)..... 3  
  
Rostrum either rounded or carinate in dorsal midline, not flat; ocular spine, if present, arising from margin of hood ..... 5
  
3. (2) Spine on ocular hood arising from mesial slope, overhanging adrostral furrow; meri of third and fourth pereopods armed with distal tooth on inferior margin (fingers of minor chela of male not “balaeniceps”-shaped; third and fourth pereopods with simple dactyli and movable spine on lateral surfaces of ischia. Small tooth or tubercle in midline of carapace in line with posterior limits of adrostral furrows; palm of major first chela with superior and inferior margins entire, not notched, immovable finger notched on opposable margin distal to socket; distolateral spine on exopod of uropod dark-colored in male).....  
..... *A. armatus*  
  
Spine on ocular hood arising from anterior slope, overhanging frontal margin; meri of third and fourth pereopods unarmed at distal end of inferior margin (immovable finger of major first chela notched on opposable margin distal to socket; distolateral spine on exopod of uropod dark-colored in male)..... 4

4. (3) Ventrolateral tooth on basal segment of antennal peduncle not overreaching stylocerite; scaphocerite lacking prominent tooth or lobe near proximal end of outer margin; merus of first pereopod with distal tooth on mesial inferior margin; palm of major first chela with both superior and inferior margins entire, not notched; movable finger of minor first chela laterally and mesially carinate, densely setose, “balaeniceps”-shaped in both males and females; third and fourth pereopods with dactyli simple, ischia with movable spines on lateral surfaces; distolateral spine on exopod of uropod dark-colored in both male and female ....  
..... *A. formosus*
- Ventrolateral tooth on basal segment of antennal peduncle distinctly overreaching stylocerite; scaphocerite with prominent curved tooth or lobate projection near proximal end of outer margin; merus of first pereopod without distal tooth on inferior margin; palm of major first chela notched superiorly; minor first chela not “balaeniceps”-shaped in either male or female; third and fourth pereopods with dactyli biunguiculate, ischia unarmed; distolateral spine on exopod of uropod dark-colored in male only ..... *A. malleator*
5. (2) Ocular hoods spined (adrostral furrows not abruptly delimited posteriorly; scaphocerite without large tooth or lobe near proximal end of lateral margin).. 6
- Ocular hoods not spined (third and fourth pereopods with simple dactyli) ..... 10
6. (5) Merus of first pereopod with sharp distal tooth on mesial inferior margin; third and fourth pereopods with dactyli not distinctly biunguiculate (meri of third and fourth pereopods without distal teeth on inferior margins) ..... 7
- Merus of first pereopod without distinct sharp tooth at distal end of inferior margin; third and fourth pereopods with dactyli distinctly biunguiculate ..... 9
7. (6) Third and fourth pereopods with inconspicuous denticles on inferior margins of dactyli, ischia without movable spines on lateral surfaces ..... *A. websteri*
- Third and fourth pereopods without accessory denticle on inferior margins of dactyli, ischia with movable spines on lateral surfaces ..... 8
8. (7) Major first chela twisted and bearing single distinct sharp teeth on distal ends of both lateral and mesial surfaces of palm ..... *A. amblyonyx*
- Major first chela not twisted and not bearing sharp teeth on distal ends of both lateral and mesial surfaces of palm..... *A. thomasi*

9. (6) Third and fourth pereopods without distal teeth on inferior margins of meri .....  
..... *A. candei*
- Third and fourth pereopods with distal teeth on inferior margins of meri .....  
..... *A. peasei*
10. (5) Meri of third and fourth pereopods with prominent acute teeth at distal ends of inferior margins (lobe on frontal margin between rostrum and ocular hood; major first chela subcylindrical, without superior or inferior notches; merus of first pereopod with tooth at distal end of mesial inferior margin; immovable finger of major first chela with notch in opposable margin distal to socket; proximal segment of carpus of second pereopod shorter than second segment; third and fourth pereopods with movable spines on lateral surfaces of ischia)....  
..... *A. cristulifrons*
- Meri of third and fourth pereopods with distal ends of inferior margins rounded or rectangular, not produced into prominent teeth..... 11
11. (10) Major first chela notched superiorly..... 12
- Major first chela with superior and inferior margins entire, not notched (major first cheliped with tooth at distal end of mesial inferior margin of merus; immovable finger of major chela with notch in opposable margin distal to socket; minor first chela of male not “balaeniceps”-shaped; third and fourth pereopods with movable spines on lateral surfaces of ischia)..... 19
12. (11) Major first chela not notched inferiorly (ocular hoods subtriangularly produced anteriorly; inferior margin of major first chela with shallow sinus at base of immovable finger) ..... *A. normanni*
- Major first chela notched inferiorly..... 13
13. (12) Third and fourth pereopods with movable spines on lateral surfaces of ischia. 14
- Third and fourth pereopods without spines on ischia..... 17
14. (13) Merus of first pereopod unarmed at distal end of mesial inferior margin; dactyli of third and fourth pereopods usually subspatulate ..... 15
- Merus of first pereopod armed with sharp tooth at distal end of mesial inferior margin; dactyli of third and fourth pereopods not subspatulate ..... 16

15. (14) Major chela with inferior margin of immovable finger distinctly truncate distally; minor first chela of male not “balaeniceps”-shaped ..... *A. estuariensis*
- Major chela with inferior margin of immovable finger more evenly rounded distally, not distinctly truncate; minor first chela of male “balaeniceps”-shaped..  
..... *A. heterochaetus*
16. (14) Adrostral furrows usually abruptly delimited posteriorly; immovable finger of major first chela without V-shaped notch in opposable margin distal to socket ...  
..... *A. armillatus*
- Adrostral furrows not abruptly delimited posteriorly; immovable finger of major first chela with sharply V-shaped notch in opposable margin distal to socket .....  
..... *A. viridari*
17. (13) Minor first chela with fingers slightly, if at all, more than half as long as palm; proximal segment of carpus of second pereopod much shorter than second segment (fingers of minor first chela not “balaeniceps”-shaped in male).....  
..... *A. schmitti*
- Minor first chela with fingers about as long as palm; proximal segment of carpus of second pereopod longer than second segment ..... 18
18. (17) Movable finger of major first chela regularly and highly arched throughout length of superior margin; fingers of minor first chela “balaeniceps”-shaped in male; second segment of carpus of second pereopod subequal to fifth segment in length ..... *A. bouvieri*
- Movable finger of major first chela not strongly convex in proximal part of superior margin; fingers of minor first chela not “balaeniceps”-shaped in male; second segment of carpus of second pereopod distinctly longer than fifth segment ..... *A. nuttingi*
19. (11) Rostrum dorsally carinate or subcarinate; proximal segment of carpus of second pereopod shorter than second segment; dactyli of third and fourth pereopods subspatulate ..... *A. floridanus*
- Rostrum dorsally convex, not subcarinate; proximal segment of carpus of second pereopod longer than second segment; dactyli of third and fourth pereopods not subspatulate ..... *A. paracrinitus*

## **Genus *Automate* De Man, 1888**

### Key to species

[Adapted from Chace, 1972]

1. Median frontal projection broadly rounded or subtriangular; propodi of third and fourth pereopods armed with series of stout movable spines on inferior margin (first segment of carpus of second pereopod at least half as long as second segment; dactyli of third and fourth pereopods slender, not subspatulate) .....  
..... *A. gardineri*  
  
Median frontal projection reduced to acute tooth or lacking; propodi of third and fourth pereopods setose, without stout spines ..... 2
2. (I) Median frontal projection a small acute tooth; first segment of carpus of second pereopod much less than half as long as second segment; dactyli of third and fourth pereopods broad, subspatulate ..... *A. evermanni*  
  
Frontal margin transverse, without median projection; first segment of carpus of second pereopod at least half as long as second segment; dactyli of third and fourth pereopods slender, not subspatulate ..... *A. rectifrons*

## **Genus *Synalpheus* Bate, 1888**

### Key to species

[Adapted from Chace, 1972, and Dardeau, 1984]

1. Stylocerite not overreaching basal segment of antennular peduncle (except in *S. macclendoni* and *S. paraneptunus*); movable finger of minor first-chela with prominent fringe of long, distally curved hairs on superior surface (reduced to single longitudinal row in *S. paraneptunus*) ..... 2  
  
Stylocerite distinctly overreaching basal segment of antennular peduncle; movable finger of minor first chela with scattered tufts of straight hairs but without prominent fringe on superior surface (scaphocerite with well-developed blade, lateral spine considerably exceeding that of basicerite in length) ..... 14
2. (I) Both pairs of dorsal spines of telson arising in posterior of segment (ocular hoods blunt, broader than long) ..... *S. heardi*  
  
Anterior or both pairs of dorsal spines of telson arising in anterior of segment ..  
..... 3

3. (2) Both pairs of dorsal spines of telson arising in anterior of segment (carapace not distinctly produced at anteroventral angle and not carinate in dorsal midline posterior to base of rostrum; cardiac notch not well marked; ocular teeth acute, as broad as long but not much broader than rostrum; basicerite not produced dorsally; major first chela twisted, immovable finger short, not reaching nearly as far distally as does movable finger; palm of major first chela armed with sharp distal spine; movable finger of minor first chela strongly tridentate in lateral view) ..... *S. pectiniger*
- Posterior pair of dorsal spines of telson arising in posterior of segment..... 4
4. (3) Carpus of second pereopod composed of 4 segments ..... 5
- Carpus of second pereopod composed of 5 segments ..... 6
5. (4) Basicerite with strong dorsal spine ..... *S. rathbunae*
- Basicerite unarmed dorsally ..... *S. agelas*
6. (4) Exopod of uropod with 1 fixed tooth on outer margin, sometimes at distolateral angle just lateral to movable spine, sometimes distinctly removed from distolateral angle (basicerite not produced dorsally) ..... 7
- Exopod of uropod with 2 or more fixed teeth on outer margin at, and proximal to, distolateral angle..... 10
7. (6) Scaphocerite with well-developed blade (fingers of minor first chela not bidentate distally) ..... 8
- Scaphocerite without blade (ocular teeth distinctly broader than rostrum; stylocerite not reaching as far as distal end of basal antennular segment) ..... 9
8. (7) Ocular teeth slender, not much broader than rostrum; first abdominal pleuron of male without hooklike tooth; stylocerite slightly overreaching distal end of basal antennal segment; major first chela not noticeably twisted, armed with stout spine at distal end of palm ..... *S. mcclendoni*
- Ocular teeth stout, distinctly broader than rostrum; first abdominal pleuron of male armed with hooklike tooth; stylocerite not reaching as far as distal end of basal antennal segment; major first chela twisted, palm terminating distally in spine-tipped lobe..... *S. sanctithomae*

9. (7) Lateral spine of basicerite not reaching tip of scaphocerite (ocular teeth at least as long as broad; dorsal spines of telson arising from dorsal surface; major first chela not strongly twisted, palm sharply spinous distally; fingers of minor first chela subequally bidentate distally; third pereopod without flanges on merus and carpus) ..... *S. brooksi*
- Lateral spine of basicerite reaching nearly to, or beyond, tip of scaphocerite (fingers of minor first chela bidentate distally; ocular teeth with lateral margins straight or slightly concave; telson with lateral margins nearly straight; antennular peduncle stout, overreaching scaphocerite by about half of distal segment, stylocerite broad)..... *S. bousfieldi*
10. (6) Lateral spine of basicerite reaching nearly to, or beyond, tip of scaphocerite (fingers of minor first chela subequally bidentate distally) ..... ll
- Lateral spine of basicerite falling considerably short of tip of scaphocerite (palm of major first chela terminating distally in tubercle armed distally or distoventrally with small, sharp tooth) ..... 12
- ll. (10) Ocular teeth subacute, only slightly broader than rostrum; palm of major first chela terminating distally in acute projection..... *S. herricki*
- Ocular teeth rounded, much broader than rostrum; palm of major first chela terminating distally in tubercle armed distoventrally with small, sharp tooth .....  
..... *S. pandionis*
12. (10) Basicerite rounded or obtuse dorsally (movable finger of major first chela barely overreaching normal immovable finger) ..... *S. longicarpus*
- Basicerite rectangular or acute dorsally..... 13
13. (12) Movable finger of minor first chela broadly tridentate distally in extensor aspect; exopod of uropod armed with 3 or 4 fixed teeth and 1 or 2 movable spines at distal end of outer margin ..... *S. paraneptunus*
- Movable finger of minor first chela simple or bidentate distally; exopod of uropod armed with 8-17 fixed teeth on outer margin (scaphocerite with blade; distal tubercle on palm of major first chela armed distally) ..... *S. goodei*
14. (1) Ocular teeth triangular, not much broader than rostrum, not tapering to slender, sharp tips..... 15
- Ocular teeth elongate, much broader than rostrum, tapering to slender, sharp tips  
..... 17

15. (14) Rostrum with well-developed ventral process preventing corneas of eyes from touching; palm of major first chela unarmed distally; merus of third pereopod short and broad, less than two and one half times as long as broad ..... *S. curaçaoensis*
- Ventral process of rostrum vestigial or lacking, not preventing corneas of eyes from touching; palm of major first chela with distal tooth or spine; merus of third pereopod about four times as long as broad..... 16
16. (15) Lateral surface of palm of major chela with 2 broad and sinuous lateral lobes, in addition to sharp superior tooth ..... *S. minus*
- Lateral surface of palm of major chela with narrow, prominent unarmed projection between superior tooth and 2 broad lateral lobes ..... *S. brevicarpus*
17. (14) Dactyli of 3 posterior pairs of pereopods with distal tooth on inferior margin distinctly divergent from axis of segment and much broader than superior tooth, inferior margin with prominence proximal to distal tooth (basicerite strongly spinous dorsally)..... 18
- Dactyli of 3 posterior pairs of pereopods with terminal teeth subparallel, no prominence on inferior margin proximal to distal tooth..... 19
18. (17) Proximal prominence on inferior margin of dactyli of 3 posterior pairs of pereopods low and obtuse..... *S. fritzmuelleri*
- Proximal prominence on inferior margin of dactyli of 3 posterior pairs of pereopods large and sharp ..... *S. hemphilli*
19. (17) Basicerite unarmed dorsally; distal spine on palm of major first chela straight....  
..... *S. townsendi*
- Basicerite armed dorsally with strong spine (palm of major first chela armed distally with curved spine; merus of third pereopod unarmed; dactyli of 3 posterior pairs of pereopods with distal tooth on inferior margin narrower than superior tooth)..... *S. apioceros*

## Family Hippolytidae

### Key to genera and species

[Adapted from Holthuis, 1955, and Chace, 1972]

1. Arthrobranchs present at bases of first four pairs of pereopods .....  
..... *Merhippolyte americana*
- Bases of pereopods without arthrobranchs ..... 2
2. (1) Carpus of second pereopod subdivided into more than 7 segments, multiarticulate  
..... 3
- Carpus of second pereopod subdivided into no more than 7 segments..... 5
3. (2) Dactyli of third, fourth, and fifth pereopods simple, spines on inferior margin inconspicuous ..... *Exhippolysmata oplophoroides*
- Dactyli of third, fourth, and fifth pereopods appearing biungulate because of series of prominent spines on inferior margin ..... 4
4. (3) Supraorbital spines present on carapace ..... *Bythocaris nana*
- Supraorbital spines absent ..... *Lysmata*
5. (2) Third segment of antennular peduncle bearing subtriangular movable plate overhanging base of flagellum dorsally; carpus of second pereopod composed of 6 or 7 segments ..... *Thor*
- Antennular peduncle without movable plate overhanging base of flagellum; carpus of second pereopod composed of 2 or 3 segments ..... 6
6. (5) Rostrum with deep ventral blade projecting posteroventrally at posterior end between bases of antennules..... 7
- Ventral lobe of rostrum, if present, not projecting posteroventrally near base..... 8
7. (6) Lateral surface of carapace smooth, not spinose; mandible without palp; carpus of second pereopod composed of 3 segments..... *Latreutes*
- Lateral surface of carapace bearing numerous appressed spines; mandible with 2-segmented palp; carpus of second pereopod composed of 2 segments ..... *Trachycaris restrictus*
8. (6) Supraorbital tooth present; third maxilliped with exopod ..... *Hippolyte*
- Supraorbital tooth absent; third maxilliped without exopod ..... *Tozeuma*

## Genus *Hippolyte* Leach, 1814

### Key to species

[Adapted from Chace, 1972]

1. Lateral spine on carapace branchiostegal, overreaching anterior margin; tergum of fifth abdominal somite armed with pair of strong posterior spines; telson with both pairs of dorsolateral spines situated in posterior third of segment; scaphocerite with blade and distolateral spine about equally advanced; dactyli of 3 posterior pairs of pereopods terminating in 2 strong distal spines (rostrum usually with single, inconspicuous tooth on dorsal and ventral margins; basal segment of antennular peduncle armed with prominent distolateral spine)..... *H. coerulescens*  
  
Lateral spine on carapace hepatic, not nearly reaching anterior margin in adults; tergum of fifth abdominal somite unarmed; telson with anterior pair of distolateral spines situated near midlength of segment; scaphocerite with blade reaching far beyond distolateral spine; dactyli of 3 posterior pairs of pereopods terminating in either 1 or 3 strong distal spines ..... 2
2. (1) Rostrum usually unarmed dorsally (rarely with 1 or 2 prominent dorsal teeth); dactyli of 3 posterior pairs of pereopods terminating in single distal spine (basal segment of antennular peduncle unarmed distally) ..... *H. nicholsoni*  
  
Rostrum usually armed with 2-4 strong teeth on dorsal margin; dactyli of 3 posterior pairs of pereopods terminating in 3 strong distal spines ..... 3
3. (2) Rostrum usually armed with 3 or 4 strong teeth on dorsal margin and with strong lateral carina in proximal third of length; basal segment of antennular peduncle armed with 1-3 strong distolateral spines ..... *H. curaçaoensis*  
  
Rostrum usually armed with 2 (rarely 1 or 3) strong teeth in proximal half of dorsal margin and without distinct lateral carina; basal segment of antennular peduncle unarmed distally ..... 4
4. (3) Rostrum not overreaching antennular peduncle in adult females, barely overreaching basal antennular segment in males ..... *H. pleuracanthus*  
  
Rostrum distinctly overreaching antennular peduncle in adult females, extending nearly as far as distal margin of second antennular segment in males ..... *H. zostericola*

## Genus *Latreutes* Stimpson, 1860

Key to species  
[Adapted from Williams, 1984]

Carapace and rostrum unarmed dorsally except for single, small, median spine on gastric region; rostrum an elongate blade nearly as long as carapace ... *L. fucorum*

Carapace strongly humped and armed dorsally with 5 or 6 spiniform teeth; rostrum deep ovoid blade, shorter than carapace ..... *L. parvulus*

## Genus *Lysmata* Risso 1816

Key to species  
[Adapted from Chace, 1972]

1. Scaphocerite overreaching antennular peduncle slightly, if at all (rostrum with 4-6 ventral teeth; antennal tooth distinct from depressed and obscure ventral angle of orbit; carapace with pterygostomian tooth on anteroventral margin; stylocerite falling far short of distal margin of basal antennular segment; distal tooth of scaphocerite distinctly overreaching distal margin of blade; exopod of third maxilliped reaching at least to midlength of antepenultimate segment; carpus of second pereopod composed of 17-23 segments) ..... *L. amboinensis*

Scaphocerite distinctly overreaching antennular peduncle (exopod of third maxilliped reaching to, or beyond, midlength of antepenultimate segment) ..... 2

2. (1) Antennal tooth fused with ventral angle of orbit; stylocerite reaching beyond distal margin of basal segment of antennular peduncle; accessory branch of dorsolateral antennular flagellum well developed (2 to 4 teeth of dorsal rostral series situated on carapace posterior to level of orbital margin; carapace with pterygostomian tooth on anteroventral margin; scaphocerite more than four times as long as wide, distal tooth distinctly overreaching distal margin of blade; carpus of second pereopod composed of 28-30 segments) ..... *L. intermedia*

Antennal tooth distinct from depressed and obscure ventral angle of orbit; stylocerite falling far short of distal margin of basal antennular segment; accessory branch of dorsolateral antennular flagellum vestigial or absent..... 3

3. (2) Rostrum usually reaching as far as, or beyond, distal end of antennular peduncle; scaphocerite five times as long as wide..... *L. rathbunae*

Rostrum reaching not much, if at all, beyond second segment of antennular peduncle; scaphocerite less than four times as long as wide ..... *L. wurdemani*

## Genus *Thor* Kingsley, 1878

Key to species  
[Adapted from Chace, 1972]

1. No vestige of supraorbital tooth; anterolateral margin of carapace faintly angular, with microscopic branchiostegal tooth; distal margin of telson armed typically with 4 pairs of spines; endopod of first pleopod of functional males with mesial margin sparsely setose; appendix masculina (not including setae) of functional males falling short of distal end of endopod of second pleopod; associated with sea anemones (merus of first pereopod unarmed in distal half of inferior margin; eggs not very large, increasing in major diameter during development from 0.48 to 0.70 mm) ....  
..... *T. amboinensis*
  
- Supraorbital tooth represented by obtuse prominence; anterolateral margin of carapace rounded, unarmed; distal margin of telson armed with 3 pairs of spines; endopod of first pleopod of functional males with mesial margin densely setose; appendix masculina (not including setae) of functional males reaching nearly to, or beyond, distal end of endopod of second pleopod; not usually associated with sea anemones ..... 2
  
2. (1) Merus of first pereopod armed with 1 or 2 spines in distal half of inferior margin (dactyli of fourth and fifth pereopods commonly armed with 5—not usually 4 or 6—spinules on inferior margin proximal to distal pair of spines; eggs not very large, increasing in major diameter during development from 0.36 to 0.74 mm) ....  
..... *T. dobkini*
  
- Merus of first pereopod unarmed in distal half of inferior margin ..... 3
  
3. (2) Dactyli of fourth and fifth pereopods commonly armed with 4 or 5 (rarely 3 or 6) spinules on inferior margin proximal to distal pair of spines; eggs large and few, increasing in major diameter during development from 0.66 to 1.40 mm .....  
..... *T. floridanus*
  
- Dactyli of fourth and fifth pereopods commonly armed with 3 (sometimes 2 or 4) spinules on inferior margin proximal to distal pair of spines; eggs not very large, increasing in major diameter during development from 0.36 to 0.73 mm .....  
..... *T. manningi*

## **Genus *Tozeuma* Stimpson, 1960**

### Key to species

[Adapted from Chace, 1972]

1. Third abdominal somite bearing long rodlike dorsal projection recurved posteriorly and bidentate distally; third maxilliped with each of 2 distal segments short, slightly longer than broad, distal segment tapering throughout to narrow truncate tip; carpus of second pereopod with proximal segment subequal in length to combined lengths of 2 distal segments; dactyli of 3 posterior pereopods without accessory spinules on inferior margin (rostrum unarmed dorsally) ..... ***T. cornutum***

Third abdominal somite not surmounted by recurved projection in adults; third maxilliped with each of 2 distal segments elongate, at least twice as long as broad, distal segment with subparallel margins nearly to distal extremity; carpus of second pereopod with proximal segment slightly more than four-fifths as long as combined lengths of 2 distal segments; dactyli of 3 posterior pereopods with row of accessory spinules on inferior margin..... 2

2. (I) Rostrum unarmed dorsally..... ***T. carolinense***

Rostrum armed with series of teeth both dorsally and ventrally ..... ***T. serratum***

## **Family Ogyrididae**

### **Genus *Ogyrides* Stebbing, 1914**

Key to species

[Adapted from Williams, 1984]

Single movable spine behind rostrum on middorsal line ..... *O. hayi*

Postrostral crest with 3 to 14 small, fixed spines ..... *O. alphaerostris*

## **Family Processidae**

Key to genera and species

[Adapted from Chace, 1972]

1. First pereopods similar, both chelate (first pereopods without exopods; second pereopods equal)..... *Ambidexter symmetricus*

First pereopods dissimilar, one (usually right) chelate, other with simple unopposed dactylus ..... 2

2. (I) First pereopod with exopod ..... *Nikoides schmitti*

First pereopod without exopod ..... *Processa*

## **Genus *Processa* Leach, 1815**

### Key to species

[Adapted from Chace, 1972]

1. Pleuron of fifth abdominal somite with sharp tooth near posteroventral angle (antennal spine present) ..... 2  
Pleuron of fifth abdominal somite with posteroventral margin entire, without projecting tooth..... 3
2. (1) Eye twice as wide as scaphocerite; third pereopod overreaching scaphocerite by length of dactylus and propodus only..... *P. fimbriata*  
Eye less than one and one-half times as wide as scaphocerite; third pereopod overreaching scaphocerite by length of dactylus, propodus, and most of carpus ....  
..... *P. riveroi*
3. (1) Antennal spine lacking ..... 4  
Antennal spine present..... 5
4. (3) Ventral margin of rostrum only slightly concave in distal half; second pereopods unequal, right with 19-29 carpal segments, left with 13-15..... *P. bermudensis*  
Ventral margin of rostrum markedly concave in distal half; second pereopods equal, with 10-14 carpal segments ..... *P. vicina*
5. (3) Second pereopods equal, with 10 carpal segments; merocarpal articulation of right not extending beyond scaphocerite..... *P. hemphilli*  
Second pereopods very unequal, merocarpal articulation of right extending considerably beyond scaphocerite ..... 6
6. (5) Posterior lobe of sixth abdominal somite, dorsal to uropodal articulation, armed with sharp tooth ..... *P. profunda*  
Posterior lobe of sixth abdominal somite unarmed ..... *P. guyanae*

## **Family Pandalidae**

Key to genera and species  
[Based on Chace, 1985]

1. Rostrum movably connected with carapace ..... *Pantomus parvulus*  
Rostrum not movable..... 2
2. (1) Abdomen with third abdominal somite unarmed or with fixed postero-medial tooth; second maxilliped with terminal segment broader than long, applied as strip to distal margin of penultimate segment; appendix masculina on second pleopod of male rather broad and profusely spinose..... *Plesionika*  
Abdomen with third somite bearing slender, basally articulated postero-medial spine or stout seta (sometimes lost); second maxilliped with terminal segment longer than broad, not applied as strip to distal margin of penultimate segment; appendix masculina on second pleopod of male slender and sparsely spinose..... *Stylopandalus richardi*

## **Genus *Plesionika* Bate, 1888**

### **Key to species**

[Based on Pequegnat, 1970]

1. Epipods on at least first two pereopods ..... 2  
No epipods on any of pereopods ..... 6
2. (1) Rostrum toothed dorsally for entire length..... 3  
Rostrum smooth dorsally for most of its length ..... 5
3. (2) Rostrum more than twice carapace length (rostrum with about 28 dorsal teeth, more widely spaced proximally than distally, and about 40 ventral teeth; carpi of last three pereopods less than twice length of propodi (epipods minute).  
..... *P. edwardsii*  
Rostrum less than twice carapace length ..... 4
4. (3) Rostrum short, reaching no further than distal end of scaphocerite (rostrum with 13-17 dorsal teeth and 3-8 small ventral teeth) ..... *P. acanthonotus*  
Rostrum longer, reaching past scaphocerite (rostrum about equal in length to carapace, with 8-10 dorsal teeth, 2-4 of which are movable spines behind orbit and separated from remaining rostral teeth)..... *P. tenuipes*
5. (2) Third abdominal somite with dorsal spine; 4-6 dorsal rostral teeth (2 or 3 behind orbit) plus one subapical tooth..... *P. ensis*  
Third abdominal somite not armed; 6-9 dorsal rostral teeth (3 or 4 behind orbit), no subapical tooth..... *P. martia*
6. (1) Ultimate segment of third maxilliped distinctly shorter than penultimate .....  
..... *P. escatilis*  
Ultimate segment of third maxilliped subequal to penultimate..... *P. longicauda*

## Family Crangonidae

### Key to genera and species

[Based on Dardeau and Heard, 1983, and Chace, 1984]

1. Second pereopods subequal in length to other pereopods ..... 2  
Second pereopods much shorter than other pereopods ..... 3
2. (1) Carapace with 1 dorsal median spine ..... *Crangon septemspinosa*  
Carapace with 2 to 4 dorsal median spines (sixth abdominal somite stout, expanded posterolaterally into prominent wing-like lobes or keels) .....  
..... *Metacrangon jacqueti agassizii*
3. (1) Eight branchiae on each side of body; apices of branchiae directed anteriorly (rostrum simple, not cleft apically, with 3 pairs of lateral teeth; median carina on carapace armed with 4 teeth; abdominal sterna unarmed) .....  
..... *Parapontocaris caribbaea*  
Six or seven branchiae on each side of body; apices of branchiae directed posteriorly ..... 4
4. (3) Rostrum armed with 1 or 2 pairs of lateral teeth in posterior half of length; first pereopod with rudimentary exopod; hepatic spines present .....  
..... *Pontophilus brevirostris*  
Rostrum without lateral teeth in posterior half; first pereopod without trace of exopod; hepatic spines absent ..... *Philocheras gorei*

## Family Glyphocrangonidae

### Genus *Glyphocrangon* A. Milne Edwards, 1881

#### Key to species

[Adapted from Holthuis, 1971]

1. Anterior antennal carina formed of a row of tubercles; first abdominal somite with two transverse rows of tubercles between intermediate carinae..... *G. spinicauda*  
Anterior antennal carina absent; first abdominal somite usually with only single transverse row of tubercles, viz., along posterior margin..... 2
2. (I) Anterior intermediate carina not ending in spine; posterior antennal and posterior lateral carinae bearing several blunt tubercles or teeth; anterior of two teeth on anterior lateral carina behind pterygostomian spine reaching to or beyond orbital margin ..... *G. longleyi*  
Anterior intermediate carina ending in sharp spine; posterior antennal and posterior lateral carinae straight, without tubercles or teeth; anterior tooth of anterior lateral carina not reaching level of posterior margin of orbit ..... *G. haematonotus*

## **Infraorder Stenopodidea**

### **Family Stenopodidae**

Key to genera and species  
[Adapted from Burukovskii, 1983]

1. Body depressed; telson broad and lanceolate or retangular, terminating in three or five spines of equal size (sometimes without terminal spinule); endopod of uropod with one median dorsal crest ..... *Microprosthemaa semilaeve*  
  
Body compressed; telson elongated, tip terminating in two strong spines, sometimes with small spinule between them; endopod of uropod with two dorsal crests, median crest strong and inner one weaker with several dorsal hairs ..... 2
2. (I) Carapace and abdomen densely covered with uniformly distributed stout spines, sometimes arranged in longitudinal rows; spines hard and anteriorly directed; ischium of third maxilliped with outer spinules ..... *Stenopus*  
  
Abdomen without dorsal spines, sometimes with spinules near lateral margins of pleura; carapace with spines along posterior margin of cervical groove, often in parallel rows; spines erect, anteriorly directed, and pressed to surface of carapace; ischium of third maxilliped without outer spinules ..... *Odontozona libertae*

### **Genus *Stenopus* Latreille, 1819**

Key to species  
[Adapted from Chace, 1972]

- Rostrum unarmed ventrally; third abdominal somite without shield shaped boss; spines on terga of 3 posterior abdominal somites not arranged in transverse rows; scaphocerite unarmed laterally for considerable distance proximal to distolateral tooth and with 2 or 3 rows of spinules arising from dorsal surfaces .... *S. hispidus*
- Rostrum armed ventrally with 6 to 8 spines; third abdominal somite bearing lobate, shield-shaped boss on posteromesial part; spines on 3 posterior abdominal terga arranged in transverse rows; scaphocerite armed throughout distal two-thirds of lateral margin and without spinules on dorsal surface..... *S. scutellatus*

## **Infraorder Astacidea**

### **Family Nephropidae**

Key to genera and species  
[Based on Holthuis, 1974]

1. Eyes black, with pigment (carapace with longitudinal ridges behind cervical groove; series of lateral rostral spines extending backwards almost to cervical groove) .....  
..... *Metanephrops binghami*

Eyes white, lacking pigment..... 2

2. (I) Rostrum laterally compressed for larger part of its length, with dorsal and ventral but no lateral teeth; carapace with branchiostegal spine; body entirely covered by numerous closely placed and sharply pointed spinules; lateral margin of telson with 6 to 12 spines ..... *Acanthacaris caeca*

Rostrum dorsoventrally depressed with lateral (and sometimes ventral) but without dorsal teeth; carapace without branchiostegal spine; body never uniformly covered with spinules, although granules may be present all over, or spinules may be placed on carapace; lateral margin of telson with at most 3 lateral spines; spines, if present, usually small and irregular ..... *Nephropsis aculeata*

## **Infraorder Thalassinidea**

### **Family Axiidae**

#### Key to species

First through third pereopods with no epipod and podobranch; dactyli of third through fifth pereopods biungulate; rostrum triangular, margins unarmed.....  
..... *Coralaxius abelei*

First through third pereopods with epipod and podobranch; dactyli of third through fifth pereopods simple; rostrum triangular, margins dentate ..... *Axiopsis*

### **Genus *Axiopsis* Borradaile, 1903**

#### Key to genera and species

1. No middorsal keel at posterior border of carapace..... *A. serratifrons*  
Middorsal keel at posterior border of carapace ..... 2
2. (I) Short middorsal trench present, extending from cervical groove; telson bearing median spine on posterior margin..... *A. hirsutimana*  
Short middorsal trench absent; telson without median spine on posterior margin...  
..... *A. oxypleura*

## Family Callianassidae

### Key to genera and species

[Adapted from de Saint Laurent and Le Loeuff, 1979]

1. Dorsal surface of carapace with raised oval area; third maxilliped always lacking exopod or with exopod vestigial; uropodal exopod with antero-dorsal lobe; fifth pereopod chelate ..... 2  
Dorsal surface of carapace without raised oval area; third maxilliped with or without exopod; fifth pereopod subchelate ..... *Gourretia latispina*
2. (I) Propodus of fourth pereopod without disto-ventral prominence; pleopods 1 and 2 always reduced or absent in male; pleopods 3 to 5 with appendix interna projecting beyond mesial border of endopod; epipod of first maxilliped only slightly dilated ventrally ..... *Callianassa*  
Propodus of fourth pereopod almost always with disto-ventral prominence; pleopods 1 and 2 present in male; pleopods 3 to 5 with appendix interna recessed in endopod and not exceeding, or only slightly exceeding, mesial border; epipod of third maxilliped with acute anterior lobe; propodus of third maxilliped nearly always greatly dilated ventrally ..... *Callichirus*

## Genus *Callianassa* Leach, 1814

### Key to species

[Adapted from Biffar, 1971a, with modification]

1. Front with lateral spinous projections ..... 2  
Front lacking lateral spinous projections ..... 5
2. (I) Third maxilliped lacking strong spinous crest on mesial surface of ischium, series of small separate denticles; rostrum short, 0.25-0.33 times length of eyestalks (posterior margin of telson concave) ..... *C. guassutunga*  
Strong spinous crest present on third maxilliped; rostrum usually more than 0.33 times length of eyestalks (occasionally shorter in *C. rathbunae*) ..... 3

3. (2) Endopod of uropod elongate oval, twice as long as wide; telson widest midlaterally, generally rounded in outline, posterior margin convex or straight (length of eyestalks only 1.2-1.7 times width) ..... *C. acanthochirus*
- Endopod of uropod rhomboid or subtriangular; telson widest in anterior third, trapezoidal ..... 4
4. (3) Posterior margin of telson with triangular median projection (rostrum almost as long as eyestalks; endopod of uropod subtriangular) ..... *C. longiventris*
- Posterior margin of telson lacking median projection (pigmented area of eyestalk lateral, small, covering about 0.1 of exposed dorsal surface of eyestalk, mediadistal projection acute or rounded, curving laterally; upper exopodal plate almost as long as lower) ..... *C. rathbunae*
5. (1) Rostrum triangular, rounded or acute, extending less than 0.25 length of eyestalks ..... 6
- Rostrum elongate triangular, spinous or flattened dorsoventrally, acute, extending more than 0.25 length of eyestalks ..... 10
6. (5) Antennular peduncle extending beyond tip of antennal peduncle ..... 7
- Antennular peduncle not extending beyond tip of antennal peduncle ..... 8
7. (6) Posterior border of telson straight, with acute median projection; distomedial projection of eyestalks elongate, slender, curving laterally; length of third antennular segment five times length of second segment ..... *C. atlantica*
- Posterior border of telson concave; tip of eyestalks with short rounded projection; length of third antennular segment three times length of second segment ..... *C. fragilis*
8. (6) Propodus of third maxilliped less than two times width of dactylus ..... *C. quadracuta*
- Propodus of third maxilliped about four times width of dactylus ..... 9
9. (8) Lateral margin of telson trilobed ..... *C. trilobata*
- Lateral margin of telson more or less smoothly rounded (posterior margin of telson inconspicuously convex or concave; distal margin of endopod of uropod quadrate; propodus of third pereopod short, extending posteriorly only as far as margin of carpus, length 1.5 times width) ..... *C. branneri*

10. (5) Antennular peduncle extending beyond tip of antennal peduncle. *C. jamaicense*  
Antennular peduncle not extending beyond tip of antennal peduncle..... ll

ll. (10) Ischium and merus of third maxilliped wide, combined length 1.1-1.4 times greatest width..... *C. biformis*  
Ischium and merus of third maxilliped narrow, combined length more than 2.0 times greatest width ..... *C. marginata*

## **Genus *Callichirus* Stimpson, 1866**

## Key to species

[Adapted from Biffar, 1971a]

Eyestalks shorter than first segment of antennular peduncle, terminating in short, subtriangular distal projections; telson widest midlaterally ..... ***C. major***

Eyestalks extending beyond first antennular segment, distomedial projection of eyestalks elongate, curving laterally; telson widest in posterior third.....*C. islagrande*

Key to large chelipeds of species of family Callianassidae (except for *C. biformis*)  
 [Adapted from Biffar, 1971a]

1. Superior and inferior margins of carpus ending distally in two acute prominences; superior margin of palm ending in acute prominence distally ..... ***C. quadracuta***  
 Carpus otherwise, no second prominence on superior and inferior margins, distal margins usually rounded; margin of palm rounded distally ..... 2
2. (1) Ischium with midinferior projection, remainder of margin denticulate ..... 3  
 Ischium lacking midinferior projection, inferior margin serrate, denticulate, spinous, or entire ..... 4
3. (2) Projection on ischium denticulate, approximately as long as remainder of segment's width; inferior margin of merus inconspicuously serrate, without elongate projection ..... ***Callichirus islagrande* (male)**  
 Projection not denticulate, length approximately 0.2 times remainder of segment's width; merus with proximal inferior bifurcate projection, remainder of margin with several strong denticles ..... ***C. jamaicense***
4. (2) Ischium with distinct inferior spines ..... 5  
 Ischium lacking distinct inferior spines ..... 8
5. (4) Merus and palm with two or three spines along superior margin .....  
 ..... ***C. acanthochirus***  
 Merus and palm lacking superior spines ..... 6
6. (5) Inferior margin of merus entire ..... ***C. marginata***  
 Inferior margin of merus spinous or serrate ..... 7
7. (6) Merus with 3-5 spines on proximal half of inferior margin, remainder of margin denticulate; ischium with numerous (7-9) spines on inferior margin; cutting edge of dactylus entire ..... ***C. longiventris***  
 Merus with 7-12 spines plus acute serrations; ischium with 3-4 spines distally, acute serrations proximally; cutting edge of dactylus with median quadrate notch (male) or entire (female) ..... ***C. rathbunae***
8. (4) Inferior margin of merus entire ..... 9  
 Inferior margin of merus serrate, spinous, or with some sort of proximal inferior projection ..... 10

9. (8) Propodal finger with acute triangular tooth proximally; carpus less than 1.7 times length of palm ..... *Callichirus major* (female)
- Propodal finger serrate but lacking well-developed tooth; carpus more than 1.7 times length of palm ..... *Callichirus islagrande* (female)
10. (8) Proximal inferior corner of merus with spinous or robust spine like projection ...  
..... ll
- Proximal inferior projection, if present, quadrate or forming hook, not spinelike  
..... 12
- ll. (10) Lateral surface of palm with 2-3 spines just proximal to base of propodal finger; projection on merus strong, bifurcate ..... *C. quassutina*
- Surface of palm lacking spines; distally curving spinous projection on merus, remainder of margin weakly serrate ..... *Gourretia latispina*
12. (10) Merus with broad, well-developed, proximal inferior hook, distal margin of hook concave, tip acute or subacute, remainder of margin weakly serrate ..... 13
- Merus lacking hook, inferior margin serrate, spinous, or with quadrate proximal inferior projection ..... 15
13. (12) Propodal notch extending proximally into palm; cutting edge of dactylus with three strong teeth; length of carpus less than 0.75 times length of palm.....  
..... *C. fragilis* (male)
- Propodal notch extending little or not at all into palm; dactylus lacking strong dentition; length of carpus greater than 0.75 times length of palm ..... 14
14. (13) Proximal inferior margin of carpus broadly rounded, extending proximally beyond level of superior articulation with merus; cutting edge of propodal finger serrate; proximal superior margin of merus elevated, denticulate, margin more or less straight; total length of carpus, palm, and dactylus in adults less than 15 mm ..... *C. fragilis* (female)
- Proximal inferior margin of carpus rounded, not extending proximally beyond level of articulation; propodal finger serrate in proximal third only; superior margin of merus rounded, highest centrally; total length of carpus, palm, and dactylus in adults more than 20 mm ..... *C. atlantica*

15. (12) Merus with proximal inferior quadrate (may appear triangular) projection, inferior margin including projection serrate (carpus much —more than 1.25—longer than palm; propodal notch extending proximally into palm; dactylus hooked, with single rounded bifid tooth; propodal finger heavy, short, blunt at tip) .....  
..... *Callichirus major* (male)
- Merus without distinct projection, inferior margin either convex and serrate or forming serrate keel ..... 16
16. (15) Carpus 0.33-0.67 times length of palm; palm subquadrate; dactylus heavy, with 2-3 strong teeth on cutting edge, acute at tip ..... *C. branneri*
- Carpus 0.65-0.95 times length of palm; palm distinctly longer than wide; dactylus with two truncate teeth medially (male) or lacking strong dentition (female) .....  
..... *C. trilobata*

## Family Upogebiidae

### Genus *Upogebia* Leach, 1814

Key to species  
[Adapted from Schmitt, 1935a]

- Anterolateral border of carapace armed with small spine on level with eyes;  
immovable finger of chela shorter than movable finger ..... *U. affinis*
- Anterolateral border of carapace not armed with spine in line with eyestalks;  
immovable finger of chela longer than movable finger ..... *U. operculata*

## **Infraorder Palinura**

### **Family Palinuridae**

Key to genera and species  
[Adapted from Manning, 1978]

First pair of pereopods enlarged in males, ending in apparent (false) pincers, with wide, red cross bands; carapace ornamented with strong, scale-like sculpture; tail brick red, with 4 or 5 conspicuous transverse grooves on each segment and with yellowish spots and stripes ..... *Justitia longimanus*

First pair of pereopods not enlarged, with no trace of pincer, without cross bands; carapace without scale-like sculpture; tail variously colored, smooth or with at most 1 transverse groove (frontal horns over eyes very sharp; antennular flagella longer than peduncle) ..... *Panulirus*

### **Genus *Panulirus* White, 1847**

Key to species

1. Each abdominal somite smooth, without complete transverse groove (antennular plate bearing 2 pairs of strong spines) ..... *P. laevicauda*  
Each abdominal somite with complete transverse groove..... 2
2. (I) Antennular plate bearing 2 pairs of strong spines; tail with 4 conspicuous yellow spots ..... *P. argus*  
Antennular plate bearing one pair of strong spines; tail without 4 conspicuous yellow spots ..... *P. guttatus*

## **Family Scyllaridae**

Key to genera and species  
[Adapted from Manning, 1978]

1. Carapace much broader than long, its sides very thin and cut into very large, flattened, triangular projections ..... *Parribacus antarcticus*  
Carapace usually longer than broad, its sides not very thin, either smooth or denticulate..... 2
2. (l) Front and usually lateral edges of antennae smooth or finely denticulate, not cut into large triangular projections; size large ..... *Scyllarides*  
Front and lateral edges of antennae cut into distinct teeth; size small .... *Scyllarus*

## **Genus *Scyllarides* Gill, 1898**

Key to species  
[Adapted from Lyons, 1970]

Gastric, cardiac, and branchial regions of carapace elevated, distinct; pregastric and gastric teeth prominent in profile; second through fourth abdominal somites with median, node-like carina..... *S. nodifer*

Gastric, cardiac, and branchial regions of carapace low, not strongly defined; pregastric and gastric teeth not obvious in profile; second through fourth abdominal somites low, rounded, without distinct carina ..... *S. aequinoctialis*

## **Genus *Scyllarus* Fabricius, 1775**

Key to species  
[Adapted from Lyons, 1970]

1. Gastric and all lateral prominences on carapace sharp; second segment of antennular peduncle cylindrical; pleura of fourth abdominal somite sharply rectangular or acute laterally ..... *S. depressus*

Prominences on carapace blunt; second segment of antennular peduncle flattened superiorly; pleura of fourth abdominal somite rounded laterally ..... 2

2. (I) Pregastric tooth of carapace nearly always bilobed, incised; first to fourth abdominal somites with deep, narrow median notch in posterior margin..... *S. americanus*

Pregastric tooth of carapace rounded, entire; first to fourth abdominal somites with very shallow, broad median notch in posterior margin..... *S. chacei*

## **Family Synaxiidae**

### **Genus *Palinurellus* Von Martens, 1881**

Carapace entirely covered with small, rounded nodules and short hairs, but without enlarged spines; small triangular rostrum present between eyes; antennae shorter than carapace, antennular flagella shorter than antennular peduncles; pereopods without true pincers, first pair not longer than, but at least twice as thick as, second [from Manning, 1978] ..... *P. gundlachi*

## **Infraorder Anomura**

### **Family Coenobitidae**

#### **Genus *Coenobita* Latreille, 1826**

[Adapted from Chace and Hobbs, 1969]

Eyestalks flattened on mesial surface; antennular peduncle five times as long as eyestalks, flagellum blunt tipped; antennal peduncle originating below eyestalk; chelipeds unequal, left much larger than right, studded with closely appressed, dark-tipped spines; third left pereopod (second walking leg) with propodus and dactylus very broad, flattened, and smooth, with inferior margins rather sharp and obscurely serrate..... *C. clypeatus*

## Family Diogenidae

### Key to genera and species

[Adapted from Provenzano, 1959, with additions]

1. Abdomen secondarily straightened for housing in rock cavities or sponges; chelae and distal segments of walking legs forming opercular face..... *Cancellus*  
Abdomen coiled for housing in gastropod shells; chelae and distal segments of walking legs not forming opercular face ..... 2
2. (1) Paired appendages present on first two abdominal somites of male and on first somite only of female ..... *Paguristes*  
No paired appendages on anterior abdominal somites of either sex ..... 3
3. (2) Chelipeds similar and subequal; fingers moving horizontally ..... 4  
Chelipeds dissimilar and unequal; fingers moving obliquely or nearly vertically ..... 5
4. (3) Finger tips spooned; antennal flagellum long and not hairy ..... *Clibanarius*  
Finger tips acuminate; antennal flagellum short and very hairy ..... *Isocheles wurdemanni*
5. (3) Chelipeds not markedly unequal, right slightly larger than left .....  
..... *Petrochirus diogenes*  
Chelipeds markedly unequal, left much larger than right ..... 6
6. (5) Major palm tuberculate, with appressed setae..... *Dardanus*  
Major palm smooth, without hairs..... *Calcinus tibicen*

### Genus *Cancellus* H. Milne Edwards, 1836

#### Key to species

[Adapted from Mayo, 1973]

- Ocular scale with more than one terminal tooth or spine; fifth coxal segments of male flattened; overall color of live or recently preserved specimens green .....  
..... *C. viridis*
- Ocular scale with one triangular tooth; fifth coxal segments of male concave and expanded; overall color cream with purple, dark red, or brown..... *C. ornatus*

## **Genus *Clibanarius* Dana, 1851**

### Key to species

[Adapted from Provenzano, 1959]

1. Dactyli of walking legs shorter than propodi ..... 2  
Dactyli of walking legs not shorter than propodi ..... 3
2. (I) Legs with broad longitudinal light stripe on dark background..... *C. antillensis*  
Legs without any longitudinal stripes, instead banded with orange at proximal ends of propodi and dactyli; dominant color blue ..... *C. tricolor*
3. (I) Propodi with dark stripe laterally, bordered on each side by light stripe of similar width ..... *C. cubensis*  
Propodi with 4 thin light stripes laterally, separated by broad dark stripes .....  
..... *C. vittatus*

## **Genus *Dardanus* Paulson, 1875**

### Key to species

[Adapted from Williams, 1984, with addition]

1. Propodus of third left pereopod (second left walking leg) not hairy, without lateral longitudinal ridge or groove; rugae arranged in herringbone pattern.... *D. insignis*  
Propodus of third left pereopod conspicuously hairy, with lateral longitudinal ridge paralleled by groove; ridge crossed by rugae ..... 2
2. (I) Dactylus of third left pereopod with shallow ventral groove; cornea widely rounded ..... *D. fucosus*  
Dactylus of third left pereopod without shallow ventral groove; cornea barely expanded, convex ..... *D. venosus*

## **Genus *Paguristes* Dana, 1852**

### **Key to species**

[Based on Provenzano, 1959, and McLaughlin and Provenzano, 1974a]

1. Rostrum broadly rounded or pointed, but not advanced beyond level of lateral projections on front of anterior shield of carapace ..... 2  
Rostrum slender and definitely advanced beyond level of lateral projections on front of anterior shield of carapace..... 6
2. (1) Eye scales adjacent, ending in more than 1 terminal spine ..... *P. hummi*  
Eye scales separated, ending in acuminate tip..... 3
3. (2) Anterolateral sides of anterior shield of carapace definitely spiny ..... 4  
Anterolateral sides of anterior shield of carapace not spiny..... 5
4. (3) Cornea narrow and tapering anteriorly to blunt point; anterolateral sides of anterior shield of carapace with about 3 transverse rows of spinules; second antennal segment with two spines on anterior margin, one on each side of base of antennal acicle ..... *P. oxyophthalmus*  
Cornea broad and not tapering anteriorly; anterolateral sides of anterior shield of carapace roughened by scattered spiny granules; second antennal segment with several spines on lateral margin..... *P. lymani*
5. (3) Rostrum very poorly developed, obtusely triangular or broadly rounded, or often obsolete ..... *P. laticlavus*  
Rostrum short, obtusely pointed, slightly less advanced than more acute lateral projections ..... *P. moorei*
6. (1) Anterior shield of carapace not noticeably longer than broad..... 7  
Anterior shield of carapace noticeably longer than broad ..... 12
7. (6) Antennular peduncles extending beyond eyestalks ..... 8  
Antennular peduncles not extending beyond eyestalks ..... 9

8. (7) Dorsal surface of carapace with numerous small spines or spinules and tufts of setae laterally ..... *P. inconstans*
- Dorsal surface of carapace hairy towards sides..... *P. triangulatus*
9. (7) Upper surface of hands of chelipeds with hairs inconspicuous, not obscuring spines ..... 10
- Upper surface of hands of chelipeds with hairs conspicuous, at least obscuring surface..... 11
10. (9) Fifth antennal segment bearing 3 spines on basal part of outer margin; antennal acicle with 2-3 spines on inner margin ..... *P. grayi*
- Fifth antennal segment bearing 2 spines on basal part of outer margin; antennal acicle with no spines on inner margin ..... *P. erythrops*
11. (9) Antennal peduncles slightly exceeding acicles ..... *P. sericeus*
- Antennal peduncles reaching just beyond middle of eyestalks ..... *P. puncticeps*
12. (6) Antennal peduncle not overreaching middle of eyestalks ..... *P. spinipes*
- Antennal peduncle overreaching middle of eyestalks ..... 13
13. (12) Rostrum slender, its sides parallel from base to near acute tip..... 14
- Rostrum broad at base, its sides converging to tip ..... 15
14. (13) Terminal segment of antennal peduncle armed with two spines; carapace triangular in shape in dorsal view..... *P. tenuirostris*
- Terminal segment of antennal peduncle without spines; carapace rectangular in shape in dorsal view ..... *P. cadenati*
15. (13) Shield with dorsolateral surface and margins unarmed or with very few, minute spinules ..... 16
- Shield with dorsolateral surface and margins armed with numerous small spines or spinulose tubercles ..... 19
16. (15) Dorsal margins of meri of chelipeds unarmed..... *P. hernancortezii*
- Dorsal margins of meri of chelipeds with spinules or spinulose protuberances.... 17

17. (16) Rostrum greatly exceeding lateral projections, slender, acute, strongly depressed distally, terminating in small spine ..... *P. anomalus*
- Rostrum considerably exceeding lateral projections, terminating acutely or subacutely but not in a small spine ..... 18
18. (17) Fifth antennal segment with two dorsal spines..... *P. wassi*
- Fifth antennal segment with few tufts of short setae, with no spines .....  
..... *P. limonensis*
19. (15) Chelipeds virtually devoid of setae ..... *P. starcki*
- Chelipeds covered with tufts of short, plumose setae ..... 20
20. (19) Dorsomesial margins of carpi of chelipeds with 4 or 5 strong spines; ocular peduncles with distinct, often irregular dark bands distally (brood pouch of female large, subovate or subquadrate) ..... *P. tortugae*
- Dorsomesial margins of carpi of chelipeds with 6 or more moderately small spines; ocular peduncles without distinct dark bands distally (brood pouch of female very small, subtriangular) ..... *P. invisissacculus*

## **Family Lithodidae**

### **Genus *Paralomis* White, 1856**

Gastric region with no spines; carapace with strong lateral spines; lateral cardiac furrows not meeting posteriorly; median rostral spine with no central tooth; walking legs moderately compressed [from Chace, 1939] ..... *P. cubensis*

## Family Paguridae

Key to genera and species

[Based on McLaughlin, 1981a, and Williams, 1984]

1. Form crancriform; 10 pairs of gills present ..... *Ostraconotus spatulipes*
  - Form not crancriform; 11 or 13 pairs of gills present..... 2
2. (1) Ischium of third maxilliped without mesioventral accessory spine near anterior end of mesial dentate crest..... *Iridopagurus*
  - Ischium of third maxilliped with mesioventral accessory spine near anterior end of mesial dentate crest ..... 3
3. (2) Paired pleopods on first abdominal somite of male (next four somites have unequally biramous appendage on left side) ..... *Tomopaguropsis problematica*
  - No paired appendages on first abdominal somite in male..... 4
4. (3) Sexual tube well developed in male ..... 5
  - No sexual tube in male ..... 7
5. (4) Right tube long, filiform at extremity ..... *Nematopaguroides pusillus*
  - Right tube not filiform at its extremity ..... 6
6. (5) Tube directed toward exterior (laterally) turning dorsally over anterior part of abdomen; chelipeds very unequal; third pereopods of right and left sides similar ..... *Catapagurus sharrei*
  - Tube directed laterally, not turned over abdomen; chelipeds subequal; third pereopod of left side modified..... *Solenopagurus lineatus*
7. (4) No paired pleopods on first abdominal somite of female (except *P. piercei*).....
  - ..... *Pagurus*
  - Paired pleopods on first abdominal somite of female ..... 8
8. (7) Thirteen pairs of gills present ..... *Pylopaguropsis atlantica*
  - Eleven pairs of gills present..... 9
9. (8) Propodi of fourth pereopods with single row of scales ..... 10
  - Propodi of fourth pereopods with two or more rows of scales..... 13

10. (9) Uropods symmetrical or nearly so..... *Pylopagurus discoidalis*
- Uropods markedly asymmetrical..... 11
11. (10) Spines of chelae with basal rosettes ..... *Rhodochirus rosaceus*
- Spines of chelae without basal rosettes ..... 12
12. (11) Dactylus and immovable finger of left chela “spoon-shaped” ..... *Tomopagurus*
- Dactylus and immovable finger of left chela not “spoon-shaped” (right chela operculate; preungual process present)..... *Phimochirus*
13. (9) Uropods symmetrical or nearly so, with protopods produced posteriorly .....
- ..... *Agaricochirus*
- Uropods markedly asymmetrical, with protopods not produced posteriorly .... 14
14. (13) Left chela triangular in cross-section, dactylus and immovable finger not dorsoventrally flattened .....
- ..... *Anisopagurus*
- Left chela not triangular in cross-section, dactylus and immovable finger dorsoventrally flattened .....
- ..... *Manucomplanus corallinus*

### **Genus *Agaricochirus* McLaughlin, 1981**

#### Key to species

[Adapted from McLaughlin, 1982]

1. Tergite of fifth abdominal somite with distinct patch of short, stiff setae (anterior lobe of sternite of third pereopods well developed, subquadrate) .....
- ..... *A. gibbosimanus*
- Tergite of fifth abdominal somite without distinct patch of short, stiff setae ..... 2

2. (1) Dorsolateral margin of carpus of right cheliped with row of strong spines, at least distally ..... *A. alexandri*
- Dorsolateral margin of carpus of right cheliped with row of low protuberances or unarmed ..... 3
3. (2) Dorsal surface of dactylus of right cheliped with longitudinal ridge of broad tubercles; margins of mushroom-shaped tubercles unarmed..... *A. boletifer*
- Dorsal surface of dactylus of right cheliped with longitudinal rows of simple tubercles; margins of mushroom-shaped tubercles armed with tiny spines .....  
..... *A. acanthinus*

### **Genus *Anisopagurus* McLaughlin, 1981**

#### Key to species

- Eye scales armed with 4-5 spines on medial margin..... *A. pygmaeus*
- Eye scales with apical spine ..... *A. bartletti*

### **Genus *Iridopagurus* De Saint Laurent-Dechancé, 1966**

#### Key to species

[From McLaughlin, personal communication]

1. Distodorsal margin of merus of left cheliped with strong spine..... *I. iris*
- Distodorsal margin of merus of left cheliped glabrous ..... 2
2. (1) Chelipeds with dense patch of setae on dorsolateral distal surface of palm and proximal surface of immovable finger ..... *I. caribbensis*
- Chelipeds without dense patch of setae on dorsolateral distal surface of palm and immovable finger..... 3

3. (2) Right chela with row of spines on dorsomesial margin and dorsal midline proximally; 4th pereopod with preungual process ..... *I. globulus*
- Right chela with numerous irregular rows of spines on dorsal surface; 4th pereopod without preungual process ..... 4
4. (3) Chelae with palms ovate, dorsal surfaces with reticulated color pattern; dactyli of 2nd and 3rd pereopods with 3-8 corneous spinules on inferior margins .....  
..... *I. reticulatus*
- Chelae with palms subrectangular, dorsal surfaces with colored band across fingers proximally; dactyli of 2nd and 3rd pereopods with 8-12 corneous spinules on inferior margins ..... *I. violaceus*

## Genus *Pagurus* Fabricius, 1775

### Key to species

[Based on Lematre et al., 1982, and Williams, 1984]

1. Ocular acicles with several terminal submarginal or marginal spines ..... 2
- Ocular acicles with single terminal submarginal spine (rarely 1 or 2 accessory mesial marginal spinules) ..... 4
2. (1) Chelae with short setae forming dense mat-like covering on dorsal surfaces.....  
..... *P. provenzanoi*
- Chelae glabrous or with short to long setae, but setae not forming dense mat-like covering on dorsal surfaces ..... 3
3. (2) Left chela with longitudinal row of moderately strong or strong spines in proximity to dorsolateral margin; antennal flagella with setae less than 1 article in length ..... *P. brevidactylus*
- Left chela without longitudinal row of moderately strong or strong spines in proximity to dorsolateral margin; antennal flagella with setae 1-2 articles in length ..... *P. carolinensis*

- |         |  |                         |
|---------|--|-------------------------|
| 4. (1)  | Width of major chela at least length (except <i>P. maclaughlinae</i> ) .....   | 5                       |
|         | Width of major chela less than length (except <i>P. maclaughlinae</i> ).....   | 7                       |
| 5. (4)  | Dactylus of major chela with sharply produced angle on mesial margin.....  |                         |
|         | ..... <i>P. pollicaris</i>   |                         |
|         | Dactylus of major chela without sharply produced angle on mesial margin.....   | 6                       |
| 6. (5)  | Chelipeds with palms dented on dorsal surfaces, covered with small, closely crowded granules .....   |                         |
|         | ..... <i>P. impressus</i>  |                         |
|         | Palm of major chela bearing irregular rows of spines on dorsal surface; palm of minor chela bearing single or double rows of spines on dorsal midline .....                        |                         |
|         | ..... <i>P. maclaughlinae</i>  |                         |
| 7. (4)  | Rostrum distinct, usually produced as small lobe .....   | <i>P. marshi</i>        |
|         | Rostrum not distinct or produced as small lobe .....   | 8                       |
| 8. (7)  | Antennal flagella with long, usually uniformly paired setae, 3-8 articles in length, at least every second article proximally .....  | 9                       |
|         | Antennal flagella with short, or irregularly short and long, not uniformly paired, setae over entire length .....  | 11                      |
| 9. (8)  | Dactyli of pereopods without row of corneous spines on inferior margins (rarely with 1-3 minute spinules) .....  | <i>P. gymnodactylus</i> |
|         | Dactyli of pereopods with row of corneous spines on inferior margins.....  | 10                      |
| 10. (9) | Antennal flagella short, not overreaching left chela; carpus of 2nd right pereopod with dorsal row of spines.....  | <i>P. annulipes</i>     |
|         | Antennal flagella long, overreaching right chela; carpus of 2nd right pereopod without dorsal row of spines, rarely 1 or 2 spines in large individuals (shield length 2.5 mm)..... | <i>P. criniticornis</i> |
| 11. (8) | Palm of small (left) chela triangular in cross section, upper surface divided by longitudinal ridge into 2 obliquely sloping facets .....  | 12                      |
|         | Palm of small (left) chela not triangular in cross section, either oval or flattened .....   | 13                      |

12. (II) Eyestalks moderately to noticeably stout with definitely dilated corneas; minor chela simply ornamented dorsally with numerous rounded, slightly appressed to spiniform tubercles ..... *P. politus*
- Eyestalks slender, curved slightly outward, cornea only very slightly dilated; major chela with prominent, sometimes strongly elevated median single or double rows of spines ..... *P. stimpsoni*
13. (II) Eye scales triangular; eyestalks equally swollen at base and cornea; rostrum obtuse but definitely exceeding obsolescent lateral projections; major chela 3 or more times longer than wide ..... *P. piercei*
- Eye scales rounded distally; eyestalks with cornea dilated, broader than base; rostrum obtuse but about equalling lateral projections; major chela 2.5 (or less) times longer than wide..... 14
14. (I3) Chelipeds subcylindrical, relatively smooth on lateral surface; palm lightly crested and minutely dentate along lateral margin, dorsal surface minutely granulate and with 2 incomplete rows of subspinous tubercles and scattered smaller ones; dorsal surface of eye scale shallowly excavated ..... *P. longicarpus*
- Chelipeds not subcylindrical, relatively spiny on lateral surface and setose; palm with more or less diagonal rows of spines on dorsal surface and with irregularly but closely set plates near base of immovable finger and occasionally on dactylus, spine or tubercle usually arising from center of each plate; not shallowly excavated on dorsal surface ..... *P. defensus*

## Genus *Phimochirus* McLaughlin, 1981

### Key to species

[Adapted from McLaughlin, 1981b]

1. Palm of right chela with dorsal tuberculate median ridge formed by shallow mesial and lateral depressions..... *P. randalli*  
Palm of right chela without dorsal tuberculate median ridge formed by shallow mesial and lateral depressions ..... 2
2. (1) Dorsal surface of palm and immovable finger of right chela with strong or moderately strong tubercles, at least distally (exopod of left uropod without dense tuft of long setae) ..... *P. holthuisi*  
Dorsal surface of palm and immovable finger of right chela smooth, granular, or weakly tuberculate ..... 3
3. (2) Dorsal surface of carpus of right cheliped unarmed..... *P. leurocarpus*  
Dorsal surface of carpus of right cheliped tuberculate, spinose, or spinulose (palm of left chela with dorsomedial row of small spines or tubercles extending to base of dactylus)..... *P. operculatus*

## Genus *Tomopagurus* A. Milne Edwards and Bouvier, 1893

### Key to species

[Adapted from McLaughlin, 1981a]

1. First antennal segment with prominent, often hooked, lateral spine ..... 2  
First antennal segment without prominent, often hooked, lateral spine ..... 4
2. (1) Propodus and dactylus of left third pereopod with lateral faces densely setose... 3  
Propodus and dactylus of left third pereopod with lateral faces not densely setose ..... *T. rubropunctatus*
3. (2) Carpus of right second pereopod with one spine on dorsal margin..... *T. cokeri*  
Carpus of right second pereopod with more than one spine on dorsal margin..... *T. wassi*
4. (1) Dorsal surface of right chela with prominent acute spines..... *T. cubensis*  
Dorsal surface of right chela with spinulose or blunt tubercles (carpus of second right pereopod with one or two strong spines on dorsal margin distally) *T. chacei*

## **Family Chirostyliidae**

### **Genus *Uroptychus* Henderson, 1888**

Carapace broader than long, with lateral margins dentate or spinose; gastric region with no spines; cornea much smaller than eyestalk..... *U. armatus*

## **Family Galatheidae**

Key to genera and species  
[Adapted from Chace, 1942b]

1. Integument hard, well calcified; transverse ciliated lines on carapace feeble or absent; exopod of first maxilliped without lash..... *Munidopsis*  
Integument pliable, not strongly calcified; well developed transverse ciliated lines on carapace; exopod of first maxilliped with simple lash ..... 2
2. (I) Rostrum triangular and flattened or concave above ..... *Galathea rostrata*  
Rostrum not triangular with long, slender spine (side walls of carapace not visible in dorsal view) ..... *Munida*

### **Genus *Munida* Leach, 1820**

Key to species  
[Adapted from Chace, 1942b]

1. Posterior margin of carapace unarmed; no median spines on cardiac region..... 2  
Ridge along posterior margin of carapace armed with spines; one or more median spines on cardiac region ..... 11
2. (I) Rostral spines armed laterally with distinct spinules..... *M. spinifrons*  
Rostral spine not distinctly spinose on margins ..... 3

3. (2) Inner terminal spine of basal segment of antennular peduncle much shorter than outer one ..... 4
- Inner terminal spine of basal segment of antennular peduncle nearly or quite twice as long as outer one ..... 7
4. (3) Intermediate spines present between large gastric pair situated directly behind supraoculars ..... 5
- No intermediate spines between large gastric pair ..... 6
5. (4) No spines on dorsal surface of triangular area of carapace behind anterior branch of cervical groove ..... *M. miles*
- One or two spines on each triangular area between branches of cervical groove, and widely separated pair behind posterior branch of cervical groove, one on either side of cardiac region ..... *M. sanctipauli*
6. (4) Supraocular spines extending beyond eyes; second and third abdominal somites armed with spines ..... *M. valida*
- Supraocular spines not reaching as far as eyes; third abdominal somite unarmed...  
..... *M. forceps*
7. (3) Usually two or more spines on ridge behind cervical groove ..... 8
- No spines on ridge behind cervical groove ..... 10
8. (7) Abdominal somites unarmed (two to four spines on ridge behind cervical groove)  
..... *M. irrasa*
- Second abdominal somite armed with spinules ..... 9
9. (8) Supraocular spines reaching to or beyond cornea; medium-sized to large species ..  
..... *M. iris iris*
- Supraocular spines not reaching to cornea; very small species ..... *M. pusilla*
10. (7) Second abdominal somite usually armed with few spinules ..... *M. angulata*
- Abdominal somites unarmed (spine at anterolateral angle of carapace long,  
followed by six small lateral spines) ..... *M. simplex*
- II. (1) Rostral spine slightly shorter than supraocular spines ..... *M. longipes*
- Rostral spine distinctly longer than supraoculars ..... 12

12. (II) Transverse striae of carapace armed with many small spinules; posterior margin of carapace armed with six to fifteen spines; basal joint of antennular peduncle with from three to five lateral spines in addition to terminal pair; thoracic sternum with small marginal spine at insertion of each appendage ..... *M. affinis*

Transverse striae of carapace at most tuberculate or beaded; posterior margin of carapace armed with two to six spines; basal segment of antennular peduncle with no or two lateral spines in addition to terminal pair; thoracic sternum unarmed (strong median spine on posterior portion of fourth abdominal somite; supraocular spines reaching to distal margin of cornea or beyond; transverse striae on carapace very numerous, discontinuous and obscure)..... *M. stimpsoni*

### Genus *Munidopsis* Whiteaves, 1874

#### Key to species

[Adapted from Mayo, 1974]

1. Dorsal surface of carapace without distinct spines or pair of tubercles on gastric region (rostrum slightly decurved; antennular spines adjacent or overlapping in dorsal view; no distinct protuberance beneath frontal margin lateral to eye)..... *M. polita*

Dorsal surface of carapace with distinct spines or at least one pair of tubercles on gastric region ..... 2

2. (I) Rostrum broad, spade-shaped; frontal margin of carapace with postantennal spine ..... *M. platirostris*

Rostrum narrow, not simply spine-like, but with distal constriction, often with obtuse teeth at base of constriction; frontal margin of carapace without postantennal spine (gastric region of carapace without distinct pair of sharp spines, but with pair of obscure tubercles or spinules; lateral submarginal depressions distinct on carapace) ..... *M. armata*

## Family Porcellanidae

Key to genera and species  
[Based on Gore and Abele, 1976]

1. Carapace at least 1.5 times as long as broad; form elongate, "Hippa"-like; large orbit-like concavity on hepatic margin, its outer angle marked by tooth .....  
..... *Euceramus praelongus*  
  
Carapace less than or nearly 1.5 times as long as broad; form not elongate, or "Hippa"-like; no large orbit-like concavity on hepatic margin ..... 2
2. (1) Basal segment of antennae short, not strongly produced forward to meet anterior margin of carapace, movable segments with free access to orbit..... 3  
  
Basal segment of antennae strongly produced forward and broadly in contact with anterior margin of carapace, movable segments thus far removed from orbit ..... 6
3. (2) Posterior portions of side walls of carapace lacking or consisting of one or more small pieces, separated by membranous interspaces behind epibranchial regions 4  
  
Posterior portions of side walls of carapace entire, without small pieces or membranous areas behind epibranchial regions ..... 5
4. (3) Side walls of carapace incomplete; portion posterior to epibranchial or mesobranchial area occupied by membrane ..... *Neopisosoma angustifrons*  
  
Side walls of carapace consisting of one or more pieces separated by membranous interspaces in epibranchial or mesobranchial area (front triangular or transverse in dorsal view, never with projecting teeth; carapace more or less subquadrate; chelipeds very robust and thick) ..... *Pachycheles*
5. (3) Basal segment of antennule not laterally expanded; basal antennal segment neither produced inward nor forming partial suborbital margin; front triangular, prominent; carapace with distinct frontal, epibranchial and mesobranchial spinules; cheliped with fingers distorted, gaping, deeply grooved along cutting edges, spooned and truncate at tips; telson 7-plated.. *Parapetrolisthes tortugensis*  
  
Basal antennular segment as above; basal antennal segment either not produced inward or, if with distinct inward projection, forming only partial suborbital margin; front triangular or trilobate, usually prominent; carapace without mesobranchial spinules; cheliped fingers normal, not grooved along cutting edges or spooned at tips; telson almost invariably 7-plated ..... *Petrolisthes*

6. (2) Dactyli of walking legs ending in 2 or more large, strong, fixed spines; carapace markedly broader than long, front nearly transverse in dorsal view .....  
..... *Polyonyx gibbesi*

Dactyli of walking legs ending in single spines, usually with accessory movable spinules on posterior margins ..... 7

7. (6) Front prominent, tridentate or trilobate in dorsal view; carapace only slightly longer than broad (lateral margins of carapace unarmed posterior to epibranchial angle; fingers on chelipeds not twisted out of plane with palm, more or less normal)..... *Porcellana*

Front deflexed, appearing rounded or faintly trilobate in dorsal view; carapace about as broad as long (basal segments of antennules very small, recessed behind front, latter projecting shelflike over antennules)..... *Megalobrachium*

### Genus *Megalobrachium* Stimpson, 1858

Key to species  
[Adapted from Gore and Abele, 1976]

Telson of abdomen with 5 plates (carapace, chelipeds, and walking legs tuberculate; lateral margins rounded, dentate; frontal, postfrontal, and protogastric lobes, viewed frontally, appearing low, rounded, indistinct, usually smooth, rarely granular)..... *M. soriatum*

Telson of abdomen with 7 plates (carapace and chelipeds thickly covered with coarse hairs; chelipeds heavily and evenly granulate; protogastric regions, viewed frontally, appearing distinct and clearly elevated above frontal and hepatic regions; propodi of walking legs more slender, from 2.8 to 3 times longer than wide)..... *M. poeyi*

## **Genus *Pachycheles* Stimpson, 1858**

Key to species

[Adapted from Haig, 1956]

1. Chelipeds thickly covered with stiff bristles ..... *P. pilosus*  
No stiff bristles on chelipeds ..... 2
2. (1) Chelipeds smooth except for rugosity on outer margin of carpus ..... *P. riisei*  
Chelipeds rough over entire surface ..... 3
3. (2) Chelipeds with high longitudinal ridges; in between ridges rows of deep pits present ..... *P. rugimanus*  
Chelipeds with longitudinal rows of large flattened tubercles ..... 4
4. (3) Fingers of chelipeds neither gaping nor full of pubescence; space between tubercles of chelipeds glabrous or nearly so; tubercles low, rows irregular ..... *P. ackleianus*  
Fingers of major cheliped gaping and full of pubescence; space between tubercles filled with pubescence; tubercles heavy, in regular rows ..... *P. monilifer*

## **Genus *Petrolisthes* Stimpson, 1858**

Key to species

[Based on Haig, 1956]

1. Telson of abdomen with 5 plates (3 or 4 teeth on carpus of chelipeds pointed, denticulate; outer margin of manus with longitudinal groove; carapace, chelipeds, and gape of fingers lightly pubescent) ..... *P. jugosus*  
Telson of abdomen with 7 plates ..... 2
2. (1) Carpus of cheliped armed with 4 teeth or lobes; no spines (except epibranchial spine) on lateral margins of carapace (carapace very rough with prominent, transverse piliferous rugae) ..... *P. galathinus*  
Carpus of cheliped armed with 3 low, wide-set, spine-tipped teeth ..... 3
3. (2) Carapace transversely rugose; epibranchial spine present ..... *P. armatus*  
Surface of carapace more or less smooth, not rugose; no epibranchial spine ..... *P. politus*

## **Genus *Porcellana* Lamarck, 1801**

Key to species  
[Adapted from Haig, 1956]

1. Median lobe of front rounded, not surpassing internal orbital angles; chelae without hairs; length and breadth of carapace about equal ..... *P. stimpsoni*  
Median lobe of front pointed, surpassing internal orbital angles; chelae with fringe of hairs on outer margin; carapace longer than broad ..... 2
2. (1) Inner angle of carpus of cheliped with broad lobe; epibranchial angle low, rounded, lobe-like, sometimes spine-tipped ..... *P. sayana*  
Inner angle of carpus with low, spine-tipped lobe; epibranchial angle with sharp spine..... *P. sigsbeiana*

## **Family Albuneidae**

### Key to genera and species

1. Eyestalks small and fused together; anterior margin of carapace with two submedian teeth separated by concavity ..... *Zygopa michaelis*  
Eyestalks elongate or broad, separate from each other; anterior margin of carapace with single median tooth (rostrum) ..... 2
2. (I) Eyestalks narrow, triangular ..... *Albunea*  
Eyestalks broad, oval ..... *Lepidopa*

### **Genus *Albunea* Weber, 1795**

Key to species  
[Adapted from Williams, 1984]

- Dactyli of second and third pereopods with blunt, rectangular lobes at bases of anterior borders..... *A. gibbesii*  
Dactyli of second pereopods with asymmetrically mucronate spurs, third pereopods with acute, falciform spurs at bases of anterior borders ..... *A. paretii*

### **Genus *Lepidopa* Stimpson, 1858**

#### Key to species

- Eye-plates squarish, distal edge carrying many teeth (20 or more in large individuals), teeth close together, almost touching ..... *L. benedicti*  
Eye-plates roundish, distal edge rounded and smooth ..... *L. websteri*

## **Family Hippidae**

Key to genera and species  
[Adapted from Haig, 1974]

- Antennal flagella very long; dactyli of first pereopods oval and lamellate *Emerita*  
Antennal flagella short; dactyli of first pereopods styliform, not multiarticulate ....  
..... *Hippa cubensis*

## **Genus *Emerita* Scopoli, 1777**

Key to species  
[From Felder, 1973]

1. Dactyli of first thoracic pereopods rounded or obtuse distally..... *E. talpoida*  
Dactyli of first pereopods subacute or sharply pointed distally ..... 2
2. (1) Lateral epimeral expansion of carapace (lower postero-lateral area) marked to inferior margin with transverse lines continued from posterior dorsum of carapace ..... *E. benedicti*  
Lateral epimeral expansion of carapace smooth and punctate, light traces of transverse lines of dorsum showing only on upper part of epimeral expansion..... *E. portoricensis*

## **Infraorder Brachyura**

### **Family Dromiidae**

Key to genera and species  
[Adapted from Felder, 1973]

1. Carapace dorsally firm, hard and covered with short hairs ..... 2  
Carapace with soft, membranous, naked or sparsely haired mid dorsal area .....  
..... *Hypoconcha*
2. (I) Carapace broader than long; fronto-orbital width in adult 1/3 or less of carapace width ..... *Dromia erythropus*  
Carapace longer than broad; fronto-orbital width in adult 1/2 or more of carapace width ..... *Dromidia antillensis*

### **Genus *Hypochoncha* Guérin-Méneville, 1854**

Key to species  
[Adapted from Williams, 1984]

1. Ventral surface of carapace with 3 granulated nodules forming triangle on either side; not hairy ..... *H. sabulosa*  
Ventral surface of carapace often granulate or spiny but without 3 nodules forming triangle on either side; often hairy ..... 2
2. (I) Ventral surface of carapace visibly granulate; posterior side of orbit raised but never conspicuously spined ..... *H. arcuata*  
Ventral surface of carapace with scattered, sharp granules or spines often partly or wholly concealed by thick pubescence; posterior side of orbit surmounted by strong spine ..... *H. spinosissima*

## **Family Homolodromiidae**

### **Genus *Dicranodromia* A. Milne Edwards, 1880**

Carapace ovoid; antennules folding under rostral teeth; walking legs short; eyes large and deep in orbital cavity; last two pairs of pereopods subcheliform, propodus not forming a distinct digit [from Rathbun, 1937] ..... *D. ovata*

## **Family Cymonomidae**

Key to genera and species  
[Adapted from Rathbun, 1937]

Eyes without pigment; antennules large, unconcealed; merus of outer (third) maxilliped produced forward far beyond carpal articulation .....  
..... *Cymonomus quadratus*

Eyes normally developed; antennules folding under front; merus of outer maxilliped not overreaching palp ..... *Cymopolus agassizi*

## **Family Cyclodorippidae**

Key to genera and species

Antennules small, completely retractile; antennae very short, with valviform peduncle..... *Clythrocerus*

Antennules long, incapable of folding into antennular cavity; antennae with narrow peduncle..... *Tymolus antennaria*

## **Genus *Clythrocerus* A. Milne Edwards and Bouvier, 1899**

Key to species  
[Adapted from Rathbun, 1937]

1. Two lateral teeth or spines behind orbital tooth (distance between lateral spines less than between foremost tooth and orbital tooth; spine present above and between lateral spines; three frontal teeth) ..... *C. stimpsoni*  
Only one lateral tooth or spine behind orbital tooth ..... 2
2. (I) Front with two teeth (carapace thick, smooth, and shining)..... *C. nitidus*  
Front with three teeth (carapace and appendages densely granulate; margins of carapace spinulous)..... *C. granulatus*

## **Family Homolidae**

### **Genus *Homola* Leach, 1815**

Carapace broadest anteriorly; second segment of antennal peduncle with antero-external spine; rostrum bidentate [from Rathbun, 1937]..... *H. barbata*

## **Family Latreilliidae**

### **Genus *Latreillia* Roux, 1830**

Each of last pair of pereopods (fourth walking legs) with propodus clearly more than half length of carpus and bearing conspicuous, featherlike row of long hairs along full length of that segment on each side; dorsal spine absent on “neck”; last pereopod with propodus decidedly shorter than carpus; dactylus closing against subdistal spinules to form subchela; propodus of last pereopod 0.44-0.61 length of carpus; length of carapace about 1/3 length of merus of walking leg [from Williams, 1982] ..... *L. manningi*

## **Family Raninidae**

Key to genera and species

[Based on Rathbun, 1937, and Williams, 1984]

1. Fronto-orbital border more than half width of carapace..... 2  
Fronto-orbital border less than half width of carapace..... 3
2. (I) Orbita of moderate size, slightly oblique and situated on anterior border of carapace, ocular peduncle folded almost transversely or longitudinally; last pair of pereopods slender .....  
***Raninoides***  
Orbits large, deep cavities in lower side of carapace forming inverted V with point at rostrum, ocular peduncles folded strongly and obliquely downward and backward; last pair of pereopods not slender ..... ***Ranilia***
3. (I) Carapace smooth; chelae broad and flat ..... ***Lyreidus nitidus***  
Carapace eroded; chelae elongate, manus swollen, fingers long and slender ..... ***Symethis variolosa***

### **Genus *Ranilia* H. Milne Edwards, 1837**

Key to species

[Adapted from Williams, 1984]

- Hand of cheliped with spine on upper margin..... ***R. muricata***
- Hand of cheliped without spine on upper margin..... ***R. constricta***

### **Genus *Raninoides* H. Milne Edwards, 1837**

Key to species

[Based on Rathbun, 1937]

- Spine at distal end of merus of cheliped; four spines on lower margin of manus ....  
..... ***R. loevis***
- No spine at distal end of merus of cheliped; five or six spines on lower margin of manus..... ***R. louisianensis***

## **Family Dorippidae**

### **Genus *Ethusa* Roux, 1828**

Key to genera and species  
[Adapted from Rathbun, 1937]

1. Eyestalks long, extending laterally beyond outer orbital spine (outer orbital spine directed obliquely forward) ..... *E. mascarone americana*  
Eyestalks short, not extending beyond outer orbital spine ..... 2
2. (1) Dactyli of first and second walking legs not flattened ..... *E. tenuipes*  
Dactyli of first and second walking legs flattened above ..... 3
3. (2) Carapace as broad as, or broader than, long ..... *E. microphthalmia*  
Carapace longer than broad ..... *E. truncata*

## **Family Calappidae**

Key to genera and species  
[Based on Williams, 1984]

1. Chelae dissimilar; large tooth on dactylus and pair of protuberances on propodus of major chela ..... 2  
Chelae essentially symmetrical, no unusually enlarged teeth or protuberances.... 4
2. (1) Posterolateral region of carapace expanded into dentate, winglike projection .....  
*Calappa*  
Posterolateral region of carapace not expanded into dentate, winglike projection ..... 3
3. (2) Merus of cheliped with very long, outstanding spine..... *Acanthocarpus*  
Merus of cheliped without long spine; carapace subcircular, small spine at lateral angle..... *Cycloes bairdii*
4. (1) Carapace considerably broader than long, regularly convex above ..... *Hepatus*  
Carapace nearly as long as broad, dorsal surface uneven..... *Osachila*

## **Genus *Acanthocarpus* Stimpson, 1871**

Key to species  
[Adapted from Rathbun, 1937]

Carapace narrowing in posterior half; short spine on posterolateral margin.....  
..... *A. alexandri*

Carapace subcircular; long spine on posterolateral margin..... *A. bispinosus*

## **Genus *Calappa* Weber, 1795**

Key to species  
[Based on Williams, 1984, and Rathbun, 1937]

1. Orbita completely separated from antennular sockets (surface quite rough, covered with rounded protuberances and granulate)..... *C. angusta*

Orbita not separated from antennular sockets..... 2

2. (1) Carapace with prominent horizontal tooth at each end of posterior margin (sharp spine at angle of posterolateral wing and another at proximal end of manus) .....

..... *C. sulcata*

Carapace without spine at either end of posterior margin ..... 3

3. (2) Deep hollow between gastric and hepatic regions (posterior third of carapace covered with short transverse granulated lines) ..... *C. gallus*

No deep hollow between gastric and hepatic regions..... 4

4. (3) Darker part of color pattern on carapace in interlacing bands on anterior half, becoming obliquely longitudinal stripes and fading somewhat on posterior half ....  
..... *C. flammea*

Darker part of color pattern on anterior of carapace in becoming reticular in pattern at midlength but fading posteriorly ..... *C. ocellata*

## **Genus *Hepatus* Latreille, 1802**

Key to species  
[Adapted from Williams, 1984]

Carapace covered with large, usually discrete spots (spots may be interconnected or form irregular, transverse stripes, proportionately small in juveniles); front noticeably tuberculate and truncate ..... *H. epheliticus*

Carapace covered with small spots often aligned in transverse rows; front slightly tuberculate and obtusely bidentate ..... *H. pudibundus*

## **Genus *Osachila* Stimpson, 1871**

Key to species  
[Based on Rathbun, 1937]

1. Dorsal surface of carapace wholly eroded; cardiac elevation pointed behind .....  
..... *O. antillensis*
  
- Dorsal surface of carapace partly eroded, including elevations; cardiac elevation rounded behind ..... 2
  
2. (I) Posterolateral margin of carapace shorter than anterolateral, thickened and raised, bearing 3 lobes including lateral angle, third lobe obsolescent ..... *O. semilevis*  
Posterolateral margin of carapace about as long as anterolateral margin, not thickened and raised, bearing 4 lobes including angle, second lobe smallest .....  
..... *O. tuberosa*

## Family Leucosiidae

Key to genera and species  
[Adapted from Rathbun, 1937]

1. Merus of outer (third) maxilliped half or more than half length of ischium measured along inner border; fingers stout, gradually narrowing from base to tip..... 2  
Merus of outer maxilliped less than half length of ischium measured along inner border; fingers slender, of subequal width throughout..... 7
2. (1) Pterygostomian margin terminating anteriorly in circular depression behind orbit; surface of carapace uneven; chelipeds of moderate length ..... 3  
Pterygostomian margin not terminating in circular depression and often obscure; carapace almost hemispherical, surface only slightly uneven; chelipeds often elongate..... 6
3. (2) Carapace broadly elliptical, sides expanded..... *Uhlia limbatus*  
Carapace narrower, pentagonal to octagonal, surface very uneven..... 4
4. (3) Deep hollows or caves within posterior half of carapace ..... *Speloeophorus*  
No deep hollows or caves within posterior half of carapace ..... 5
5. (4) Upper surface of carapace deeply excavate..... *Lithadia*  
Upper surface of carapace uneven but not deeply excavate ..... *Ebalia*
6. (2) Chelipeds rather massive; abdominal segments 3-5 fused in male ..... *Persephona*  
Chelipeds long and slender; abdominal segments 3-6 fused in male; cardiac and intestinal regions indicated ..... *Myropsis quinquespinosa*
7. (1) Posterior half of carapace with seven spines; anterior half of carapace with three spines on each side ..... *Callidactylus asper*  
Posterior half of carapace with three spines; anterior half of carapace with no spines or with one spine on each side..... *Iliacantha*

## **Genus *Ebalia* Leach, 1817**

Key to species  
[Adapted from Williams, 1984]

Carapace octagonal..... *E. cariosa*

Carapace hexagonal or subglobular..... *E. stimpsonii*

## **Genus *Iliacantha* Stimpson, 1871**

Key to species  
[Adapted from Rathbun, 1937]

1. Short, blunt spine on subhepatic margin (posterior margin between lateral spines invisible in dorsal view; carapace with many large granules) ..... *I. sparsa*

No spine on subhepatic margin..... 2

2. (1) Fingers of chela about half as long as palm..... *I. intermedia*

Fingers longer than palm ..... 3

3. (2) Spines of posterior margin subtriangular, blunt..... *I. subglobosa*

Spines of posterior margin conical, acute..... *I. liodactylus*

## **Genus *Lithadia* Bell, 1855**

Key to species  
[Adapted from Rathbun, 1937]

Anterior median carina present on carapace (branchial region almost entirely swollen; rostrum slightly concave)..... *L. cadaverosa*

No anterior median carina (highest point a small branchial pyramid either side in line with widest part of carapace)..... *L. granulosa*

## **Genus *Persephona* Leach, 1817**

Key to species  
[Adapted from Felder, 1973]

Carapace with several tubercles or enlarged granules on each side, one at widest part of carapace, another less than half way from there to hepatic protuberance, and usually one on subhepatic protuberance (less obvious in females than in males); coarse granules on lateral areas of carapace not arranged in single marginal line; fresh specimens usually with carapace uniform blue-gray color ..... *P. crinita*

Carapace without singularly enlarged granules or tubercles on sides, but with distinct single line of coarse granules defining lateral margin; fresh specimens usually with red blotches and patterns on cream-colored carapace.....  
..... *P. mediterranea*

## **Genus *Spelaeophorus* A. Milne Edwards, 1865**

Key to species  
[Adapted from Rathbun, 1937]

1. Deep cavity of carapace with only 2 openings, not visible dorsally; carapace hexagonal..... *S. nodosus*

Deep cavity of carapace with 4 openings, visible dorsally; carapace octagonal ... 2

2. (I) Dorsal pair of openings small; carapace highest at anterior end of branchial elevation..... *S. pontifer*

Dorsal pair of openings large; carapace highest near middle of branchial elevation, narrower than in *S. pontifer* ..... *S. elevatus*

## Family Majidae

Key to genera and species  
[Based on Garth, 1958, and Rathbun, 1925]

1. Eyes either without orbits or with incomplete or commencing orbits..... 2  
Eyes with nearly complete or complete orbits; basal antennal segment very broad..... 28
2. (1) Eyes without orbits; eyestalks generally long, either nonretractile or retractile against sides of carapace or against acute postocular spine affording no concealment; basal antennal segment extremely slender and usually long..... 3  
Eyes with incomplete or commencing orbits; basal antennal segment not extremely slender..... 15
3. (2) Spine intercalated between pre- and postorbital spines..... *Achaeopsis thomsoni*  
No spine intercalated between pre- and postorbital spines..... 4
4. (3) Seven free abdominal segments in both sexes; rostrum double .....  
..... *Anomalothir furcillatus*  
Six free abdominal segments in male, five in female..... 5
5. (4) Rostrum double..... 6  
Rostrum single ..... 10
6. (5) Interantennular spine absent or inconspicuous ..... *Collodes*  
Interantennular spine present and conspicuous ..... 7
7. (6) Eyestalks slender; 3 erect median spines..... *Arachnopsis filipes*  
Eyestalks not slender ..... 8
8. (7) Seven long capitate spines ..... *Aepinus septemspinosis*  
Fewer than 7 carapace spines ..... 9
9. (8) Spine of basal antennal segment equally advanced with front ..... *Euprognatha*  
Spine of basal antennal segment not equally advanced with front.....  
..... *Batrachonotus fragosus*

10. (5) Merus of outer (third) maxilliped as broad as ischium; palp of moderate size ..... 11  
     Merus of outer maxilliped often narrower than ischium; palp large and coarse .. 13
11. (10) Postorbital tooth large, curving around eye ..... *Pyromania*  
     Postorbital tooth small or, if large, not curving around eye ..... 12
12. (11) Carapace rough with spines and tubercles; legs not subprehensile.....  
     ..... *Anasimus latus*
- Carapace smooth; legs subprehensile..... *Inachoides forceps*
13. (10) Rostrum considerably less than postrostral length, basal antennal segment often longitudinally sulcate ..... *Podochela*  
     Rostrum approaching or surpassing postrostral length, basal antennal segment not longitudinally sulcate ..... 14
14. (13) Carapace nodulous; long spine at end of merus of each walking leg; rostrum few spined ..... *Metoporaphis calcarata*  
     Carapace smooth; spines at ends of meri of walking legs no longer than others; rostrum multispinose..... *Stenorhynchus seticornis*
15. (2) Eyes with commencing orbits having, in addition to supraocular spine, large, cupped postocular process into which eyes retract; eyestalks short ..... 16  
     Eyes without true orbits, lacking postocular cup ..... 21
16. (15) Intercalated spine present..... 17  
     Intercalated spine absent ..... 18
17. (16) First pair of walking legs much longer than remaining pairs..... *Chorinus heros*  
     Walking legs diminishing regularly from first to last pair ..... *Nibilia antilocapra*
18. (16) Supraocular eave and postocular process closely approximated ..... *Libinia*  
     Supraocular eave and postocular process not closely approximated ..... 19
19. (18) Rostrum bifid for not more than half its length or at tip only ..... *Pelia mutica*  
     Rostrum bifid for more than half its length..... 20

20. (19) Two rows of spines on walking legs ..... *Olopisia spinipes*
- Walking legs without two rows of spines ..... *Rochinia*
21. (15) Eyestalks long; orbit partially protected by hornlike supraocular spine or by jagged postocular tooth or by both; body often truncate in front..... 22
- Eyestalks short, little movable, and either concealed by supraocular spine or sunk in sides of rostrum; basal antennal segment truncate-triangular ..... 25
22. (21) Eyes furnished with orbits completely enclosed, often outstanding and tubular 23
- Orbit unprotected below; eyes protected above by lamellate projection consisting of supraocular eave and outgrowth of hepatic region..... 24
23. (22) Rostrum long, greatly advanced beyond orbits; preocular spine twice length of remainder of orbit; legs filiform; first movable segment of antenna cylindrical...  
..... *Picroceroides tubularis*
- Rostrum short, little if at all advanced beyond orbits; preocular spine not long; legs moderately robust; first movable segment of antenna flattened ..... *Pitho*
24. (22) Basal prolongation of exopod of third maxilliped curving forward and usually lodged in groove of ischium of endognath; abdomen 7-segmented in both sexes  
..... *Tyche emarginata*
- Basal prolongation of exopod of third maxilliped not recurving; merus of endognath strongly arched, brilliantly glistening, and porcellanous; abdomen of female with segments 4-6 coalesced ..... *Stilbomastax margaritifera*
25. (21) Rostrum double..... 26
- Rostrum single or secondarily divaricate ..... 27
26. (25) Seven free abdominal segments in both sexes..... *Sphenocarcinus corrosus*
- Six free abdominal segments in both sexes; legs subchelate.....  
..... *Acanthonyx petiverii*
27. (25) Six free abdominal segments in male, five in female..... *Epialtus*
- Five free abdominal segments in male ..... *Mocosoa crebripunctata*

28. (l) Intercalated spine present; orbits sometimes projecting beyond general outline of carapace, but never tubular ..... 29
- Intercalated spine absent; orbits tubular ..... 32
29. (28) Orbita not projecting laterally beyond general outline of carapace; carapace subtriangular; legs cristate ..... 30
- Orbits projecting laterally somewhat beyond general outline of carapace..... 31
30. (29) Carapace very high on median line; basal segment of antenna broader than long ..... *Hemus cristulipes*
- Carapace not noticeably high on median line, lobulate; basal segment of antenna no broader than long ..... *Thoe puella*
31. (29) Rostrum small; carapace ovate, usually broader than long ..... *Mithrax*
- Rostrum of good size, usually with two strong horns; carapace broadly pyriform; basal antennal segment armed with prominent spine at anteroexternal angle.....
- ..... *Microphrys*
32. (28) Lateral margin of carapace armed with series of strong spines; basal antennal segment very broad..... 33
- Lateral margin of carapace not armed with series of strong spines, but with spine, usually strong, at lateral angle of carapace ..... 34
33. (32) Basal antennal segment quadridentate; postocular tooth large, quadrangular, armed with two teeth or spines ..... *Coelocerus spinosus*
- Basal antennal segment with fewer than four spines or teeth; postocular tooth of moderate size, triangular, armed with only one spine ..... *Stenocionops*
34. (32) Orbita strongly projecting; rostral horns short; carapace broad ... *Macrocoeloma*
- Orbits little projecting; rostral horns long and slender; carapace narrow.....
- ..... *Leptopisa setirostris*

## Genus *Collodes* Stimpson, 1860

### Key to species

[Adapted from Rathbun, 1925]

1. Carapace with median spines ..... 2  
Carapace without median spines ..... 4
2. (1) Rostrum simple, not bifid (basal antennal segment with inner crest armed with three spiniform teeth)..... *C. obesus*  
Rostrum bifid..... 3
3. (2) Walking legs hairy (granules evenly distributed on branchial region) .....  
..... *C. trispinosus*  
Walking legs naked..... *C. nudus*
4. (1) Interantennular spine advanced as far as rostrum; chelipeds slender .....  
..... *C. leptochelus*  
Interantennular spine not advanced as far as rostrum (carapace mostly granulate; basal antennal segment with conspicuously dentate crests) ..... *C. robustus*

## Genus *Epiactus* H. Milne Edwards, 1834

### Key to species

[Adapted from Rathbun, 1925]

1. Rostrum simple, margin entire or nearly so..... 2  
Rostrum either bilobed or bidentate ..... 4
2. (1) Rostrum dorsally carinate; carapace widest at hepatic regions; cardiac region conical..... *E. kingsleyi*  
Rostrum not dorsally carinate..... 3
3. (2) Carapace with very shallow sinus between lateral lobes; hand of male high; preorbital angles obtuse; tip of rostrum rounded..... *E. bituberculatus*  
Carapace with deep sinus between lateral lobes; hand of male elongate; preorbital angles sharp (rostrum very narrow, sides parallel, tip subtruncate, with faint indication of two lobes) ..... *E. longirostris*

4. (I) Rostrum short; carapace in front of anterior margin of hepatic lobe much shorter than behind same region; hepatic lobe much larger than branchial lobe (hepatic lobe not directed forward; rostrum narrowing anteriorly; tuft of hair present on propodi of legs)..... *E. dilatatus*
- Rostrum long; hepatic and branchial lobes more nearly equal; tuft of hair present on propodi of legs (carapace widest across branchial regions; length in front of hepatic lobes nearly as great as behind same line) ..... *E. dilatatus forma elongata*

### **Genus *Euprognatha* Stimpson, 1871**

Key to species  
[Adapted from Rathbun, 1925]

- Interantennular spine very short; sternum forming wide border around posterolateral portions of carapace ..... *E. gracilipes*
- Interantennular spine long; sternum forming narrow border around posterolateral portions of carapace; antennal spines diverging anteriorly; immovable finger without noticeably enlarged tooth ..... *E. rastellifera*

### **Genus *Libinia* Leach, 1815**

Key to species  
[Adapted from Rathbun, 1925]

1. Median line of carapace with about 9 spines, 5 behind cervical groove ..... *L. emarginata*
- Median line of carapace with about 6 spines..... 2
2. (I) Fork of rostrum in adult shallow, tips of horns blunt; lateral marginal spines in young of good size, subequal ..... *L. dubia*
- Fork of rostrum in young deeper than in *L. dubia*. horns acute, curved toward each other; lateral marginal spines in young small except very long and slender posterior one ..... *L. erinacea*

## Genus *Macrocoeloma* Miers, 1879

Key to species  
[Adapted from Rathbun, 1925]

1. Carapace with fewer than 7 spines on its posterior half or, if with 7 spines, some of them small..... 2  
Carapace with 7 strong spines on its posterior half ..... 8
2. (1) Basal antennal segment armed with only one spine or sharp tubercle ..... 3  
Basal antennal segment armed with 2 or more spines; orbits elongate-tubular .... 7
3. (2) Rostral horns separated by interspace; interspace narrow or pointed at base ..... 4  
Rostral horns separated by interspace; interspace broad and rounded at base ..... 6
4. (3) Posterolateral projections narrow, spinelike ..... *M. trispinosum trispinosum*  
Posterolateral projections broad, bladelike..... 5
5. (4) Posterolateral projections very broad, their margins continuous with marginal lines of carapace ..... *M. trispinosum nodipes*  
Posterolateral projections less broad, their margins making angle with marginal lines of carapace . ..... *M. trispinosum variety*
6. (3) Carapace deeply sculptured or areolated between two posterolateral spines; rostral spines short and stout (posterolateral spines directed obliquely backward).....  
..... *M. subparallelum*  
Carapace not unusually sculptured between epibranchial spines; rostral horns longer and slenderer..... *M. diplacanthum*
7. (2) Rostral spines separated by U-shaped sinus ..... *M. eutheca*  
Rostral spines separated by V-shaped sinus; basal antennal segment armed with 2 spines forming oblique line, outer spine more or less distant from orbital margin ..  
..... *M. laevigatum*
8. (1) Basal antennal segment armed with only one spine ..... *M. cinctocerum*  
Basal antennal segment armed with two spines in transverse line .....  
..... *M. septemspinosum*

## **Genus *Microphrys* H. Milne Edwards, 1851**

Key to species  
[Adapted from Williams, 1984]

Carapace with 2 lateral laminiform processes, 2 strong branchial spines .....	<i>M. antillensis</i>
Carapace without lateral laminiform processes, 1 strong branchial spine .....	<i>M. bicornutus</i>

## **Genus *Mithrax* Desmarest, 1823**

Key to species  
[Adapted from Rathbun, 1925]

1. Carapace without smooth, oblique, branchial sulci .....	2
Carapace with smooth, oblique, branchial sulci; rostral horns very short; minor teeth of orbit tuberculiform, inconspicuous.....	14
2. (1) Palm armed above with spines or spinules .....	3
Palm not armed above with spines or spinules.....	7
3. (2) Two spines only on basal segment of antenna.....	<i>M. spinosissimus</i>
Three spines on basal segment of antenna.....	4
4. (3) Carapace paved with flattened granules, concealed by short hair .....	<i>M. verrucosus, young</i>
Carapace not paved with flattened granules .....	5
5. (4) Carapace as wide between tips of third anterolateral spines as between tips of fourth spines; carapace closely granulate and tuberculate and densely pilose .....	<i>M. pilosus</i>
Carapace widest between tips of fourth anterolateral spines (not counting orbital spine) .....	6

6. (5) Three or four supraorbital spines, exclusive of preorbital and exorbital spines; propodi of legs very long and slender ..... *M. cornutus*
- Two supraorbital spines only, exclusive of preorbital and exorbital spines; propodi of legs moderate (size small) ..... *M. acuticornis* (**over 18 mm long**)
7. (2) Rostral horns sharp or acute (rostral horns very short; only two anterolateral spines) ..... *M. holderi*
- Rostral horns blunt, either subtruncate or tuberculiform..... 8
8. (7) Carapace paved with close-set granules or tubercles ..... 9
- Carapace not paved with close-set granules or tubercles ..... 10
9. (8) Carapace paved with convex tubercles, each granulate ..... *M. hemphilli, mature*
- Carapace paved with flat, tessellated granules (lateral margins of carapace spinous; carpus of cheliped nearly smooth above, three tubercles on inner edge) .....
- ..... *M. verrucosus*
10. (8) Spine on, or just above, posterolateral margin of carapace ..... 11
- Tubercle, instead of spine, on, or just above, posterolateral margin of carapace ....
- ..... 12
- II. (10) Two parallel and nearly transverse rows of well marked tubercles and spines on posterolateral region ..... *M. caribbaeus, small or medium size*
- One row of not more than two or three well marked tubercles and spines on posterolateral region; prehensile edges of fingers of very old specimens entire; not crenulated, in gape, except on tubercle..... *M. hispidus*
12. (10) Carapace very wide, anterior, marginal, branchial lobe strikingly protuberant; posterolateral slope of carapace smooth, behind row of two conical tubercles leading obliquely inward from spine at lateral angle; rostral sinus V-shaped .....
- ..... *M. tortugae*
- Carapace narrower, anterior, branchial protuberance not strikingly prominent; posterolateral slope of carapace rough, with few tubercles or granules ..... 13

13. (12) Well marked, posterolateral tubercle present, outermost of transverse row of three, this row having similar row in front of it; prehensile edges of fingers crenulated along gape; rostral sinus U-shaped..... *M. caribbaeus*, large
- Almost transverse row of two large tubercles leading inward from spine at lateral angle; tubercles behind and immediately in front of it all very small or granules; rostral sinus V-shaped in young, U-shaped in old ..... *M. pleuracanthus*
14. (1) Carapace longer than broad ..... *M. cinctimanus*
- Carapace broader than long ..... 15
15. (14) Anterolateral margins cut into rounded lobes only..... 16
- Anterolateral margins cut into spines or angular lobes or spines and lobes ..... 17
16. (15) Anterolateral margin cut into three lobes (posterior part of carapace nodose, not eroded; inner margin of cheliped not laminate)..... *M. coryphe*
- Anterolateral margin cut into four lobes; carpus of cheliped smooth, margin not laminate or dentate..... *M. sculptus*
17. (15) Four anterolateral protuberances behind orbit; carpus of cheliped smooth above and with one inner tooth ..... *M. forceps*
- Three anterolateral protuberances behind orbit; carpus of cheliped obscurely tuberculate (palm without tubercle on outer surface at articulation with carpus) ....  
..... *M. ruber*

## **Genus *Pitho* Bell, 1835**

### Key to species

[Adapted from Rathbun, 1925]

1. Second and third lateral teeth, exclusive of tooth at orbital angle, partially united at base..... 2  
Second and third lateral teeth not united at base..... 5
2. (1) First movable segment of antenna much wider than long, its outer lobe strongly produced laterally; lateral teeth of carapace blunt-tipped in adult ..... *P. aculeata*  
First movable segment of antenna little, if at all, wider than long, its outer lobe produced as much anteriorly as laterally; lateral teeth of carapace acute ..... 3
3. (2) Lateral teeth subequal in size; carapace subcircular, front narrow ..... *P. laevigata*  
Lateral teeth not subequal ..... 4
4. (3) Last two lateral teeth not much, if at all, smaller than others (second lateral tooth very small, much smaller than first and third teeth)..... *P. anisodon*  
Last two lateral teeth much reduced, at least in male (first movable segment of antennal slightly wider than long; lateral teeth sharper in female than in male, last two teeth more prominent than in male) ..... *P. lheminieri*
5. (1) Lateral teeth five (exceptionally four), dentiform, their edges denticulate..... *P. mirabilis*  
Lateral teeth four, long and narrow, spiniform (rostral teeth acutely pointed) ..... *P. quadridentata*

## **Genus *Podochela* Stimpson, 1860**

### Key to species

[Adapted from Rathbun, 1925]

1. Postorbital protuberance a large lobe ..... 2  
Postorbital protuberance a granule or wanting..... 3
2. (1) Supraorbital margin armed with two long spines; sternal segments of male elevated, flat, closely and finely granulate; palm of adult male not inflated; rostrum long, spiniform, arched upward ..... *P. curvirostris*  
Supraorbital margin armed with series of spinules or small spines; sternal segments of male not closely and finely granulate (palm of adult male not inflated; fingers contiguous; sternum of male laminate, each lamina overlapping one behind it; surface sparingly granulate with scattered, pointed granules; prominent lobe behind and below postorbital lobe; rostrum short, pointed) .....  
..... *P. lamelligera*
3. (1) Rostrum long, ending in spine; palm inflated in male (rostrum less than half as long as posterostral portion of carapace; gape between fingers of adult male subtriangular, deep at proximal end; size small, not over 13 mm long) .....  
..... *P. gracilipes*  
Rostrum short, not ending in spine ..... 4
4. (3) Rostrum thick, subtriangular, not hollow beneath (propodus of first walking leg four or more times as long as dactylus; propodi of last two legs considerably longer than dactyli and slightly curved)..... *P. macrodera*  
Rostrum thin, hood-shaped, hollow beneath..... 5
5. (4) Dactyli of last three walking legs curved, short, contained twice, or more than twice, in their respective propodi; cardiac prominence low ..... *P. riisei*  
Dactyli of last three walking legs less curved and longer, those of last two pairs contained less than twice in their respective propodi; cardiac prominence higher and more acute or ending in short spine..... *P. sidneyi*

## **Genus *Pyromania* Stimpson, 1871**

Key to species  
[Adapted from Rathbun, 1925]

Rostrum tapering regularly to tip; chelipeds and walking legs covered with short, soft pubescence; no spines at proximal ends of meri of walking legs .....  
..... *P. cuspidata*

Rostrum triangular at base, then narrowing to slender spine; chelipeds and walking legs not noticeably pubescent; erect spine at proximal end of merus of each walking leg; short fringe of hair on each side of dactyli ..... *P. arachna*

## **Genus *Rochinia* A. Milne Edwards, 1875**

Key to species  
[Adapted from Rathbun, 1925]

1. Median spines six; gastric spines six; two spines on basal antennal segments.....  
..... *R. crassa*
- Median spines or tubercles fewer than six; gastric spines or tubercles fewer than six ..... 2
2. (1) Spines of carapace and rostrum long and slender; spine at angle of buccal cavity  
..... *R. hystrix*
- Spines or tubercles of carapace short or of moderate length; no spine at angle of buccal cavity ..... 3
3. (2) Dorsal tubercles mostly large and flat-topped ..... *R. umbonata*
- Dorsal tubercles or spines acute, not large and flat-topped ..... *R. tanneri*

## **Genus *Stenocionops* Desmarest, 1823**

### Key to species

[Adapted from Rathbun, 1925]

1. Hepatic region not enlarged or produced beyond general outline of carapace; armed with not more than one large spine ..... 2
- Hepatic region enlarged and produced separately from curve of branchial region ..... 4
2. (1) Marginal spines behind orbit three (carapace widest between tips of anterior branchial spines) ..... *S. spinimana, young*
  - Marginal spines behind orbit more than three..... 3
3. (2) Dorsal surface almost unarmed except for median intestinal spine ..... *S. furcata furcata*
  - Dorsal surface armed with spines; fewer than eight median spines..... *S. furcata coelata*
4. (1) Median spines of carapace l2 or l3; marginal hepatic spines 3..... *S. spinimana, adult*
  - Median spines of carapace l0; marginal hepatic spines 2 ..... *S. spinosissima*

## **Family Parthenopidae MacLeay, 1838**

Key to genera and species  
[Adapted from Gore and Scotto, 1979]

1. Carapace not laterally expanded over walking legs ..... 2  
    Carapace expanded to form vault concealing walking legs ..... 6
2. (1) Carapace tuberculate or eroded..... 3  
    Carapace smooth, except for few strong spines ..... 4
3. (2) Carapace equilaterally subtriangular; basal antennal segment long, almost or completely reaching orbital hiatus ..... ***Tutankhamen cristatipes***  
    Carapace ovate-pentagonal or broadly triangular; basal antennal segment short, not reaching orbital hiatus ..... ***Parthenope***
4. (2) Efferent branchial channels opening at middle of endostome as in Oxystomata ...  
..... ***Mesorhoea sexspinosa***  
    Efferent branchial channels opening at sides of endostome as in Oxrhyncha .... 5
5. (4) Carapace depressed, with strong lateral spine..... ***Leiolambrus nitidus***  
    Carapace high, without strong lateral spine ..... ***Solenolambrus***
6. (1) Carapace greatly expanded both laterally and posteriorly; pterygostomian region smooth, not ridged..... ***Cryptopodia concava***  
    Carapace expanded laterally, not posteriorly; 1.1-1.5 times as wide as long; pterygostomian and subhepatic regions traversed by granulate or crenulate ridge  
..... ***Heterocrypta granulata***

## Genus *Parthenope* Weber, 1795

### Key to species

[Adapted from Gore and Scotto, 1979]

1. Carapace ovate-pentagonal, surface little carinate in adult; chelipeds at least twice as long as carapace ..... *P. agona*  
Carapace broadly triangular, surface carinate or tuberculate, sides more or less rounded; chelipeds at least twice as long as carapace..... 2
2. (1) Carapace and chelipeds very flat; spine at end of main dorsal branchial ridge small ..... 3  
Carapace very convex; spine at end of main dorsal branchial ridge large; chelipeds not flat ..... 4
3. (2) Triangular spines on outer margins of chelipeds rounded posteriorly; carapace with posterolateral spine directed laterally or nearly so; carapace moderately tuberculate; angle formed by posterolateral spine, gastric tubercle and outer orbital margin always distinctly less than 90° ..... *P. serrata*  
Triangular spines on outer margins of chelipeds acute, margins straight; carapace with posterolateral spine directed obliquely posteriad; carapace heavily tuberculate; angle formed by posterolateral spine, gastric tubercle and outer orbital margin always 90° or nearly so ..... *P. granulata*
4. (2) Dactylus of walking leg 4 about 1.3 times longer than propodus; carapace much broader than long; palm with 8-10 teeth on inner, 10-12 teeth on outer margin ..... *P. pourtalesii*  
Dactylus of walking leg 4 about 1.4 times longer than propodus; carapace little, if any, broader than long; palm with 6-8 teeth on inner, 3-5 teeth on outer margin ... ..... *P. fraterculus*

## Genus *Solenolambrus* Stimpson, 1871

### Key to species

[Adapted from Gore and Scotto, 1979]

1. No spines or teeth on posterior or posterolateral margin; dorsal protuberance round ..... *S. tenellus*  
Some teeth or spines on posterior or posterolateral margin; dorsal protuberance angular..... 2
2. (1) Not more than four teeth on posterior and posterolateral margins..... *S. typicus*  
Six teeth or spines on posterior and posterolateral margins; two median spines; spine near middle of branchial ridge..... *S. decemspinosus*

## **Family Atelecyclidae**

### **Genus *Trichopeltarion* A. Milne Edwards, 1880**

Carapace broader than long; surface thickly velvety; median frontal spine shorter than lateral ones [from Rathbun, 1930] ..... *T. nobile*

## **Family Cancridae**

### **Genus *Cancer* Linnaeus, 1758**

Key to species  
[Adapted from Williams, 1984]

Anterolateral teeth of carapace with denticulate margins; upper margin of palm denticulate; outer orbital tooth with pointed tip, not coalesced with adjacent anterolateral tooth in small juveniles ..... *C. borealis*

Anterolateral teeth of carapace with margins granulate; chelipeds granulate, not denticulate; outer orbital tooth with rounded tip, coalesced with adjacent anterolateral tooth in small juveniles ..... *C. irroratus*

## **Family Geryonidae**

### **Genus *Geryon* Krøyer, 1837**

Carapace broader than long; median pair of frontal teeth separated by wide sinus, teeth scarcely overreaching obtuse lateral frontal teeth; anterolateral teeth 5, second and fourth reduced, distance between first and third usually smaller than distance between third and fifth; cheliped with blunt lobe on upper margin of merus, carpus lacking outer spine, propodus lacking distal dorsal spine; meri of walking legs lacking distal dorsal spine [from Manning and Holthuis, 1984] ..... *G. fenneri*

## Family Portunidae

### Key to genera and species

[Based on Rathbun, 1930, and Williams, 1984]

1. Carapace with 3 to 5 teeth on anterolateral margin..... 2  
    Carapace with 9 anterolateral teeth ..... 4
2. (1) Anterolateral teeth 3..... *Benthochason schmitti*  
    Anterolateral teeth 5..... 3
3. (2) Anterolateral teeth similar, dentiform; dactyli of swimming paddles broadly oval;  
    male abdomen oblong ..... *Ovalipes*  
  
    Long spine at lateral angle of carapace instead of tooth; dactyli of swimming  
    paddles broadly lanceolate, pointed; male abdomen triangular .....  
        *Bathynectes longispina*
4. (1) Movable part of antenna excluded from orbit by prolongation of basal segment;  
    anterolateral teeth alternatively large and small..... *Cronius*  
  
    Movable part of antenna not excluded from orbit..... 5
5. (4) Carpus of cheliped without mesiodistal spine; abdomen of male T shaped .....,  
..... *Callinectes*  
  
    Carpus of cheliped with mesiodistal spine; abdomen of male triangular ..... 6
6. (5) Front with 2 bifurcated teeth between inner orbitals; fissures on orbital margin  
    broadly open; color light brown, thickly covered over dorsal surface with small  
    white spots, reticulate pattern persisting in alcohol ..... *Arenaeus cibrarius*  
  
    Front with 4 separate teeth between inner orbitals (latter sometimes bifurcate);  
    fissures on orbital margin closed except for shallow notch; color varied but never  
    as above..... *Portunus*

## **Genus *Callinectes* Stimpson, 1860**

Key to species based on carapace  
(excluding juveniles)  
[Adapted from Williams, 1984]

1. Front with 2 prominent, broad-based, triangular teeth between inner orbitals; each with or without rudimentary submesial tooth on mesial slope ..... *C. sapidus*
- Front with 4 teeth between inner orbitals or 2 prominent teeth separated by space often bearing pair of rudimentary submesial teeth..... 2
2. (1) Submesial pair of frontal teeth well developed and more than half as long as lateral pair (measuring from base of lateral notch between teeth) ..... *C. bocourti*
- Frontal teeth decidedly unequal in size, submesial pair no more than half as long as lateral pair (measuring from base of lateral notch between teeth)..... 3
3. (2) Carapace very smoothly granulate, lines of granules visible but barely perceptible to touch (except epibranchial line variably prominent) ..... *C. similis*
- Carapace coarsely granulate, scattered granules and lines of granules quite evident to sight and touch ..... 4
4. (3) Anterolateral teeth (exclusive of outer orbital and lateral spine) lacking shoulders and swept forward ..... 5
- Anterolateral teeth (exclusive of outer orbital and lateral spine) lacking shoulders, not swept forward..... 6
5. (4) Anterolateral teeth well separated, all except first 3 and lateral spine with anterior margins concave; chelipeds with ridges finely granulated ..... *C. larvatus*
- Anterolateral teeth adjacent, stout, anterior margins not noticeably concave, fifth tooth often largest; chelipeds with ridges coarsely granulated ..... *C. exasperatus*
6. (4) Submesial pair of frontal teeth absent or vestigial ..... *C. ornatus*
- Submesial pair of frontal teeth never vestigial, but no more than half length of lateral pair ..... *C. danae*

## **Genus *Cronius* Stimpson, 1860**

Key to species

[Adapted from Rathbun, 1930]

- Four spines on palm; spine at posterodistal angle of merus of each swimming leg ..... *C. ruber*

- Two spines on palm; row of spinules but no spine on posterodistal margin of merus of each swimming leg ..... *C. tumidulus*

## **Genus *Ovalipes* Rathbun, 1898**

Key to species

- Carapace with relatively coarse granulation behind frontal margin and inside anterolateral borders, median elongate tract of slightly but variably enlarged granules extending from mesogastric to anterior cardiac region ... *O. stephensonii*

- Carapace with granulation generally fine but more pronounced anteriorly, lacking narrow tract of slightly enlarged granules in midline ..... *O. floridanus*

## **Genus *Portunus* Weber, 1795**

Key to species

[Based on Rathbun, 1930, and Williams, 1984]

1. Carapace wide, anterolateral margins forming arc of circle with center near posterior margin ..... 2
- Carapace narrow, anterolateral margins forming arc of circle with center near middle of cardiac region ..... 6
2. (1) Stridulating ridge present on lower surface of carapace; spine at posterior angle of carapace ..... *P. vocans*
- Stridulating apparatus absent; posterior angles of carapace unarmed ..... 3
3. (2) Posterodistal margin of merus of each swimming leg armed with row of spinules but no spine (frontal teeth blunt; width of merus of swimming legs equal to length of anterior margin) ..... *P. gibbesii*
- Posterodistal margin of merus of each swimming leg unarmed ..... 4

4. (3) Carapace convex, mostly smooth and glossy; palm of chela swollen, only 1 spine on upper margin ..... *P. sayi*
- Carapace uneven, not smooth and glossy; 2 spines on upper margin of palm; submesial teeth of front very small ..... 5
5. (4) Spine at posterodistal margin of merus of cheliped; submesial teeth of front much less advanced than outer teeth..... *P. anceps*
- No spine at posterodistal margin of merus of cheliped; submesial teeth of front nearly or quite as advanced as outer teeth..... *P. ventralis*
6. (1) Posterodistal margin of merus of swimming leg unarmed; 2 spines on upper margin of palm ..... 7
- Posterodistal margin of merus of swimming leg armed with one or two spines or with spinules or with both ..... 8
7. (6) Lateral spine of carapace similar to and very little larger than preceding spine or tooth; upper margin of dactylus on chela conspicuously fringed with long hairs ..  
..... *P. depressifrons*
- Lateral spine of carapace much larger than preceding spine or tooth and directed more outward; upper margin of dactylus on chela with hair inconspicuous.....  
..... *P. floridanus*
8. (6) Erect spine on basis of each swimming leg; large round persistent red spot on posterolateral slope of carapace ..... *P. sebae*
- No erect spines on bases of swimming legs; no large persistent red spot on posterolateral slope of carapace ..... 9
9. (8) Posterodistal margin of merus of each swimming leg armed with one spine besides inconspicuous spinules ..... *P. spinimanus*
- Posterodistal margin of merus of each swimming leg armed with spinules but no spines..... 10
10. (9) Chelipeds with mesiodorsal spine of carpus less than half length of palm.....  
..... *P. ordwayi*
- Chelipeds with mesiodorsal spine of carpus greater than half length of palm.... 11
11. (10) Two distinct submedian red spots in middle of carapace, one on each branchial lobe..... *P. binoculus*
- No submedian red spots in middle of carapace..... *P. spinicarpus*

## Family Goneplacidae

### Key to genera and species

[Based on Rathbun, 1918, Guinot, 1969, and Williams, 1984]

1. Base of third segment of male abdomen covering whole space between last pair of legs ..... 2  
Base of third segment of male abdomen not covering whole space between last pair of legs ..... 9
2. (1) Carapace subquadrate, anterior border entirely occupied by square-cut front and orbits, the latter being long, narrow trenches; carapace widest between postorbital angles ..... 3  
Carapace xanthoid, widest behind postorbital angles; orbits of normal size and form ..... 4
3. (2) Chelipeds with patch or tufts of hair on distal part of carpus and proximal part of palm ..... *Frevillea*  
Chelipeds without patch or tufts of hair on distal part of carpus and proximal part of palm ..... *Goneplax sigsbei*
4. (2) Inner angle of carpus of cheliped prominent with two acute teeth (carapace very narrow, more than 3/4 as long as broad; male abdomen with segments free) ..... *Neopilumnoplax americana*  
Inner angle of carpus of cheliped with one acute tooth ..... 5
5. (4) Front very narrow, much less than 1/3 of carapace width ..... 6  
Front rather broad, more than 1/3 of carapace width ..... 7
6. (5) Male first gonopod extremely long, slender and filiform, incurved and almost without ornamentation ..... *Chacellus filiformis*  
Male first gonopod robust, distal portion dilated, triangular in shape ..... *Euphrosynoplax clausa*
7. (5) Carapace much broader than long; anterolateral teeth with granular margins ..... *Nanoplax xanthiformis*  
Carapace narrow; anterolateral teeth with smooth margins ..... 8
8. (7) Carapace narrow, barely widened near front, with poorly defined regions; four anterolateral teeth, including outer orbital ..... *Thalassoplax angusta*  
Five anterolateral teeth, second well developed ..... *Pilumnoplax elata*

9. (l) Carapace subquadratae, anterior margin almost completely occupied by front and elongate orbits ..... 10
- Carapace xanthoid, anterior margin consisting of front, orbits, and anterior part of arched, toothed, anterolateral border..... 12
10. (9) Two anterolateral teeth present, including outer orbital..... *Sotoplax robertsi*
- Three anterolateral teeth present ..... 11
- ll. (10) Antennae excluded from orbit..... *Euryplax nitida*
- Antennae entering orbit..... *Trapezioplax tridentata*
12. (9) Posterolateral borders imperceptibly convergent (almost parallel); eyestalks tapering to reduced cornea and conspicuously hairy ..... *Speocarcinus lobatus*
- Posterolateral borders obviously convergent; eyestalks rather thick and not conspicuously hairy..... 13
13. (l2) Fronto-orbital border about half total width of carapace .....
- ..... *Pseudorhombila quadridentata*
- Fronto-orbital border from 3/5 to 3/4 total width of carapace ..... 14
14. (l3) Carapace broad, width 1.5 times length (anterolateral teeth with smooth margins, first 2 coalesced, third largest, obtuse, with strongly curved lateral margin) .....
- ..... *Panoplax depressa*
- Carapace narrow, width 1.3 times length..... 15
15. (l4) Merus of outer (third) maxillipeds with antero-external angle prominent, acutangular (front prominent and almost straight, with small median notch; usually 4 anterolateral teeth, second tooth largest; carpus of chelipeds smooth) .....
- ..... *Glyptoplax smithii*
- Merus of outer maxillipeds with antero-external angle neither prominent nor acutangular (carapace narrow, hexagonal; five anterolateral teeth, including orbital tooth) ..... *Eucratopsis crassimanus*

**Genus *Frevillea* A. Milne Edwards, 1880**

Key to species

Orbital spine long, projecting laterally; next spine very small; sides of carapace strongly convergent posteriorly..... *F. barbata*

Orbital spine projecting more forward than that of *F. barbata*; sides of carapace much less convergent posteriorly than those of *F. barbata*; long and dense tuft of hair on distal half of carpus and proximal part of palm in cheliped ..... *F. hirsuta*

## Family Xanthidae

### Key to genera and species

[Based on Rathbun, 1930, and Williams, 1984]

1. Ridges defining efferent branchial channels, if present, low and confined to posterior part of endostome, never reaching to anterior boundary of buccal cavity ..... 2  
Ridges defining efferent branchial channels extending to anterior boundary of buccal cavity and often very strong ..... 25
2. (1) Fronto orbital border less than half greatest width of carapace ..... 3  
Fronto orbital border half or more than half greatest width of carapace ..... 10
3. (2) Anterolateral border of carapace thin, cristiform; upper border at least of arms and of merus, carpus, and propodus of each leg sharp, cristiform.....  
..... *Platypodiella spectabilis*  
Anterolateral border of carapace and upper borders of legs not cristiform ..... 4
4. (3) Anterolateral border entire up to strong lateral epibranchial tooth; carapace perfectly smooth without trace of regions; chelipeds unequal, fingers pointed; front three-lobed.....  
..... *Carpilius corallinus*  
Anterolateral border cut into teeth or lobes..... 5
5. (4) Surface of carapace nearly smooth (superior inner tooth of orbit distinct though small; anterolateral rim lobate or dentate and continued behind widest part of carapace, its chord longer than posterolateral distance).....  
..... *Xantho denticulata*  
Carapace usually conspicuously lobulate, granulate, or eroded ..... 6
6. (5) Carapace and legs deeply eroded ..... *Glyptoxanthus erosus*  
Carapace lobulate or granulate, chelipeds and walking legs also granulate, often hairy ..... 7
7. (6) Areoles low, separated by narrow furrows; marginal divisions of carapace lobiform, not angular, dentiform or spiniform (carapace uniformly granulate; black color of immovable finger of adult male widely extended on palm; fingers grooved, sharply granulate).....  
..... *Platyactaea setigera*  
Areoles low or high and convex, separated by narrow or wide furrows; marginal divisions of carapace various, angular, dentiform or spiniform..... 8

8. (7) Carapace covered dorsally with spines or sharp tubercles or carapace covered with granules and areoles low, separated by narrow furrows ..... *Actaea*  
     Carapace covered with granules and areoles high, convex, widely separated.... 9
9. (8) Areoles separated by short pubescence; anterior mesogastric nodule small.....  
     ..... *Paractaea rufopunctata nodosa*  
     Areoles raspberry-like, set in thick coat of long hair; palms shaggy; fingers broad, smooth, sharp-edged, acutely tipped..... *Banareia palmeri*
10. (2) Anterolateral margin continued forward and downward to anterior angle of buccal cavity instead of to orbit (superior inner orbital tooth absent).....  
     ..... *Carpoporos papulosus*  
     Anterolateral margin continued to orbit ..... 11
- ll. (10) Dorsal surface of carapace covered with large and small lobules often arranged in triads, tending to proliferate with increasing age ..... *Allactaea lithostrota*  
     Dorsal surface of carapace not covered with large and small lobules ..... 12
- l2. (ll) Carapace rough and hairy except on margin of front and orbits; lunate crest above carpus of each walking leg; anterolateral margin spinous .....  
     ..... *Heteractaea ceratopus*  
     Carapace smooth (non-granulate) and bare or nearly so..... 13
- l3. (l2) Carapace transversely oval..... 14  
     Carapace more or less hexagonal or subquadrate ..... 18
- l4. (l3) Anterolateral teeth strong..... 15  
     Anterolateral teeth not strong..... 17
- l5. (l4) Last (or most posterior) of anterolateral teeth directed outward (areolations of carapace not crossed by granulated ridge; anterolateral edge thick).....  
     ..... *Leptodius parvulus*  
     Last (or most posterior) of anterolateral teeth directed obliquely forward ..... 16

16. (15) Granulation of carapace and chelipeds inconspicuous; lateral teeth of carapace rather broad and flat (dark color of both immovable fingers of male continued on palm) ..... *Cataleptodius floridanus*
- Granulation coarse; lateral teeth of carapace subconical, hooked ..... *Pseudomedaeus*
17. (14) Carapace depressed; anterolateral margin thin, teeth little projecting, second tooth fused with first ..... *Eurypanopeus*
- Carapace convex, smooth; anterolateral margin faintly lobed or toothed; palms elongate, major palm at least twice as wide as minor; fingers short.. *Paraliomera*
18. (13) Frontal and anterolateral regions rough with numerous tubercles, spinules, or sharp granules; walking legs spinulous above..... 19
- Frontal and anterolateral regions relatively smooth, never spinulous or sharply granulous ..... 20
19. (18) Anterolateral regions coarsely tuberculate (basal antennal segment broad, prolonged into orbital hiatus; front prominent, four-toothed; fingers spooned)....  
..... *Etisus maculatus*
- Anterolateral regions, chelipeds and walking legs spinulous or sharply granulous; size small; anterolateral margin shorter than posterolateral, with either second or fifth tooth or both reduced or wanting; basal antennal segment not reaching or barely reaching prolongation from front ..... *Micropanope*
20. (18) Only four anterolateral teeth including orbital angle; carapace very convex from front to back; front truncate; chelae elongate ..... *Tetraxanthus*
- Five anterolateral teeth ..... 21
21. (20) Anterolateral teeth small, thick, widely separated; few smooth transverse ridges on anterolateral and epigastric regions; legs thickly hairy .....  
..... *Chlorodiella longimana*
- Anterolateral teeth broad, flat, first and second more or less fused ..... 22
22. (21) Third segment of male abdomen not reaching coxae of legs of last pair; carapace subquadrate, broad behind, front truncate ..... *Rhithropanopeus harrisi*
- Third segment of male abdomen reaching coxae of legs of last pair; carapace narrower behind ..... 23

23. (22) Carapace crossed by broken, transverse, raised, granulated lines on anterior half; front nearly transverse, not advanced; first and second anterolateral teeth partially fused ..... *Panopeus*
- Carapace narrow, not crossed by transverse raised lines ..... 24
24. (23) Front arcuate, forming regular curve with anterolateral margins; second anterolateral tooth lobiform, separated from the first by shallow sinus; male abdomen constricted between fifth and sixth segments; terminal segment subtriangular ..... *Neopanope*
- Hexagonal; front narrow, prominent beyond curve of anterolateral margins; posterolateral margins strongly converging; anterolateral teeth prominent; supraorbital lobe well marked ..... *Hexapanopeus*
25. (l) Fronto-orbital border half or less than half greatest width of carapace ..... 26
- Fronto-orbital border much more than half greatest width of carapace ..... 28
26. (25) Basal antennal segment touching front (anterior margin of merus of outer (third) maxilliped not notched at orifice of efferent branchial channel; orbits oblong) ...  
..... *Eurytium limosum*
- Basal antennal segment not nearly reaching front ..... 27
27. (26) Carapace broad, suboval; surface of carapace and chelipeds smooth .... *Menippe*
- Carapace not much broader than long, subcircular; chelipeds very rough.....  
..... *Pilumnoides nudifrons*
28. (25) Fronto-orbital border about two-thirds greatest width of carapace; anterolateral borders shorter than posterolateral; front with narrow outer tooth, spine, or lobe, separated by notch from superior inner angle of orbit ..... 29
- Fronto-orbital border much more than two-thirds greatest width of carapace . 30
29. (28) More or less hairy and generally armed with spines or sharp granules *Pilumnus*
- More massive than preceding, carapace deeply lobulate anteriorly, anterolateral margin with three large teeth behind orbit..... *Lobopilumnus agassizii*
30. (28) Antennae not excluded from orbit; chelipeds long, merus reaching far beyond carapace; carapace resembling that of portunid ..... *Melybia thalamita*
- Antennae excluded from orbit ..... 31

31. (30) Meri of outer (third) maxillipeds as long or nearly as long as broad .....  
..... *Eriphia gonagra*

Meri of outer maxillipeds twice as broad as long; carapace and chelipeds armed  
with black spines ..... *Domecia acanthophora acanthophora*

### Genus *Actaea* De Haan, 1833

#### Key to species

[Based on Rathbun, 1933]

Carapace covered dorsally with conical spines or sharp tubercles; marginal lobes  
spinous; fingers short, channeled, rough except at tips; color purplish, pincers  
brown; length 2.2 cm ..... *A. acantha*

Carapace covered with granules; areoles low, separated by narrow furrows .....  
..... *A. bifrons*

### Genus *Eurypanopeus* A. Milne Edwards, 1880

#### Key to species

[Adapted from Rathbun, 1930]

1. Fingers of both chelae with acute tips, not spooned ..... 2

Fingers of minor chela spoon-shaped at tip ..... 3

2. (I) Front double-edged, upper edge with line of granules ..... *E. abbreviatus*

Front not double-edged (first and second lateral teeth of carapace very unequal,  
separated by shallow sinus) ..... *E. turgidus*

3. (I) Minor palm two-thirds as high as major; transverse lines on dorsum not strikingly  
prominent ..... *E. depressus*

Minor palm half as high as major; few very prominent raised granulated lines on  
dorsum ..... *E. dissimilis*

## **Genus *Hexapanopeus* Rathbun, 1898**

### Key to species

[Based on Rathbun, 1930]

1. Fingers of major cheliped black, brown, or horn color..... 2  
Fingers of major cheliped white or nearly so..... 5
2. (1) Fifth lateral tooth almost obsolete..... *H. caribbaeus*  
Fifth lateral tooth well developed ..... 3
3. (2) Carpi of walking legs distinctly bilobed on superior margins ..... *H. lobipes*  
Carpi of walking legs not bilobed on superior margins ..... 4
4. (3) Carpus of cheliped covered with tubercles, about 15 in number ..... *H. paulensis*  
Carpus of cheliped not covered with tubercles, although it may be lumpy .....  
..... *H. angustifrons*
5. (1) Fingers not deeply grooved; short granulated ridges on carapace ... *H. hemphillii*  
Fingers deeply grooved; first two lateral teeth similar to, but smaller than,  
remaining teeth..... *H. quinquedentatus*

## **Genus *Menippe* De Haan, 1833**

### Key to species

[Adapted from Rathbun, 1930]

- Surface of carapace not nodose, almost smooth; anterolateral teeth or lobes shallow or little projecting; stridulating apparatus present ..... *M. mercenaria*
- Surface of carapace anteriorly nodose; anterolateral teeth strong, projecting well out from carapace; no stridulating apparatus ..... *M. nodifrons*

## Genus *Micropanope* Stimpson, 1871

Key to species  
[Adapted from Rathbun, 1930]

1. Last lateral tooth of carapace obsolescent ..... 2  
Last lateral tooth of carapace small but easily discernible ..... 4
2. (1) Carapace deeply areolated all over; legs unarmed; chelae high and heavy.....  
..... *M. pusila*  
Carapace areolated and rough anteriorly; legs spinulous ..... 3
3. (2) Second lateral tooth small but distinct; anterior carapace and carpus of cheliped finely granulate ..... *M. lobifrons*  
Second lateral tooth fused with first and scarcely distinguishable; anterior carapace and carpus of cheliped deeply eroded..... *M. sculptipes*
4. (1) Palms mostly smooth (lateral projections spiniform)..... *M. spinipes*  
Palms entirely or mostly rough..... 5
5. (4) Second lateral tooth absent or fused with first or orbital tooth; palms rough with large bead granules ..... *M. nuttingi*  
Second lateral tooth or spine present ..... 6
6. (5) Outer surface of major palm rough all over; chelipeds and legs long-haired.....  
..... *M. urinator*  
Outer surface of major palm partly rough; chelipeds and legs inconspicuously hairy ..... *M. barbadensis*

## Genus *Neopanope* A. Milne Edwards, 1880

Key to species

1. Movable finger of major chela with large basal tooth..... *N. packardii*  
Movable finger of major chela without large basal tooth..... 2
2. (1) Dactylus of fifth pereopod longer than propodus ..... *N. texana*  
Dactylus of fifth pereopod equal to or shorter than propodus ..... *N. sayi*

## Genus *Panopeus* H. Milne Edwards, 1834

### Key to species

[Based on Rathbun, 1930, and Williams, 1983]

1. Dark color of immovable finger continued more or less on palm, especially in males ..... 2  
Dark color of immovable finger not continued on palm ..... 7
2. (l) Outer edge of fourth lateral tooth longitudinal or nearly so ..... *P. americanus*  
Outer edge of fourth lateral tooth arcuate..... 3
3. (2) Edge of front thick, beveled, and with transverse groove ..... *P. bermudensis*  
Edge of front if thick not transversely grooved ..... 4
4. (3) Major chela with cusps of teeth on immovable finger not reaching above imaginary straight line drawn between tip and angle at juncture of finger with anterior margin of palm (= length immovable finger)..... 5  
Major chela with cusps of teeth near midlength of immovable finger reaching above imaginary straight line drawn between tip and angle at juncture of finger with anterior margin of palm (= length immovable finger)..... 6
5. (4) Coalesced anterolateral teeth 1-2 separated by shallow rounded notch, 2 broader than but not so prominent as 1; 4 curved forward as much as 3; 5 much smaller than 4, acute and hooked forward; palm with distance between crest at base of movable finger and tip of cusp lateral to base of dactylus 0.7 or less length of immovable finger..... *P. herbstii*  
Coalesced anterolateral teeth 1-2 separated by deep rounded notch, adjacent slopes of 1 and 2 about equal, 2 nearly as prominent as 1; 4 not curved forward as much as 3; 5 much smaller than 4, usually projecting straight anterolaterally, sometimes slightly hooked; distance between crest of palm and tip of cusp lateral to base of movable finger 0.8 or more length of immovable finger ..... *P. simpsoni*
6. (4) Major chela with cusps of teeth in "molar area" of immovable finger very broad, often coalesced and worn, their external faces often flared or bowed outward ..... *P. lacustris*  
Major chela with cusps of teeth in "molar area" of immovable finger somewhat enlarged but separated from each other, in line with axis of finger, not bowed outward ..... *P. obesus*

7. (l) Carapace and chelipeds rough and hairy; outer surface of palm with longitudinal ridges ..... *P. rugosus*
- Carapace and chelipeds not noticeably hairy; outer surface of palm without three longitudinal ridges ..... 8
8. (7) Carapace rough with upstanding bead granules; first and second lateral teeth similar, acute and widely separated ..... *P. harttii*
- Carapace nearly smooth; granules of carapace depressed; third to fifth lateral teeth less prominent and nearer together ..... *P. occidentalis*

### **Genus *Paraliomera* Rathbun, 1930**

Key to species  
[Adapted from Rathbun, 1930]

- Gastric region plainly but not deeply delimited; transverse fringe of hair on front; major palm thrice as wide as long slender minor palm ..... *P. longimana*
- Carapace almost smooth, shining, very small; major palm twice as wide as minor palm ..... *P. dispar*

### **Genus *Pilumnus* Leach, 1815**

Key to species  
[Adapted from Rathbun, 1930]

1. Margins of frontal lobes distinctly oblique and concave, some times nearly straight (marginal spines long; three at inner end of orbit curving over eyestalk; subhepatic region covered with sharp granules)..... *P. spinosissimus*
- Margins of frontal lobes more or less convex ..... 2
2. (l) Anterolateral spines or teeth five including outer orbital one (carapace convex; front granulate; upper margin of orbit spined, walking legs spinulous). *P. longleyi*
- Anterolateral spines or teeth four, or occasionally three, including outer orbital one ..... 3

3. (2) Walking legs very long and slender, longest one twice as long as carapace (frontal lobes arcuate, fine denticulate) ..... *P. marshi*
- Walking legs of moderate length, less than twice as long as carapace..... 4
4. (3) Palms naked..... *P. nudimanus*
- Palms hairy or partly hairy ..... 5
5. (4) Major palm with outer surface rough all over or nearly so (hairy covering short; long tubular hairs interspersed, numerous on legs and chelipeds giving them a ragged appearance; red bead tubercles showing on carapace, chelipeds, and legs).  
..... *P. gemmatus*
- Major palm partly smooth and bare on outer surface ..... 6
6. (5) Hair on carapace not covering whole carapace or not forming coat thick enough to conceal surface beneath ..... 7
- Hair covering whole carapace and forming thick coat concealing surface beneath.  
..... 9
7. (6) Two or more superhepatic spines; all long spines black or dark colored ..... *P. sayi*
- No superhepatic spines ..... 8
8. (7) Major palm smooth on larger part of outer surface ..... *P. dasypodus*
- Major palm rough on larger part of outer surface (front lobes shallow; margins of carapace long spined) ..... *P. caribaeus*
9. (6) Chelipeds spinous above; transverse row of long hairs across front.. *P. floridanus*
- Chelipeds not spinous above; carapace tuberculate ..... 10
10. (9) Felt-like covering of carapace forming well defined areoles, deeply separated from one another; half or less than half of outer surface of major palm bare and smooth  
..... *P. holosericus*
- Felt-like covering of carapace not forming well defined, deeply separated areolets  
..... 11
- II. (10) Anterior half of carapace and upper surface of chelipeds dotted with bead-like tubercles; upper margin of orbit furnished with truncate spines ..... *P. pannosus*
- Tubercles of carapace not numerous or prominent; upper margin of orbit not spinous ..... *P. lacteus*

## **Genus *Pseudomedaeus* Guinot, 1968**

Key to species  
[Adapted from Williams, 1984]

Median frontal notch V-shaped, usually narrow; margins of anterolateral teeth either spinous or with beadlike granules; carpi of chelipeds with strong internal spine, sometimes double ..... *P. agassizii*

Median frontal notch U-shaped; margins of anterolateral teeth almost always smooth (rarely granulated); carpi of chelipeds with stout internal double spine .....  
..... *P. distinctus*

## **Genus *Tetraxanthus* Rathbun, 1898**

Key to species

Lateral projections of carapace shallow, not prominent; carpi and chelae of chelipeds smooth with single lobe on inner margin of carpus ..... *T. rathbunae*

Third and fourth lateral teeth prominent; carpus and proximal portion of outer surface of palm distinctly rugose and having second, smaller tooth below and behind prominent inner carpal tooth ..... *T. bidentatus*

## **Family Gecarcinidae**

Key to genera and species  
[Based on Rathbun, 1918]

Fronto-orbital border more than half width of carapace; exopod of each outer (third) maxilliped exposed and provided with flagellum .... *Cardisoma guanhumi*

Fronto-orbital border less than half width of carapace; exopod of each outer maxilliped concealed or nearly so and without flagellum ..... *Gecarcinus*

## **Genus *Gecarcinus* Leach, 1814**

Key to species  
[Based on Rathbun, 1918]

Merus of third maxilliped with entire margin..... *G. ruricola*

Merus of third maxilliped with inner distal emargination ..... *G. lateralis*

## Family Grapsidae

Key to genera and species  
[Based on Rathbun, 1918]

1. Antennules visible in dorsal view..... 2  
Antennules hidden from dorsal view when folded ..... 3
2. (1) Carapace broader than long ..... *Plagusia depressa*  
Carapace longer than broad ..... *Percnon gibbesi*
3. (1) Third maxilliped without oblique hairy ridge on exposed surface of merus..... 4  
Third maxilliped with oblique hairy ridge on exposed surface of merus ..... 10
4. (3) Ventral margin of orbit incomplete, paralleled ventrally by deep groove and strong transverse crest; chelipeds very dissimilar ..... 5  
Ventral margin of orbit entire, usually sharply produced, not paralleled by deep groove and supplementary crest; chelipeds similar ..... 6
5. (4) Palm of major cheliped prolonged proximally far beyond its articulation with carpus..... *Platychirograpsus spectabilis*  
Palm of major cheliped normal ..... *Euchirograpsus*
6. (4) Front much less than half greatest breadth of carapace..... 7  
Front more than half, or about half, greatest breadth of carapace ..... 8
7. (6) Fingers with broad, spooned tips ..... *Grapsus grapsus*  
Fingers acute, not spooned ..... *Geograpsus lividus*
8. (6) Antennae excluded from orbit ..... *Goniopsis cruentata*  
Antennae entering orbit ..... 9
9. (8) Carapace depressed, distinctly striated ..... *Pachygrapsus*  
Carapace convex, almost smooth ..... *Planes minutus*
10. (3) Antennae excluded from orbit by tooth at lower inner angle of orbit meeting or nearly meeting front..... *Aratus pisonii*  
Antennae lodged in orbital hiatus ..... 11
11. (10) Carapace quadrate or subquadrate ..... *Sesarma*  
Anterior half of carapace with arcuate margin, posterior half rectangular.....  
..... *Cyclograpsus integer*

**Genus *Euchirograpsus* H. Milne Edwards, 1853**

Key to species  
[Adapted from Türkay, 1975]

Suture of gonopod twisted from ventral to dorsal; suture present on dorsal face of terminal appendage..... *E. americanus*

Suture of gonopod not twisted; linear along lateral margin of basal fragment; suture present on ventral face of terminal appendage ..... *E. antillensis*

**Genus *Pachygrapsus* Randall, 1840**

Key to species  
[Adapted from Chace and Hobbs, 1969]

Chelipeds with movable finger tuberculate on superior margin; first pleopod of male broad, terminating in very short corneous tip ..... *P. gracilis*

Chelipeds with movable finger smooth; first pleopod of male slender, terminating in long corneous obliquely T-shaped endpiece..... *P. transversus*

## Genus *Sesarma* Say, 1817

Key to species  
[Adapted from Abele, 1973]

1. Movable finger of male chela greatly enlarged proximally; apex of gonopod with two sutures ..... *S. benedicti*
- Movable finger of male chela normal, not greatly enlarged proximally; apex of gonopod without two sutures ..... 2
2. (1) Superior margin of palm with distinct row of granules; movable finger with row of sharp tubercles dorsally; carapace with tooth or lobe posterior to outer orbital angle ..... 5
- Superior margin of palm without distinct row of granules; movable finger without row of sharp tubercles dorsally; carapace without tooth or lobe posterior to outer orbital angle ..... 3
3. (2) Gonopod with endpiece central, not curved; merus of second walking leg with length greater than 2.6 times width ..... *S. ricordi*
- Gonopod with endpiece lateral, curved; merus of second walking leg with length less than 2.6 times width ..... 4
4. (3) Dactylus of fourth walking leg unarmed dorsally ..... *S. miersii*
- Dactylus of fourth walking leg armed dorsally with short black spines ..... *S. cinereum*
5. (2) Tooth behind outer orbital angle deeply cut into carapace ..... *S. curaçaoense*
- Tooth behind outer orbital angle little more than lobe ..... *S. reticulatum*

## **Family Pinnotheridae**

Key to genera and species

[Based on Rathbun, 1918, and Williams, 1984]

1. Dactyli of first, second, and third walking legs bifurcate..... *Dissodactylus*  
Dactyli of walking legs simple, acute..... 2
2. (1) Third walking leg longest and broadest..... *Pinnixa*  
Third walking leg not longest and broadest..... 3
3. (2) Walking legs diminishing in size from distinctly largest first to smallest last leg  
(carapace about twice as broad as long) ..... *Parapinnixa*  
Walking legs not diminishing in size from first to last leg ..... 4
4. (3) Carapace with 2 longitudinal, impressed lines leading back from middle of upper  
margin of orbit; second walking leg longest..... *Fabia*  
Carapace without 2 longitudinal, impressed lines leading back from middle of  
upper margin of orbit; second and third walking legs nearly equal in length ..... 5
5. (4) Dactylus of third maxilliped very small and inserted at end of propodus .....,  
..... *Orthotheres strombi*  
Dactylus of third maxilliped stiliform and inserted on inner side of propodus .... 6
6. (5) Buccal mass subquadrate; carapace somewhat orbicular and either smooth and  
membranous or firm and covered with short pile..... *Pinnotheres*  
Buccal mass subtriangular; carapace firm, smooth ..... *Pinnaxodes floridensis*

## **Genus *Dissodactylus* Smith, 1870**

### Key to species

[Based on Rathbun, 1918]

1. Dactylus of fourth walking leg bifurcate, as in other pairs; carapace covered with numerous transverse ridges; anterolateral margin dentate..... *D. rugatus*  
Dactylus of fourth walking leg simple, not bifurcate; carapace with no more than one dorsal ridge on each side; anterolateral margin entire, non-dentate ..... 2
2. (1) Dorsal ridge transverse ..... *D. stebbingi*  
Dorsal ridge oblique ..... 3
3. (2) Secondary spines of dactyli of walking legs 1, 2, and 3 minute and remote from primary spine ..... 4  
Secondary spines of dactyli of walking legs 1, 2, and 3 of good size ..... 5
4. (3) Propodus of third maxilliped widening slightly distally; outer two-thirds of distal margin truncate ..... *D. borradalei*  
Propodus of third maxilliped not widening distally; distal margin rounded ..... *D. primitivus*
5. (3) Dactyli of walking legs 1, 2, and 3 bifurcate half way to their bases.... *D. mellitae*  
Dactyli of walking legs 1, 2, and 3 bifurcate less than half way to their bases..... *D. crinitichelis*

## **Genus *Fabia* Dana, 1851**

### Key to females of species

[Adapted from Cobb, 1973]

- Third pereopod longer on right than on left side; transverse sulcus across frontal region ..... *F. byssomiae*
- Third pereopods equal in size; no transverse sulcus across frontal region..... *F. tellinae*

## **Genus *Parapinnixa* Holmes, 1894**

Key to species  
[Adapted from Williams, 1984]

Carapace less than twice as wide as long ..... *P. bouvieri*

Carapace more than twice as wide as long ..... *P. hendersoni*

## **Genus *Pinnixa* White, 1846**

Key to species  
[Based on Williams, 1984]

1. Dorsal surface of carapace with four prominent transverse ridges ..... *P. leptosynaptae*

Dorsal surface of carapace without four transverse ridges..... 2

2. (1) Posterior part of carapace with conspicuous, sharp, transverse ridge extending uninterrupted from side to side..... 3

Posterior part of carapace without transverse ridge or with ridge falling well short of lateral margin of carapace ..... 4

3. (2) Carapace less broad, width-length ratio 2.5; lateral angles less acutely produced; third walking leg proportionately heavier, length-width ratios of merus and propodus 2.2 and 1.6 respectively, with no dense pubescence on posterior margin; female without rudimentary proximal tooth above immovable finger..... *P. chacei*

Carapace more broad, width-length ratio 2.85; lateral angles more acutely produced; on third walking leg, length-width ratios of merus and propodus 2.9 and 1.8 respectively, with rather dense pubescence on posterior margin; female with rudimentary proximal tooth above immovable finger ..... *P. cristata*

4. (2) Chela with inner margin of dactylus not smoothly bent 90° at 1/4 to 1/2 distance from its proximal end when flexed..... 5

Chela with inner margin of dactylus smoothly bent 90° at 1/4 to 1/2 distance from its proximal end (adult male with dactylus flexed) ..... 10

5. (4) Immovable finger of chela with prehensile edge variously toothed, merging with lower margin at tip..... 6

Immovable finger of chela with prehensile edge and lower margin connected distally by subterminal, oblique margin (female and juvenile male) ..... 10

6. (5) Prehensile edge of immovable finger horizontal or inclined at less than 30° angle.	7
Prehensile edge of immovable finger inclined at more than 40° angle (juvenile male) .....	10
7. (6) Third walking leg with greatest length of merus more than twice greatest width, posterodistal end of ischium prolonged into stout curved spine (may be lacking in juvenile) .....	<i>P. retinens</i>
Third walking leg with greatest length of merus less than twice greatest width, ischium lacking stout curved spine.....	8
8. (7) Outer surface of chela with numerous scattered granules and long hairs above mid-horizontal row of granules; upper margin of dactylus bearing numerous long hairs .....	<i>P. floridana</i>
Outer surface of chela with few, if any, granules; few short hairs (mainly on immovable finger and upper margin of dactylus).....	9
9. (8) Third walking leg with posterior surface of merus not deeply excavate behind smoothly beaded posterior margin.....	<i>P. cylindrica</i>
Third walking leg with posterior surface of merus deeply excavate behind nearly entire length of laminate and strongly beaded or tuberculate posterior margin .....	<i>P. lunzi</i>
10. (4) Third walking leg with greatest length of propodus twice or more than twice its greatest width.....	11
Third walking leg with greatest length of propodus less than twice its greatest width .....	12
11. (10) Third walking leg with inferoposterior margin of merus coarsely granulated or toothed (may be concealed by hair).....juvenile	<i>P. chaetopterana</i>
Third walking leg with inferoposterior margin of merus finely toothed or granular .....	<i>P. sayana</i>
12. (10) Single bilobed cardiac ridge present.....	<i>P. pearsei</i>
Two short ridges on cardiac region.....	<i>P. chaetopterana</i>

## **Genus *Pinnotheres* Bosc, 1801-1802**

Key to females of species (except for *P. hemphilli*)

[Adapted from Rathbun, 1918]

1. Palp of outer (third) maxilliped large, nearly or quite half as large as merus .....  
..... ***P. maculatus***  
  
Palp of outer maxilliped small, not nearly half as large as merus ..... 2
2. (1) Carapace wider than long ..... ***P. ostreum***  
  
Carapace as long as or longer than wide ..... 3
3. (2) Dactyli of all walking legs similar, falcate ..... ***P. shoemakeri***  
  
Dactylus of fourth walking leg of shape different from others, almost straight,  
except for slender, curved, horny tip ..... ***P. moseri***

Key to males of species (except for *P. moseri*)

[Adapted from Rathbun, 1918]

1. Carapace wider than long ..... 2  
  
Carapace as long as or longer than wide ..... 3
2. (1) Carapace octagonal; sternum sharply cristate ..... ***P. hemphilli***  
  
Carapace suborbicular; sternum not sharply cristate ..... ***P. ostreum***
3. (1) Postlateral portion of branchial region inclined abruptly in steep plane, oblique to  
dorsal surface of carapace, in which it forms reentering angle ..... ***P. shoemakeri***  
  
Branchial region gradually inclined downward toward margin; carapace with 4  
large, persistent, white spots ..... ***P. maculatus***

## Family Ocypodidae

Key to genera and species  
[Based on Chace and Hobbs, 1969]

1. Fronto-orbital distance barely two-thirds of maximum carapace width; no specialized hair-fringed ventral opening between coxae of third and fourth pereopods..... *Ucides cordatus*  
Fronto-orbital distance at least nine-tenths of maximum carapace width; specialized hair-fringed opening between coxae of third and fourth pereopods..... 2
2. (I) Carapace nearly subquadrate in adults, more than four-fifths as long as wide; cornea greatly swollen, occupying much more than half of extensor surface of distal segment of eyestalk; chelipeds somewhat unequal in both sexes .....  
..... *Ocypode quadrata*  
Carapace broader, seldom more than two-thirds as long as wide; cornea occupying less than half of extensor surface of distal segment of eyestalk; one cheliped greatly enlarged in males, both chelipeds small and subequal in females..... *Uca*

## Genus *Uca* Leach, 1814

Key to species  
[Based on Crane, 1975]

1. Minor chela with gape wide, in middle at least half width of adjacent part of movable finger; opposing edges practically parallel in at least gape's proximal half and only chela tips in contact; serrations absent or at most few, minute, and irregular; male abdomen with some segments partly fused ..... *U. leptodactyla*  
Minor chela with gape narrow, in middle clearly less than half width of adjacent part of movable finger, diminishing distally; opposing edges often almost in contact except gape's base (uncommon individuals of *pugilator*); serrations distinct and regular throughout middle section; male abdomen with all segments distinct..... 2
2. (I) No pile on walking legs in either sex (carapace moderately arched; tip of gonopod not thick and contorted but relatively flat and narrow with two flanges and tapering inner process; female gonopore not usually large, without raised rim)..... 3  
Ambulatory pile always present at least on second and third carpus and propodus  
..... 4
3. (2) Cardiac H-form with rust-red pigmentation; gonopod in male continuing to follow curvature of shaft to tip of gonopod ..... *U. panacea*  
Cardiac H-form with grey-brown pigmentation; gonopod in male diverging away from arm, causing tip of gonopod to form concave arch on side opposite arm .....  
..... *U. pugilator*

4. (2) Front narrow, contained at least 4.5 times in carapace breadth; palm with dorsal beaded edge above carpal cavity, not curving down around cavity's distal margin. .... *U. thayeri*
- Front wider, contained at most 3.5 times in carapace breadth, usually less; degree of downward curving of palm's dorsal beaded edge various ..... 5
5. (4) Anterolateral margins practically straight, posteriorly always sharply angled; palm's dorsal beaded edge slanting only slightly downward, usually with little or no curvature ..... 6
- Anterolateral margins convex, curving gradually into posterodorsal margins; palm's dorsal beaded edge strong, curving distinctly downward along carpal cavity's upper distal edge ..... 7
6. (5) Spine or tooth present on inner surface of carpus; oblique ridge inside palm very prominent..... *U. spinicarpa*
- No spine on inner surface of carpus; oblique ridge inside palm moderately prominent..... *U. speciosa*
7. (5) Palm with oblique, tuberculate ridge vestigial to absent; pile in marbled pattern present over most of carapace (but often largely absent through abrasion); second and third walking legs without pile in females, with pile in males, including lower palm; gonopod tip thick, its inner process broad and truncate; female gonopore with edge unevenly raised, with three unequal tubercles ..... *U. vocator*
- Palm with oblique, tuberculate ridge always distinct, although tubercles often in irregular rows or bands; pile on carapace absent or scanty, confined to H-form depression and, rarely, other grooves or anterolateral region, never in widely distributed marbled pattern; second and third walking legs always with pile on carpus and palm in both sexes at least dorsally; gonopod with inner process narrow, tapering; female gonopore with edge raised or not and with or without single tubercle..... 8
8. (7) Second and third walking legs with pile on ventral as well as dorsal sides of carpi and propodi (major chela with proximal ridge at dactylus base paralleling adjacent furrow; eyebrow strongly inclined, almost vertical; pile on ventral sides of walking carpus and propodus scanty, fragile, confined to anteroventral margins) ..... *U. longisignalis*
- Pile completely absent on lower sides of walking legs ..... 9

9. (8) Proximal ridge at movable finger's base clearly diverging upward from adjacent groove, often either with angle ventrally or with curve throughout; center of palm always rough with tubercles of moderate size, not fine granules; tip of immovable finger never with outer subdistal crest but always with enlarged, subdistal tubercle with posterior part of edge clearly raised ..... *U. burgersi*

Proximal ridge at movable finger's base straight, closely paralleling adjacent furrow or (*minax* only) in upper portion minutely diverging from it; center of palm various; tip of immovable finger always with outer, subdistal crest at least indicated and never with enlarged, subdistal tubercle in gape's median row; meri of walking legs various; female gonopore various ..... 10

10. (9) Center of palm almost always finely granulate, usually appearing almost smooth, although exceptions occur; subdistal crest on outer surface of immovable finger almost always strongly developed, highest tubercle usually proximal with several others diminishing regularly toward tip; walking meri broad, dorsal margins of third and fourth clearly convex at least on one side in both sexes; apex of oblique tuberculate ridge on palm high, tubercles almost always continued little or not at all upward around carpal cavity; eyebrow only moderately inclined and usually narrower than smaller dimension of thickness of adjacent, depressed eyestalk; female gonopore with tubercle ..... *U. rapax*

Center of palm almost always with large, sometimes flat tubercles; apex of oblique ridge low, often lower than its median section, continued or not upward around carpal cavity; crest on outer surface of immovable finger highly variable within each species in strength and form; walking meri slender in males; dorsal margins of fourth scarcely or not at all convex, broader in females; eyebrows various; female gonopore with or without small tubercle ..... 11

- II. (10) Front extremely broad, clearly more than one-third carapace breadth in both sexes; eyebrow wider than smaller dimension of adjacent, depressed eyestalk; oblique ridge inside palm not continued upward around carpal cavity; female carapace dorsally with antero-lateral patches of conspicuous tubercles; crab size large; in fresh male specimens joints of major cheliped bordered by red patches . *U. minax*

Front narrower, less than one-third carapace breadth in males, about one-third in females; eyebrow almost always strongly inclined, almost vertical, narrower in males than smaller dimension of adjacent, depressed eyestalk, in females subequal to it; front always with distal margin's inner edge normally rounded; female gonopore with posterior edge slightly raised and sometimes with minute tubercle; in fresh male specimens joints of major cheliped bordered by yellow or yellow-brown ..... *U. pugnax*

## Family Palicidae

### Genus *Palicus* Phlippi, 1838

#### Key to species

[Adapted from Rathbun, 1918]

1. Length of second walking leg not more than twice width of carapace ..... 2  
Length of second walking leg more than twice width of carapace ..... 8
2. (1) Last sternal segment forming thin, laminiform crest conspicuous in dorsal view; carapace with 3 lateral teeth, exclusive of orbital tooth ..... *P. sica*  
Last sternal segment not forming laminiform crest conspicuous in dorsal view .. 3
3. (2) Meri of second and third walking legs each having, at its superodistal angle, obtuse lobe, more or less prominent, sometimes atrophied ..... 4  
Meri of second or second and third walking legs each having, at its superodistal angle, prominent lobe ending in sharp point ..... 6
4. (3) Carapace with four lateral teeth on each side (not counting outer orbital tooth), diminishing in size from front to back; walking legs with 3 or 4 large teeth on anterior margin..... *P. cristatipes*  
Carapace with two lateral teeth on each side, sometimes with rudiments of third farther back; walking legs without large teeth on anterior margin except distal tooth ..... 5
5. (4) Anterolateral teeth blunt ..... *P. alternatus*  
Anterolateral teeth acute ..... *P. affinis*
6. (3) Outer suborbital lobe strongly convex on anterior margin; anterolateral teeth blunt ..... *P. obesus*  
Outer suborbital lobe truncate and nearly straight on anterior margin; anterolateral teeth acute ..... 7
7. (6) Outer orbital tooth pointing straight ahead; first tooth (excluding outer orbital) on lateral margin with posterior border curved, longer than anterior border; tubercles of carapace very distinct from prominences bearing them..... *P. dentatus*  
Outer orbital tooth with tips turned inward; first tooth (excluding outer orbital) on lateral margin subtriangular, borders subequal in length..... *P. faxoni*

8. (1) Outer suborbital lobe visible from above and almost as advanced as pterygostomial lobe; one larger lateral tooth between two smaller lobes or denticles ..... *P. cursor*
- Outer suborbital lobe much less advanced than ear-shaped prominence formed by pterygostomial region at its anterior angle ..... 9
9. (8) One lateral tooth and one tubercle; second walking leg 3.5 times as long as width of carapace ..... *P. gracilis*
- Three lateral teeth; second walking leg 3 times as long as width of carapace .....  
..... *P. floridana*

## Family Cryptochiridae

### Genus *Pseudocryptochirus* Hiro, 1938

Key to species  
 [Based on Shaw and Hopkins, 1977]

Posterior lateral margins of carapace expanded, anterior lateral margins tuberculate; sternum with transverse rows of tubercles; inhabiting canopy-like burrows of *Agaricia fragilis* (Family Agariciidae) ..... *P. hypostegus*

Posterior lateral margins of carapace parallel, anterior lateral margins spined; sternum without transverse rows of tubercles; inhabiting lunate pits oblique to surface of living corals of families Mussidae and Flaviidae ..... *P. corallicola*

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