

# Checklist of isopods (Crustacea: Peracarida: Isopoda) from the Eastern Tropical Pacific

Maria del Carmen Espinosa-Pérez and Michel E. Hendrickx

Laboratorio de Invertebrados Bentónicos, Estación Mazatlán UNAM,  
P.O. Box 811, Mazatlán, 82000 Sinaloa, Mexico

**ABSTRACT.** Literature dealing with isopods from the east Pacific is reviewed. Marine and brackish water species reported at least once in the Eastern Tropical Pacific zoogeographic subregion, which extends from Magdalena Bay, on the west coast of Southern Baja California, Mexico, to Paita, in northern Peru, are listed, and their ranges along the Pacific coast of America are provided. Unpublished records, based on material kept in the collections of the authors, were also considered, to modify previously published distribution ranges within the study area. A total of 124 species, belonging to 68 genera, is included in the checklist and new records or new distribution data are provided for 19 species. A list of names of species and subspecies currently recognized as invalid for the area is also included.

**KEY WORDS:** Isopoda, Eastern Tropical Pacific, Checklist, Distribution.

## INTRODUCTION

Isopods belong to the superorder Peracarida, which represents approximately 50% of all described crustaceans. The order Isopoda contains about 9500 species that inhabit marine, fresh water and terrestrial ecosystems (BRUSCA, pers. comm., April 2000). As in other ecosystems where they occur, marine isopods play an important role in the food web, in particular in removing decaying material from natural or altered environments. Isopods also represent an important factor of economic unbalance. Some species (e.g., *Limnoria lignorum* Rathke, 1799) are wood-burrowing species which damage wooden marine structures (e.g., docks, ships, piers, etc.), although they also contribute to the initial breakdown of woody detritus in natural shallow waters ecosystems (SCHMITT, 1965; SCHULTZ, 1969; BRUSCA, 1980). Species of *Sphaeroma*, known to affect red mangrove roots (e.g., *S. peruvianum* Richardson, 1910; see PERRY & BRUSCA, 1989) have also been observed boring into sandstone and chalk (SCHMITT, 1965). Other species are parasites on commercially important fishes and crustaceans (BRUSCA, 1981; MARKHAM, 1985) and can cause damage to gills (e.g., males of species of *Livoneca*), skin (e.g., species of *Rocinela* and *Nerocila*), or within the mouth (e.g., females

of species of *Cymothoa* and *Lironeca*) (BRUSCA, 1980; 1981; BRUSCA & IVERSON, 1985).

The high diversity and ecological success of this group are reflected by their presence in a great variety of marine and brackish water habitats. They are virtually found everywhere in the seas and oceans, from the supralittoral zone (e.g., *Ligia* species) to abyssal depths (e.g., species of the suborder Asellota). They live in a wide variety of habitats, including mangrove roots (RIBI, 1981; ELLISON & FARNSWORTH, 1990), mixed and soft bottoms (TAYLOR & MOORE, 1995), seagrasses (KANG & YUN, 1988), coral reefs (DELANEY, 1984) and rocky and sandy beaches (SCHULTZ, 1961; DEXTER, 1972; 1974; 1976).

As in other tropical marine regions of the world, the isopods of the Eastern Tropical Pacific (ETP) include a wide variety of forms, contained in many families from different habitats and sites. Although generally rather small, Sphaeromatidae are among the most obvious marine isopods as they live in intertidal or shallow waters, hence they are easy to observe or collect. They occur under rocks but also in high numbers among intertidal algae, within the chambers of sponges and with other encrusting animals such as bryozoans. Aegidae and Cymothoidae are temporary and obligatory parasites in fishes, sometimes with a very low host specificity; *Nerocila acuminata* Schiödte & Meinert, 1881, for instance, has been observed on as many as 40 species of fishes (families Engraulidae, Atherinidae, Serranidae,

Mugilidae and Embiotocidae). Predaceous species of the family Cirolanidae are found in many habitats (e.g., in algae and mussel beds, under rocks and among intertidal animals, on sandy beaches) of the intertidal zone and shallow waters. Anthuridae are often small and usually do not occur in large numbers. Hence, anthurids are relatively rare in collections although they share a wide variety of intertidal and shallow water habitats with more common species. Anthurids usually build burrows or are associated with encrusting organisms, which might be the major reason for their scarcity in collections. Idoteidae are usually solitary animals with a clear preference for seaweed, although they occupy other habitats as well (e.g., mussel beds, muddy substrates). Due to their mimetic capacity, idoteids are difficult to spot while they grasp to algal leaves and stems. Corallanidae include free-living and temporary parasitic species, mostly on fishes, turtles and shrimps. They are wide-spread marine, brackish water and fresh water organisms, found from the intertidal zone to the upper shelf fringe in virtually every type of habitat (BRUSCA, 1980; 1981; BRUSCA & IVERSON, 1985; DELANEY, 1989; SCHULTZ, 1961).

Other families are represented in the ETP by only one or two species. Oniscidae are found on rocky and sandy beaches, generally along the upper tidal limit where the substrate remains humid and detritus offers food and shelter. Members of the family Serolidae are rarely found in the Gulf of California. Tylidae contains one genus only, with terrestrial habits. Found at the upper limit of the tides on sandy beaches, they feed on all kinds of organic detritus, especially seaweeds. The families Microcerberidae and Munnidae (with at least one undescribed species for the area) are poorly known and only a few records are available. Gnathiidae are known from all depths. Gnathiids are a poorly known group, with the taxonomy almost entirely based on the morphology of males due to the similarity among female specimens. Arcturidae are among the most bizarre isopods species. Often associated with seagrass and crinoids, they feature striking adaptations of pereopods related to their clinging habits. Jaeropsidae, Janiridae, Paramunnidae, and Gnathostenotroididae are represented in the area by a single species each; maximum size is usually of the order of 2 mm or less, making these animals difficult to spot and collect; there might be numerous undescribed species present along the ETP coast. Paramunnidae are usually found on muddy substrates in both shallow and deep water. Species of Scyphacidae are also of small size and occur in the littoral zone, on sandy substrate covered with detritus or among rocks and pebbles (BRUSCA, 1980; KENSLEY & SCHOTTE, 1989).

All species of Epicaridea are ectoparasites of other crustaceans. They have been reported on a wide variety of crustaceans groups, from Copepoda to Decapoda. Bopyridae represent by far the most widespread family of Epicaridea; Eastern Tropical Pacific species have been reported on ghost shrimps, squat lobsters, hermit-crabs,

porcelain crabs and caridean shrimps (e.g., *Upogebia dawsoni* Williams, 1986; *Upogebia macginitieorum* Williams, 1986; *Munida refulgens* Faxon, 1893; *Pleuroncodes planipes* Stimpson, 1860; *Parapagurodes laurentae* McLaughlin & Haig, 1973; *Parapagurodes makarovi* McLaughlin & Haig, 1973; *Petrolisthes hians* Nobili, 1901; *Glypocrangon spinulosa* Faxon, 1893; *Hippolyte californiensis* Holmes, 1895; *Thor algicola* Wicksten, 1987) (HANSEN, 1897; NIERSTRASZ & BRENDER À BRANDIS, 1929; MARKHAM, 1975; CAMPOS-GONZÁLEZ & CAMPOY-FAVELA, 1987; SALAZAR-VALLEJO & LEJATRISTÁN, 1989). The other epicaridean family known in the area, Dajidae, is represented in the ETP by one species only, an ectoparasite of euphausiacean shrimps (SHIELDS & GÓMEZ-GUTIÉRREZ, 1996).

The earliest works specifically related to isopods of the east Pacific were published at the end of last century (HANSEN, 1890, 1897). A few years later Harriet Richardson presented her Monograph of the North America Isopods (RICHARDSON, 1905), which still represents to date the most complete monograph on isopods from the American continent. Many papers have been produced since then, most by American scientists (see MENZIES, 1962; SCHULTZ, 1969; BOWMAN, 1977; NUNOMURA, 1978). In the mid 70's a very important series of taxonomic, ecological and zoogeographic works were presented by a group of Californian scientists under the leadership of Richard C. Brusca. Their most relevant works were a review of the species known from the Gulf of California (BRUSCA, 1980), a review of the families Cymothoidae (BRUSCA 1978a, 1978b, 1981), Aegidae (BRUSCA, 1983) and Idoteidae (BRUSCA & WALLERSTEIN, 1979a; 1979b), a monograph on isopods of the Pacific coast of Costa Rica (BRUSCA & IVERSON, 1985) and a review of the Cirolanidae of the Eastern Tropical Pacific (ETP) (BRUSCA et al., 1995). For more complete lists of recent literature on marine isopods of the ETP see papers by BRUSCA (1980), DELANEY (1984) and BRUSCA et al. (1995).

## METHODS

Records in the checklist were derived from a review of the literature dealing with Eastern Tropical Pacific isopods, combined with unpublished data obtained during recent surveys of the fauna of the Pacific coast of Mexico. Unpublished information was also obtained while reviewing museum collections and through the generosity of colleagues. As in previous works dealing with species of Crustacea occurring in the ETP (see HENDRICKX, 1995; HENDRICKX & HARVEY, 1999), this area is herein defined as extending from Magdalena Bay, on the west coast of Baja California Sur, to the area of Paita, Peru, including the entire Gulf of California and all oceanic islands that lie within the latitudinally-defined tropical fringe.

Occurrence of species in other geographic regions of the world has been indicated by the following abbrevia-

tions: I-PAC, Indo-Pacific; I-WPAC, Indo-West Pacific; W-ATL, West Atlantic; ATL, West and East Atlantic; N-PAC, North Pacific; MED, Mediterranean. Records on offshore islands or rocks are cited separately, as they often correspond to southern or northern distribution limits markedly different from those known along the continent. As a rule, we considered only oceanic islands (Clarion and Socorro, Revillagigedo, Mexico; Clipperton, France; Coco, Costa Rica; Malpelo, Colombia; Galapagos, Ecuador; Juan Fernandez, Chile) or rocks (Alijos, Mexico) to be "offshore" records. For the sake of clarity, all records for "Isla del Coco", Costa Rica (such as "Coco Island", "Cocos Island", "isla Cocos" and [rarely] "isla del Coco") are referred to as "Coco Island". Records on close-to-continent islands, such as Gorgona Island, the Tres Marias Islands, and those in the Gulf of California and the Gulf of Panama, are included in the general continental range of the species.

The taxonomic sequence of suborders follows BRUSCA & WILSON (1991). Families, genera and species are listed alphabetically. If the range was given in the original description and has not been modified since, the source is the original citation. Author citations are given at the end of the range. An appendix, at the end of the list, provides names of non-valid species or subspecies cited for the Eastern Tropical Pacific. The correct, currently recognized valid name is provided in parenthesis. Invalid names cited for other zoogeographic regions are not included, as they are not relevant to this study.

## RESULTS

The present paper provides an updated taxonomic list of all species of Isopoda known from the area: 124 species, belonging to 68 genera. Those include eight undescribed species of isopods known to us in the study area: two species of the suborder Epicarida and six species of the suborder Flabellifera (genera *Rocinela*, *Eurydice*, *Alcirona*, *Limnoria*, *Exosphaeroma* and *Paracerceis*).

Although this list is not a systematic paper, the following comments are in order together with some considerations on species distribution or occurrence in the area. *Coxicerberus mexicanus* (Pennak, 1958) is known only from the type locality (Acapulco, Guerrero, Mexico); this diminutive species has never been reported since its original description by PENNAK (1958). *Cirolana diminuta* Menzies, 1962 had previously been synonymized with *C. parva* Hansen, 1890 (BRUCE & BOWMAN, 1982), but BRUSCA et al. (1995) have presented numerous taxonomic arguments that lead them to the conclusion that both species should be considered valid. According to R.C. BRUSCA (pers. comm., April 2000), Californian records of *C. parva* are likely to correspond to *C. diminuta*. *Alcirona insularis* Hansen, 1890, *A. hirsuta* Moore, 1902 and *A. malvadensis* Stebbing, 1904 are synonyms of *A. krebsii* Hansen, 1890, but according to DELANEY (1989) *A. krebsii* might well represent a species complex in need of a thorough revision. *Idusa carinata*

Richardson, 1904, has been considered an incertae sedis species (BRUCE, 1990) but is reported here to account for records of this species in the area.

Records of *Paracerceis sculpta* (Holmes, 1904) from the Mediterranean (RODRIGUEZ et al., 1992) and from the West Atlantic (PIRES, 1980; 1981) are questioned by R.C. BRUSCA (pers. comm., April 2000); although *P. sculpta* is without any doubt one of the most commonly reported species of isopods along the west coast of Mexico and occurs in a wide variety of habitats (from the rocky intertidal to 69 m; among algae, in sponges and on mangrove aerial roots), such a wide distribution pattern is indeed rather surprising. *Munna (Uromunna) ubiquita* Menzies, 1952 is cited herein as *Uromunna ubiquita*, following the proposal of POORE (1984b) who elevated *Uromunna* to the category of genus. The genus *Calafia*, described by CARVACHO (1983) to accommodate a new species of Asellota from western Mexico, is a junior synonym of *Maresiella* Fresi & Scipione, 1980 (G. WILSON, pers. comm., Oct. 2000).

*Colidotea findleyi* Brusca & Wallerstein, 1977, known from both sides of the Baja California Peninsula (upper Gulf of California and southern California to northwestern Baja California), appears to be a warm-temperate disjunct species. *Idotea fewkesi* (Richardson, 1904) and *I. montereyensis* Maloney, 1933, clearly belong to the temperate fauna of the East Pacific; in addition to records from Alaska to northern California for the first species and from British Columbia to northern California for the second, each species has been recorded once in Baja California (AUSTIN, 1985) without further precision as to the exact locality. It is unlikely, however, that they occur south of Magdalena Bay and they have therefore not been included in the list. *Idotea wosnesenskii* Brandt, 1851, a clearly temperate species recorded from Alaska to California has been registered only once in the SE end of the Gulf of California (La Paz, Southern Baja California; "Albatross" sample) by BRUSCA & WALLERSTEIN (1977) who questioned the validity of this record, which most likely has resulted from an erroneous label rather than represents a distribution anomaly; indeed, La Paz is not in an upwelling zone. The records of the supralittoral species *Ligia exotica* Roux, 1828 for California by RICHARDSON (1899; 1901; 1905), might be in error; R.C. BRUSCA's opinion (pers. comm., April 2000) is that *L. exotica* is rather a strictly tropical species and species found along the Californian littoral are either *L. occidentalis* Dana, 1853 or *L. pallasi* Brandt, 1833. In spite of its singular taxonomic characteristics *Alloniscus thalassophilus* Rioja, 1964 has not been registered since its original description by RIOJA (1963). *Alloniscus perconvexus* Dana, 1855 and *Armadilloniscus holmesi* Arcangeli, 1933, are temperate species known to Magdalena Bay, the northernmost limit of the study area considered herein; however, due to the fact that these genera have been occasionally recorded for subtropical regions, both species were included in the checklist as they might also occur south of Magdalena Bay.

Some interesting results related to species distribution were also obtained during this study (Table 1) and this information has been added to the distribution ranges, referring to these records as “unpublished data” in the text.

TABLE 1

List of species of isopods occurring in the Eastern Tropical Pacific and for which new records or new distribution data were made available during this study.

Species	New record or distribution range
<i>Cortezura penascoensis</i>	Coast of Oaxaca, Mexico.
<i>Mesanthura occidentalis</i>	Guaymas, Sonora; Tenacatita Bay, Jalisco, Mexico.
<i>Paranthura elegans</i>	Guaymas, Sonora; Banderas Bay, Nayarit, Mexico.
<i>Rocinela belliceps</i>	Mazatlan, Sinaloa, Mexico.
<i>Anopsilana oaxaca</i>	Off Chamela River, Jalisco, Mexico.
<i>Cirolana nielbrucei</i>	Banco Gordo, Baja California Sur, Mexico.
<i>Excorallana truncata</i>	San Marcos Island, west coast of Gulf of California, Mexico.
<i>Ceratothoa gaudichaudii</i>	Topolobampo Bay, Sinaloa, Mexico.
<i>Elthusa menziesi</i>	Tastiota estuary, Sonora, Mexico.
<i>Elthusa vulgaris</i>	Off Puerto Madero, Chiapas, Mexico.
<i>Paradella dianae</i>	San Juan de Alima, Michoacan, Mexico.
<i>Dynoides crenulatus</i>	Raza Point, Nayarit, Mexico.
<i>Dynoides saldanai</i>	Raza Point, Nayarit, Mexico.
<i>Exosphaeroma</i> sp.	Los Arcos, Jalisco, Mexico.
<i>Paracerceis sculpta</i>	San Juan de Alima, Michoacan, Mexico.
<i>Neastacilla californica</i>	Topolobampo Bay, Sinaloa, Mexico.
<i>Synisoma wetzerae</i>	Guaymas, Sonora, Mexico.
<i>Tylos punctatus punctatus</i>	La Paz, Baja California Sur; Mazatlan, Sinaloa, Mexico.
<i>Ligia occidentalis</i>	Chamela Bay, Jalisco, Mexico.

## SYSTEMATIC ACCOUNT

### ISOPODA Latreille, 1817 ANTHURIDEA Leach, 1814

#### Anthuridae Leach, 1814

1. *Cortezura penascoensis* Schultz, 1977  
Puerto Peñasco, east coast of the Gulf of California, Mexico, to Gulf of Tehuantepec, Oaxaca, Mexico (SCHULTZ, 1977; unpublished data).
2. *Cyathura guaroensis* Brusca & Iverson, 1985  
Known only from Costa Rica (BRUSCA & IVERSON, 1985; WETZER et al., 1991).

3. *Cyathura munda* Menzies, 1951  
Marine County, California, USA, to Mexican border. Gulf of California, Mexico (MENZIES, 1951; WETZER & BRUSCA, 1997).
4. *Mesanthura nubifera* Wägele, 1984  
Known only from Tiburon Island, Sonora, Mexico (NEGOESCU & WÄGELE, 1984).
5. *Mesanthura occidentalis* Menzies & Barnard, 1959  
Point Conception, California, USA, to Gulf of Nicoya, Costa Rica, including the east coast of the Gulf of California, north to Puerto Peñasco, Sonora, Mexico (BRUSCA, 1980; VARGAS et al., 1985; WETZER et al., 1991; unpublished data).

#### Paranthuridae Menzies & Glynn, 1968

6. *Calianthura squamosissima* (Menzies, 1951)  
Marine County, California, USA, to Tangola-Tangola Bay, Oaxaca, Mexico, including the east coast of the Gulf of California, probably to Puerto Peñasco, Sonora (NUNOMURA, 1978; HENDRICKX & VAN DER HEIDEN, 1983; POORE, 1984a; WETZER et al., 1991; CALDERÓN & CAMPOY, 1993).
7. *Colanthura bruscai* Poore, 1984  
Off San Clemente (33°22.9'N, 117°35.8'W), California, USA, to Salinas Bay, Costa Rica, including the east coast of the Gulf of California, Mexico (POORE, 1984a; WETZER et al., 1991).
8. *Paranthura californiae* Nunomura, 1978  
Known only from Magdalena Bay, west coast of Baja California, Mexico (NUNOMURA, 1978; NEGOESCU & WÄGELE, 1984).
9. *Paranthura elegans* Menzies, 1951  
Tomales Point, Marin County, California, USA, to San Quintin Bay, Baja California, Mexico; including the east coast of the Gulf of California, north to Guaymas, Sonora, Mexico (MENZIES, 1951; WETZER & BRUSCA, 1997; unpublished data)
10. *Paranthura longitelson* Wägele, 1984  
Gulf of California, Estanque, Angel de la Guarda and Tiburon Islands to Guaymas, Sonora and La Paz, Southern Baja California, Mexico (WÄGELE, 1984).

#### MICROCERBERIDEA Lang, 1961

#### Microcerberidae Karaman, 1933

11. *Coxicerberus mexicanus* (Pennak, 1958)  
Known only from Acapulco, Guerrero, Mexico (PENNAK, 1958).

#### FLABELLIFERA Sars, 1882

#### Aegidae Dana, 1853

12. *Aega acuminata* Hansen, 1897  
Off Blanco Cape, Costa Rica. Galapagos Islands (HANSEN, 1897; BRUSCA, 1983).

13. *Aega deshayesiana* (H. Milne-Edwards, 1840)  
Coco Island (BRUSCA, 1983). HAW. I-PAC. ATL.
14. *Aega maxima* Hansen, 1897  
A single record off Coco Island (5°56'N, 85°10'30"W) (HANSEN, 1897; BRUSCA, 1983).
15. *Aega longicornis* Hansen, 1897  
Galapagos Islands (HANSEN, 1897; BRUSCA, 1983).
16. *Aega plebeia* Hansen, 1987  
Aleutian Islands, Alaska, USA south to Tierra del Fuego, Argentina (not in the Gulf of California). Coco Island (HANSEN, 1897; RICHARDSON, 1909; BRUSCA, 1983; pers. comm., April 2000). I-PAC.
17. *Rocinela belliceps* (Stimpson, 1864)  
Aleutian Islands, Alaska, to Channel Islands, California, USA. Gulf of California, Angel de la Guarda Island (29°19.9'N, 113°10.4'W) and Mazatlan, Sinaloa, Mexico. Clarion Island (BRUSCA & FRANCE, 1992; unpublished data).
18. *Rocinela laticauda* Hansen, 1897  
Piedras Blancas, California, USA, and from Guaymas, Sonora, to Acapulco, Guerrero, Mexico (RICHARDSON, 1905; BRUSCA & FRANCE, 1992; CALDERÓN & CAMPOY, 1993).
19. *Rocinela modesta* Hansen, 1897  
Known only from Gulf of Panama (7°31'30"N, 79°14'W) (HANSEN, 1897; BRUSCA et al., 1995).
20. *Rocinela murilloi* Brusca & Iverson, 1985  
Point Sur, California, USA, south to Valparaiso, Chile, including the southeastern Gulf of California, Mexico to San Blas, Nayarit (BRUSCA & FRANCE, 1992).
21. *Rocinela signata* Schioedte & Meinert, 1879  
From Newport Bay, California, USA, to Gulf of Guayaquil, Ecuador, including the whole Gulf of California, Mexico. Galapagos Islands (BOWMAN, 1977; BRUSCA & FRANCE, 1992). W-ATL.
22. *Rocinela tuberculosa* Richardson, 1898  
Gulf of California, from San Marcos Island to Gorda Bank (west coast), Mexico (BRUSCA, 1980; BRUSCA & FRANCE, 1992).
23. *Rocinela* sp.  
Northern Gulf of California, Mexico (BRUSCA, 1980).
27. *Anopsilana browni* (Van Name, 1936)  
Gulf of Nicoya, Costa Rica (BRUCE, 1986a; BRUSCA et al., 1995). W-ATL.
28. *Anopsilana oaxaca* Carvacho & Haasmann, 1984  
From Chamela Bay, Jalisco to Manialtepec Lagoon, Oaxaca, Mexico. Clipperton Island (BRUSCA et al., 1995; unpublished data).
29. *Cirolana diminuta* Menzies, 1962  
Point Conception, California, USA, to San Ignacio Lagoon, west coast of Baja California, Mexico. A single record at Espíritu Santo Island, southern Gulf of California, Mexico. Galapagos Islands (BRUSCA et al., 1995; BRUSCA, pers. comm., April 2000).
30. *Cirolana harfordi* (Lockington, 1877)  
Vancouver Island to Magdalena Bay, west coast of Baja California, Mexico. A single record at La Paz, southwestern tip of the Gulf of California (BRUSCA et al., 1995). I-PAC.
31. *Cirolana namelessensis* Brusca, Wetzer & France, 1995  
Utria, Colombia. Malpelo and Galapagos Islands (BRUSCA et al., 1995).
32. *Cirolana nielbrucei* Brusca, Wetzer & France, 1995  
Gulf of California, from Tiburon Island to Arboleda Point, Sonora, and from Chivato Point to Gorda Bank, Baja California (east coast), Mexico (BRUSCA et al., 1995; unpublished data).
33. *Cirolana parva* Hansen, 1890  
Gulf of California, at Tortuga Island (west coast), and from Mazatlan, Sinaloa to Punta Mita, Nayarit (east coast), Mexico, and to Santa Elena Point, Ecuador. Coco and Galapagos Islands (BRUSCA et al., 1995). W-ATL.
34. *Conilera bullisi* Brusca, Wetzer & France, 1995  
From San Miguel Cape, west coast of Gulf of California, Mexico, south to Gulf of Guayaquil, Ecuador (BRUSCA et al., 1995; ESPINOSA-PÉREZ & HENDRICKX, 1997).
35. *Eurydice caudata* Richardson, 1899  
From San Diego, California, USA, to La Libertad, Ecuador, including the Gulf of California, Mexico. Guadalupe, Revillagigedo, Coco and Galapagos Islands (BOWMAN, 1977; WALLERSTEIN, 1980; BRUSCA et al., 1995).
36. *Excirolana brasiliensis* Richardson, 1912  
From San Felipe and Puerto Peñasco, Gulf of California, Mexico, south to Concepcion, Chile (RÍOS & RAMOS, 1990; BRUSCA et al., 1995). ATL.
37. *Excirolana chamensis* Brusca & Weinberg, 1987  
Punta Chame Bay and Perlas Island, Panama (BRUSCA & WEINBERG, 1987; BRUSCA et al., 1995).
38. *Excirolana mayana* (Ives, 1891)  
Ojo de Liebre (Scammon's) Lagoon, west coast of Baja California, Mexico. From Rio Colorado Delta, Gulf of California, Mexico, to Playa Blanca Island, Colombia (BRUSCA et al., 1995). ATL.
39. *Metacirolana calypso* Brusca, Wetzer & France, 1995.  
Galapagos Islands (BRUSCA et al., 1995).
40. *Metacirolana costaricensis* Brusca & Iverson, 1985  
From Guaymas, Sonora, east coast of the Gulf of California, Mexico to Panama Bay, Panama. Galapagos

### Ancinidae Tattersall, 1905

24. *Ancinus granulatus* Holmes & Gay, 1909  
Southern California, USA, to Cedros Island, west coast of Baja California, Mexico. Gulf of California, San Felipe, Baja California (northwest coast) and Mazatlan, Sinaloa (southeast coast) (GLYNN & GLYNN, 1974; WALLERSTEIN, 1980; VAN DER HEIDEN & HENDRICKX, 1982).
25. *Ancinus panamensis* Glynn & Glynn, 1974  
From Santa Rosa National Park, Costa Rica to Malaga Bay, Colombia (GLYNN & GLYNN, 1974; BRUSCA & IVERSON, 1985).

### Cirolanidae Dana, 1853

26. *Anopsilana aleci* Brusca, Wetzer & France, 1995.  
Miraflorres Locks, Panama Channel, Panama (BRUSCA et al., 1995).

- Islands (BRUSCA et al., 1995; ESPINOSA-PÉREZ & HENDRICKX, 1997).
41. *Natatalana californiensis* (Schultz, 1966)  
From southern California, USA, to Cedros Island, west coast of Baja California, Mexico. In the Gulf of California, at Angel de la Guarda Island and off La Paz, South Baja California, Mexico (BRUSCA & NINOS, 1978; BRUSCA et al., 1995). A single record in Costa Rica (BRUSCA, pers. comm., April 2000) and another in the Peru-Chile Trench ( $7^{\circ}7.9'S$ ,  $80^{\circ}37'W$ ) (MENZIES & GEORGE, 1972).
42. *Natatalana carlenae* Brusca, Wetzer & France, 1995  
From Cedros Island, west coast of Baja California, Mexico, to Secas Island, Panama, including the whole Gulf of California, Mexico (BRUSCA et al., 1995).
43. *Oncilorpheus jerrybarnardi* Brusca, Wetzer & France, 1995.  
From Playas Blancas, Costa Rica, to Honda Bay, Panama (BRUSCA et al., 1995).
- Corallanidae Hansen, 1890**
44. *Alcirona krebsii* Hansen, 1890  
From off San Lucas Cape, Southern Baja California, Gulf of California, Mexico, to Panama Bay, Panama (MENZIES & KRUCZYNSKI, 1983; DELANEY, 1989). I-PAC. W-ATL.
45. *Alcirona* sp.  
Puerto Peñasco, Sonora, northern Gulf of California, Mexico (DELANEY, 1989).
46. *Excorallana bruscai* Delaney, 1984  
From Puerto Peñasco, Sonora, and Concepcion Bay, Baja California, Gulf of California, south to Boca de San Francisco, Oaxaca, Mexico (DELANEY, 1989; WETZER et al., 1991; HENDRICKX & ESPINOSA-PÉREZ, 1998b).
47. *Excorallana conabioae* Hendrickx & Espinosa-Pérez, 1998  
From San Miguel Cape to San Marcial Point, west coast of the Gulf of California, Mexico (HENDRICKX & ESPINOSA-PÉREZ, 1998b).
48. *Excorallana houstoni* Delaney, 1984  
From San Francisco Island and San Lucas Cape, Southern Baja California, Gulf of California, to Manzanillo, Colima, Mexico. Galapagos Islands (DELANEY, 1989).
49. *Excorallana tricornis occidentalis* Richardson, 1905  
From Santa Catalina Island, California, USA, south to Panama, including the whole Gulf of California, Mexico (BRUSCA, pers. comm., April 2000; DELANEY, 1984; 1989; 1993; GUZMAN et al., 1988).
50. *Excorallana truncata* (Richardson, 1899)  
Point Conception, California, USA, to Panama, including Puerto Peñasco, Sonora, and San Marcos Island, Gulf of California, Mexico. Galapagos Islands (DELANEY, 1989; unpublished data).
- Cymothoidae Leach, 1818**
51. *Anilocra laticauda* H. Milne-Edwards, 1840  
Off Acapulco, Guerrero, Mexico to Peru (COVENTRY, 1944; MIERS, 1877; BRUSCA, 1981). ATL.
52. *Anilocra meridionalis* Richardson, 1914  
Pacific Ocean ( $10^{\circ}0'N$ ,  $142^{\circ}50'W$ ). Northwest of the Galapagos Islands ( $9^{\circ}31'N$ ,  $106^{\circ}30'W$ ) (BRUSCA, 1981; BRUSCA & IVERSON, 1985).
53. *Ceratothoa gaudichaudii* (H. Milne-Edwards, 1840)  
From southern California, USA, south to Cape Horn, Chile, including the whole Gulf of California, Mexico. Galapagos Islands (BRUSCA, 1981; MOLINA & MANRIQUE, 1996; unpublished data). I-PAC.
54. *Ceratothoa gibberti* (Richardson, 1904)  
From southern California, USA, to Punta Banda, west coast of Baja California; Tortugas Bay, Southern Baja California, and Mazatlan, Sinaloa, Gulf of California, Mexico (BRUSCA, 1981).
55. *Cymothoa exigua* Schioedte & Meinert, 1884  
From San Juanico Bay, west coast of South Baja California, Mexico, south to Panama, including the whole Gulf of California. Galapagos Islands (BRUSCA, 1977; 1981; ALVAREZ & FLORES, 1997). ATL.
56. *Elthusa menziesi* (Brusca, 1981)  
Todos Santos and San Quintin Bays, west coast of Baja California, and Gulf of California, Mexico. Alijos Rocks. Guadalupe Island (CAMPOS et al., 1986; WETZER et al., 1991; unpublished data).
57. *Elthusa vulgaris* (Stimpson, 1857)  
From Washington, USA, south to off Puerto Madero, Chiapas, including the whole Gulf of California, Mexico. Near Malpelo Island (BRUSCA, 1981; AUSTIN, 1985; unpublished data).
58. *Enispa convexa* (Richardson, 1905)  
San Diego, California, USA, to Gulf of Guayaquil, Ecuador. A single record at Playa Novilleros, southern Gulf of California, Mexico (BRUSCA, 1981; BRUSCA & IVERSON, 1985; WETZER et al., 1991).
59. *Idusa carinata* Richardson, 1904  
From Gulf of Panama, Panama to Gulf of Guayaquil, Ecuador (RICHARDSON, 1904; BRUSCA, 1981).
60. *Livoneca bowmani* Brusca, 1981  
Gulf of California, from off Colorado River and Santa Cruz Island (west coast), to Nayarit ( $20^{\circ}40'N$ ,  $105^{\circ}20'W$ ) (BRUSCA, 1981; WETZER et al., 1991).
61. *Mothocyia gilli* Bruce, 1986  
From Asuncion Bay to Almeja Bay, west coast of Baja California, and from Guaymas, Sonora, Gulf of California, to Manzanillo, Colima, Mexico (BRUCE, 1986b; WETZER et al., 1991).
62. *Nerocila acuminata* Schioedte & Meinert, 1881  
From Long Beach, California, USA, south to Peru, including the whole Gulf of California, Mexico. Galapagos Islands (BRUSCA, 1981). HAWAII. W-ATL.
63. *Nerocila excisa* (Richardson, 1914)  
Galapagos and Coco Islands (RICHARDSON, 1914; BRUSCA, 1981). PAC.
64. *Renocila thresherorum* Williams & Williams, 1980  
A single record at Corona del Mar, California, USA. Magdalena Bay, west coast of Baja California, and Gulf of

California, from Loreto to San Jose del Cabo, Mexico (BRUSCA, 1981).

### **Limnoriidae Harger, 1880**

65. *Limnoria tripunctata* Menzies, 1951

From San Francisco Bay, California, USA south to Mazatlan, Sinaloa, including the whole Gulf of California, Mexico (MENZIES, 1951; BRUSCA & IVERSON, 1985). ATL.

66. *Limnoria* sp.

Known only from the coast of Sonora, Gulf of California, Mexico (BRUSCA, 1980).

### **Serolidae Dana, 1853**

67. *Heteroserolis carinata* (Lockington, 1877)

From Santa Monica Bay, California, USA, to San Quintin Bay, Baja California, Mexico. Gulf of California, from Angel de la Guarda Island to San Miguel Cape and Tiburon Island to Lobos Bay (MENZIES & BARNARD, 1959; CALDERÓN & CAMPOY, 1993; ESPINOSA-PÉREZ & HENDRICKX, 1997; WETZER & BRUSCA, 1997).

68. *Heteroserolis tropica* (Glynn, 1976)

A single record from Panama Bay, Panama (GLYNN, 1976).

### **Sphaeromatidae H. Milne-Edwards, 1840**

69. *Cassidinidea mexicana* Hendrickx & Espinosa-Pérez, 1998

Estero el Verde (23°09'03"N, 106°19'00"W) and Mazatlan, Sinaloa, Mexico (HENDRICKX & ESPINOSA-PÉREZ, 1998a).

70. *Paradella dianae* (Menzies, 1962)

Ventura County, California, USA, to San Juan de Alima, Michoacan, Mexico. West coast of the Gulf of California, from Guaymas, Sonora to Sayulita, Nayarit, Mexico (MENZIES, 1962; IVERSON, 1974; unpublished data). I-PAC. ATL. MED.

71. *Paradella setosa* (Glynn, 1968)

Tortola and Naos Islands, Panama (GLYNN, 1968).

72. *Paraleptosphaeroma glynni* Buss & Iverson, 1981

From Tarcoles Beach, Costa Rica to Paitilla Point, Panama (BUSS & IVERSON, 1981; BRUSCA & IVERSON, 1985).

73. *Dynamenella josephi* Glynn, 1968

From Tarcoles, Costa Rica to Tortola, Perico and Naos Islands, Panama (GLYNN, 1968; BRUSCA & IVERSON, 1985).

74. *Dynoides crenulatus* Carvacho & Haasman, 1984

From Raza Point, Nayarit (21°02.6'N, 105°19.4'W) to Puerto Escondido, Oaxaca, Mexico (CARVACHO & HAASMAN, 1984; unpublished data)

75. *Dynoides saldanai* Carvacho & Haasman, 1984

From Raza Point, Nayarit (21°02.6'N, 105°19.4'W) to Puerto Escondido, Oaxaca, Mexico (CARVACHO & HAASMAN, 1984; unpublished data)

76. *Exosphaeroma* sp.

From Guaymas, Sonora and La Paz, Southern Baja California, Gulf of California, Mexico, south to Malaga

Bay, Colombia (BRUSCA & IVERSON, 1985; RIOS & RAMOS, 1990; unpublished data).

77. *Paracerceis richardsonae* Lombardo, 1988

Magdalena Bay, west coast of Baja California; Guaymas, Sonora (Gulf of California), Mexico (LOMBARDO, 1988).

78. *Paracerceis sculpta* (Holmes, 1904)

From San Clemente Island, California, USA, south to San Juan de Alima, Michoacan, Mexico, including the whole Gulf of California, Mexico (RICHARDSON, 1905; BRUSCA, 1980; unpublished data). ATL. MED.

79. *Paracerceis* sp.

Gulf of California, from San Esteban and San Pedro Islands to Guaymas, Sonora (east coast), and San Jose Island, east coast of Baja California, Mexico (BRUSCA, 1980).

80. *Sphaeroma peruvianum* Richardson, 1910

From Gulf of Nicoya, Costa Rica to Matapalo, Peru (RICHARDSON, 1910; BRUSCA & IVERSON, 1985; PERRY & BRUSCA, 1989).

81. *Striella balani* Glynn, 1968

From Santa Cruz Bay, Oaxaca, Mexico, to Naos Island, Panama (GLYNN, 1968; CARVACHO & HAASMAN, 1984).

### **ASELLOTA Latreille, 1803**

#### **Janiridae Sars, 1899**

82. *Carpias villalobosi* (Carvacho, 1983)

Gulf of California, Concepcion Bay, Mexico (CARVACHO, 1983).

#### **Joeropsididae Nordenstam, 1933**

83. *Joeropsis dubia* Menzies, 1951

Tomales Point, Marin County, California, USA, to San Quintin Bay, west coast of Baja California, Mexico. Gulf of California, Percebu Lagoon and Concepcion Bay, Mexico (MENZIES, 1962; CARVACHO, 1983; WETZER et al., 1991).

#### **Munnidae Sars, 1897**

84. *Uromunna ubiquita* (Menzies, 1952)

San Juan Archipelago, Washington, USA, to San Quintin Bay, west coast of Baja California, Mexico. Northern Gulf of California, Guaymas, Sonora and Percebu Lagoon, Mexico (MENZIES, 1962; GEORGE & STROMBERG, 1968; CARVACHO, 1983; WETZER et al., 1991; CALDERÓN & CAMPOY, 1993).

85. *Uromunna* sp.

Estero de Urias, Sinaloa, Mexico (GARCÍA-GUERRERO, unpubl. masterthesis, 1999).

#### **Gnathostenetroididae Kussakin, 1967**

86. *Maresiella brevicornis* (Carvacho, 1983)

Known only from Concepcion Bay, Gulf of California, Mexico (CARVACHO, 1983).

**VALVIFERA Sars, 1882****Arcturidae Sars, 1899**

87. *Neastacilla californica* (Boone, 1918)  
Southern California, USA. Consag Rocks and Topolobampo Bay, Gulf of California, Mexico (MENZIES & BARNARD, 1959; unpublished data).

**Holognathidae Thomson, 1904**

88. *Cleantoides occidentalis* (Richardson, 1899)  
From the southern coast of California, USA south to Ecuador, including the east coast of the Gulf of California, from Puerto Peñasco, Sonora, to Mazatlan, Sinaloa, Mexico. Galapagos Islands (KENSLEY & KAUFMAN, 1978; BRUSCA & IVERSON, 1985; BRUSCA, pers. comm., April 2000).  
89. *Cleantoides planicauda* (Richardson, 1899)  
Oaxaca, Mexico (BRUSCA & WALLERSTEIN, 1979a). ATL.  
90. *Cleantoides vonprahlii* Ríos & Ramos, 1990  
Known only from Malaga Bay, Colombia (Ríos & RAMOS, 1990).

**Idoteidae H. Milne-Edwards, 1840**

91. *Colidotea findleyi* Brusca & Wallerstein, 1977  
From San Diego, California, USA to San Eugenio Point, west coast of Baja California, Mexico. Gulf of California, from San Felipe, Baja California and Puerto Peñasco to Lobos Point, Sonora. Guadalupe Island (WETZER et al., 1991; BRUSCA, pers. comm., April 2000).  
92. *Edotia sublittoralis* Menzies & Barnard, 1959  
Conception Point, California, USA, to Mexican border (WALLERSTEIN, 1980; WETZER et al., 1991). A single record at Gulf of Nicoya, Costa Rica (VARGAS et al., 1985).  
93. *Erichsonella cortezi* Brusca & Wallerstein, 1977  
Known only from Puerto Peñasco, northern Gulf of California, Mexico (BRUSCA & WALLERSTEIN, 1977).  
94. *Eusymmerus antennatus* Richardson, 1899  
From San Eugenio Point, west coast of Baja California, south to Gulf of Nicoya, Costa Rica, including the east coast of the Gulf of California (BRUSCA & WALLERSTEIN, 1977; VARGAS et al., 1985; CALDERÓN & CAMPOY, 1993).  
95. *Idotea urotoma* Stimpson, 1864  
From Alaska, USA, to the west coast of Baja California, Mexico. Guaymas, Sonora and la Paz, South Baja California, Gulf of California (BRUSCA & WALLERSTEIN, 1977; AUSTIN, 1985; CALDERÓN & CAMPOY, 1993; BRUSCA, pers. comm., April 2000).  
96. *Parasymmerus annamaryae* Brusca & Wallerstein, 1979  
From Mazatlan, Sinaloa, southeast coast of the Gulf of California, south to Puerto Angel, Oaxaca, Mexico (CARVACHO & HASSELMANN, 1984; WETZER et al., 1991).  
97. *Pentidotea aculeata* (Stafford, 1913)  
British Columbia, Canada, to Cedros Island, west coast of Baja California, Mexico. Gulf of California, Mexico, Guaymas, Sonora and La Paz, South Baja California

(MENZIES, 1950; BRUSCA & WALLERSTEIN, 1977; AUSTIN, 1985; CALDERÓN & CAMPOY, 1993; BRUSCA, pers. comm., April 2000).

98. *Pentidotea resecata* (Stimpson, 1857)  
From Karta Bay, Alaska, USA, south to Tortola Bay, west coast of Baja California, Mexico; San Lucas Cape and La Paz, South Baja California, Gulf of California. Alijos Rocks (BRUSCA & WALLERSTEIN, 1977; AUSTIN, 1985; BRUSCA & WETZER, pers. comm.).  
99. *Pentidotea stenops* (Benedict, 1898)  
From Alaska, USA, to San Eugenio Point, west coast of Baja California, Mexico, and from San Telmo Point to La Paz, South Baja California, Mexico (BRUSCA & WALLERSTEIN, 1977; AUSTIN, 1985; BRUSCA & WETZER, pers. comm.).  
100. *Pentidotea wosnesenskii* (Brandt, 1851)  
Aleutian Islands, Alaska, to southern California, USA. A single record at La Paz, South Baja California, Gulf of California, Mexico (BRUSCA & WALLERSTEIN, 1977; BRUSCA, 1980; AUSTIN, 1985). I-PAC.  
101. *Synidotea francesae* Brusca, 1983  
Known only from Gulf of Santa Clara, Sonora, east coast of the Gulf of California, Mexico (WETZER et al., 1991).  
102. *Synidotea harfordi* Benedict, 1897  
Southern California, USA, to the the Gulf of Nicoya, Costa Rica, including whole Gulf of California, Mexico (BRUSCA & WALLERSTEIN, 1979a; WALLERSTEIN, 1980; VARGAS et al., 1985). I-PAC.  
103. *Synisoma wetzerae* Ormsby, 1991  
Santa Catalina Island, California, USA, and Guaymas, Sonora, Gulf of California, Mexico (ORMSBY, 1991; unpublished data).

**EPICARIDEA Latreille, 1831****Bopyridae Rafinesque, 1815**

104. *Aporobopyrus trilobata* (Nierstrasz & Brender à Brandis, 1925)  
Zihuatanejo, Guerrero, Mexico (SALAZAR-VALLEJO & LEIJA-TRISTÁN, 1989). W-ATL.  
105. *Bathygyge grandis* Hansen, 1897  
From coast of Nayarit to off Acapulco, Guerrero, Mexico (HANSEN, 1897; SALAZAR-VALLEJO & LEIJA-TRISTÁN, 1989).  
106. *Cryptione elongata* Hansen, 1897  
A single record from off Acapulco, Guerrero, Mexico (RICHARDSON, 1905; SCHULTZ, 1969).  
107. *Parageia ornata* Hansen, 1897  
Off Acapulco, Guerrero, Mexico (RICHARDSON, 1905; SALAZAR-VALLEJO & LEIJA-TRISTÁN, 1989).  
108. *Probopyrus markhami* Román-Contreras, 1996  
From off Piaxtla, Sinaloa to off Coyuca, Guerrero, Mexico (ROMÁN-CONTRERAS, 1996).  
109. *Probopyrus pacificensis* Román-Contreras, 1993  
Coast of Guerrero, Mexico south to El Salvador (HOLTHUIS, 1954; ROMÁN-CONTRERAS, 1993).

110. *Probopyrus pandalicola* (Packard, 1879)  
From Puertecitos and Coloradito, west coast of Gulf of California, Mexico south to Panama (CAMPOS & CAMPOS, 1989). W-ATL.
111. *Progebiophilus bruscai* Salazar-Vallejo & Leija-Tristán, 1989  
West coast of Baja California, Tortugas and Todos Santos Bays, and on the west coast of the Gulf of California, from San Felipe, Baja California, to La Paz, South Baja California, Mexico (SALAZAR-VALLEJO & LEJA-TRISTÁN, 1989).
112. *Pseudione galacantha* Hansen, 1897  
Coast of Canada and into the Gulf of California, Mexico (BRUSCA, 1980; AUSTIN, 1985; SALAZAR-VALLEJO & LEJA-TRISTÁN, 1989).
113. *Pseudione* sp. 1  
Puerto Libertad, Sonora, Gulf of California, Mexico (BRUSCA, 1980).
114. *Pseudione* sp. 2  
Gulf of California, Mexico (SALAZAR-VALLEJO & LEJA-TRISTÁN, 1989).
115. *Schizobopyrina bruscai* Campos & Campos, 1990  
Only known from Concepcion Bay, west coast of Gulf of California, Mexico (CAMPOS & CAMPOS, 1990).
116. *Schizobopyrina striata* Nierstrasz & Brender à Brandis, 1929  
Northern California, USA and Puertecitos, Baja California, Gulf of California, Mexico (CAMPOS & CAMPOS, 1990).

#### Dajidae Sars, 1882

117. *Oculophryxus bicaulis* Shields & Gómez-Gutiérrez, 1996  
West coast of Baja California (20-29°N – 112-118°W), Mexico. W-PAC. W-ATL.

#### ONISCIDEA Latreille, 1803

#### Tylidae H. Milne-Edwards, 1840

118. *Tylos punctatus punctatus* Holmes & Gay, 1909  
San Diego, California, USA, to Ensenada, west coast of Baja California, Mexico. Gulf of California, Mexico, Puerto Peñasco, Sonora to Mazatlan, Sinaloa (east coast) and la Paz, South Baja California (west coast) (SCHULTZ, 1970; AUSTIN, 1985; unpublished data).

#### Ligiidae Brandt, 1883

119. *Ligia baudiniana* H. Milne-Edwards, 1840.  
Raza Island, Gulf of California, Mexico, and Malaga Bay, Colombia (MULAIK, 1960; RÍOS & RAMOS, 1990). ATL.
120. *Ligia exotica* Roux, 1828  
From California, USA (dubious records), south to Chile, including the Gulf of California, Mexico. Guadalupe and Clipperton Islands (RICHARDSON, 1905; MULAIK, 1960). HAWAII. I-PAC. ATL.
121. *Ligia occidentalis* Dana, 1853  
From Oregon, USA, south to Chamela Bay, Jalisco, Mexico, including the whole Gulf of California, Mexico

(RICHARDSON, 1905; AUSTIN, 1985; BOWMAN, 1977; unpublished data).

#### Scyphacidae Dana, 1852

122. *Alloniscus perconvexus* Dana, 1856  
From San Juan Archipelago, Washington, USA, south to Magdalena Bay, west coast of Baja California, Mexico (MULAIK, 1960; GEORGE & STRÖMBERG, 1968).
123. *Alloniscus thalassophilus* Rioja, 1964  
Known only from Zihuatanejo, Guerrero, Mexico (RIOJA, 1963 [1964]).

#### Scyphacidae Dana, 1853

124. *Armadilloniscus holmesi* Arcangeli, 1933  
From British Columbia, Canada, to Magdalena Bay, west coast of Baja California, Mexico (MULAIK, 1960; BOWMAN, 1977; WALLERSTEIN, 1980; AUSTIN, 1985).

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#### APPENDIX

List of invalid names (with the original orthograph) cited for the Eastern Tropical Pacific. The valid name to which they are currently synonymized appears in parenthesis. Invalid names cited only from other zoogeographic regions where ETP species occur (e.g., Western Atlantic, Indo-West Pacific) have not been included in the list.

FLABELLIFERA Sars, 1882

Aegidae Dana, 1853

*Aega excisa* Richardson, 1910 (=*Aega deshayiana*)

*Aega antillensis* Schioedte & Meinert, 1879 (=*Aega deshayiana*)

*Aega Schioedteana* Bovallius, 1885 (=*Aega deshayiana*)

*Aega magnoculus* Richardson, 1909 (=*Aega plebeia*)

*Aega alaskensis* Lockington, 1877 (=*Rocinela belliceps*)

*Rocinela aries* Schioedte & Meinert, 1879 (=*Rocinela signata*)  
*Cirolanidae* Dana, 1853  
*Cirolana californica* Hansen, 1890 (=*Cirolana harfordi*)  
*Cirolana harfordi japonica* Theilemann, 1910 (=*Cirolana harfordi*)  
*Cirolana theilemanni* Kussakin, 1979 (=*Cirolana harfordi*)  
*Cirolana toyamaensis* Nunomura, 1982 (=*Cirolana harfordi*)  
*Eurydice branchiropus* Menzies & Barnard, 1959 (=*Eurydice caudata*)  
*Cirolana koepckeae* Bott, 1954 (=*Excirolana braziliensis*)  
*Cirolana salvadorensis* Schuster, 1954 (=*Excirolana braziliensis*)  
*Corallanidae* Hansen, 1890  
*Alcinora insularis* Hansen, 1890 (=*Alcinora krebsii*)  
*Alcinora hirsuta* Moore, 1902 (=*Alcinora krebsii*)  
*Alcinora maldivensis* Stebbing, 1904 (=*Alcinora krebsii*)  
*Excorallana kathyae* Menzies, 1962 (=*Excorallana truncata*)  
*Cymothoidae* Leach, 1818  
*Anilocra mexicana* de Saussure, 1857 (=*Anilocra laticauda*)  
*Anilocra leachii* Schioedte, 1866 (=*Anilocra laticauda*)  
*Anilocra laevis* Miers, 1877 (=*Anilocra laticauda*)  
*Ceratothoa rapax* Haller, 1865 (=*Ceratothoa gaudichaudii*)  
*Livoneca panamensis* Schioedte & Meinert, 1884 (=*Elthusa vulgaris*)  
*Anilocra occidentalis* Richardson, 1899 (=*Elthusa vulgaris*)  
*Nerocila californica* Schiödte & Meinert, 1881 (=*Nerocila acuminata*)  
*Pterisopodus bartschi* Boone, 1918 (=*Nerocila acuminata*)  
*Sphaeromatidae* H. Milne-Edwards, 1840  
*Sergiella angra* Pires, 1980 (=*Paracerceis sculpta*)  
*VALVIFERA* Sars, 1882  
*Idoteidae* H. Milne-Edwards, 1840  
*Idotea rectilinea* Lockington, 1877 (=*Idotea urotoma*)  
*Cleantis heathii* Richardson, 1900 (=*Idotea urotoma*)  
*Idotea hirtipes* Dana, 1852 (=*Idotea wosnesenskii*)  
*Idotea media* Dana, 1854 (=*Idotea wosnesenskii*)  
*Idotea oregonensis* Dana, 1854 (=*Idotea wosnesenskii*)  
*ONISCIDEA* Latreille, 1803  
*Ligiidae* Brandt, 1883  
*Ligia exotica* var. *hirtitarsis* Dollfus, 1890 (=*Ligia baudiniana*)  
*Scyphacidae* Dana, 1853  
*Actoniscus tuberculatus* Holmes & Gay, 1909 (=*Armadilloniiscus holmesi*)

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