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Coastal amphipods from Bahía Málaga and Bahía Buenaventura, Eastern Tropical Pacific of Colombia

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ABSTRACT

Knowledge about the diversity of coastal amphipods in the eastern tropical Pacific, including the Pacific coast of Colombia, is scarce. We characterized amphipod diversity in Bahía Málaga (intertidal and subtidal rocky shores, and sandy beaches) and Bahía Buenaventura (intertidal rocky shores, mangrove roots, and sandy beaches), two important estuaries in the central Pacific coast of Colombia. Sixteen species in eleven families were found; Hourstonius baciroa, *Leptocheirus rhizophorae, Leucothoe alata, Elasmopus ocoroni, Melita bousfieldi*, and *Neomegamphopus heardi* represent new records for Colombia.

Keywords: Amphipoda, biodiversity, rocky shores, mangroves, sandy beaches.

Anfípodos costeros de Bahía Málaga y Bahía Buenaventura, Pacífico Oriental Tropical de Colombia

RESUMEN

El conocimiento acerca de la diversidad de los anfípodos costeros en el Pacífico Oriental Tropical, incluyendo las costas del Pacífico de Colombia, es escaso. Por esto, caracterizamos la diversidad de anfípodos en Bahía Málaga (costas rocosas intermareales y submareales, playas arenosas) y Bahía Buenaventura (costa rocosa intermareal, raíces de manglares, playas arenosas), dos estuarios importantes de la costa central del Pacífico de Colombia. Se encontraron 16 especies en once familias, de las cuales *Hourstonius baciroa, Leptocheirus rhizophorae, Leucothoe alata, Elasmopus ocoroni, Melita bousfieldi* y *Neomegamphopus heardi* representan nuevos registros para Colombia.

Keywords: Amphipoda, biodiversidad, costas rocosas, manglares, playas arenosas.

INTRODUCTION

Amphipods are one of the most diverse peracarids with almost 10 000 described species (Lowry and Myers 2017). In shallow seas around the world, including tropical environments, amphipods constitute a major component of coastal communities in terms of species richness and abundance, likely as a result of their varied life history strategies (Barnard 1979, Thomas 1993). Knowledge about coastal amphipod diversity in the Eastern Tropical Pacific (ETP) comes primarily from the large scientific expeditions carried out in the 1920s-1950s such as the Allan Hancock Expeditions among others (Barnard 1954, 1960, 1961, 1967a, 1972, Myers 1968, Barnard and Barnard 1981, Thomas and Barnard 1983). More recently, studies about the diversity of this taxonomic group in the region are still scarce (Escobar-Briones and Winfield 2003, Ortiz et al. 2004, 2007, García-Madrigal 2007, 2010, Foster et al. 2009, Winfield et al. 2020). The reasons for which coastal amphipods have been forgotten in most diversity studies from tropical environments could be that the lack of appropriate taxonomic keys, taxonomic expertise, and their small size difficult their identification.

In Colombia, only six studies focused on amphipod diversity have been conducted in the Caribbean coast (Ortiz 1983, Quintero et al. 1992, Ortiz and Lemaitre 1994, 1997, Martín et al. 2013), while only two in the Pacific coast (Valencia and Giraldo 2009, Valencia et al. 2018). However, several studies of macrobenthos diversity in different coastal ecosystems of the Colombian Pacific (rocky shores, sandy beaches, mangroves, and subtidal soft bottoms) have recognized their importance in terms of abundance and number of morphotypes (Dexter 1974, Herrera 2002, Riascos 2002, Lazarus-Agudelo and Cantera-Kintz 2007, Valencia et al. 2014, Cobo-Viveros and Cantera-Kintz 2015). To date in Colombia, 67 species of coastal amphipods have been reported for the Caribbean coast (Ortiz and Lemaitre 1994, 1997, Martín et al. 2013), while only 27 species for the Pacific coast (Barnard 1954, 1960, 1961, 1967a,b, 1972, Barnard and Barnard 1981, Thomas and Barnard 1983, Valencia and Giraldo 2009; Valencia et al. 2014, 2018). This result contrasts with the 253 and 278 species reported by García-Madrigal (2007) for the Gulf of California and Baja California, respectively, in the northern Mexican Pacific.

In the Colombian Pacific, studies about macrofauna diversity in coastal environments have recorded amphipods mainly as “Amphipoda”, whereas only a few studies have reached the family or genera level (Dexter 1974, Riascos 2002, Cobo-Viveros and Cantera-Kintz 2015). Consequently, the information about amphipod fauna from the Pacific coast of Colombia is practically unknown and therefore, their ecological importance in coastal environments has been underestimated. In the present work, we characterize the diversity of coastal amphipods from the central zone of the Pacific coast of Colombia (Bahía Málaga and Bahía Buenaventura) to improve the knowledge of this taxonomic group in the ETP.

MATERIALS AND METHODS

Samples were collected between 2005 and 2011 in six localities in the central zone of the Pacific coast of Colombia: Isla Palma, Islote Morro Chiquito, and Playa Chucheros in Bahía Málaga; and San Pedro, Piangüita, and Isla Cangrejo in Bahía Buenaventura (Fig. S1). In the intertidal zone, specimens were captured during low tide in encrusting and filamentous

algae using a spatula in Isla Palma; inside of rocks by breaking down the pieces in Isla Cangrejo and Piangüita; using artificial substrates made of *Anadara tuberculosa* (Sowerby, 1833) shells that were placed between mangrove roots of *Rhizophora mangle* L. in Piangüita; and by removing beach litter (pieces of wood and leaf fragments) in Playa Chucheros, San Pedro, and Piangüita. In the subtidal zone, samples were collected at 3 m depth using artificial substrates made of pieces of bricks in Islote Morro Chiquito. All specimens were preserved initially in 4% formalin. Amphipods were identified to the lowest taxonomic level possible and were deposited in 70% alcohol in the Marine Biology Reference Collection of Universidad del Valle, Cali, Colombia (CERBMcr-UV). A general description including the main characters for identification, illustrations of the species identified, and an identification key are provided. Based on a literature revision, a checklist of amphipods in the Colombian Pacific is included in the supplementary material (Table S1). Abbreviations in the text and figures are as follow: Antennae 1 and 2: A1-A2, gnathopods 1 and 2: G1-G2, pereopods 3 to 7: P1-P7, uropods 1 to 3: U1-U3, telson: T.

RESULTS AND DISCUSSION

Sixteen species of benthic amphipods were identified from samples collected at Bahía Buenaventura and Bahía Málaga in the central zone of the Pacific coast of Colombia (Table S1). Among these, four are reported to the genera level from individuals that were not possible to identify to the species level. Based on the literature review, 27 species of benthic amphipods have been reported in the Colombian Pacific (Table S1). Adding the records from the present study, the total species richness reaches 40 species; therefore, our study represents an important contribution to the knowledge about amphipod diversity in Colombia and in the ETP. Studies directed towards the natural history of coastal amphipods are necessary in order to have a better understanding of their taxonomy, diversity, and ecology in the different environments found along the Colombian Pacific coast such as sandy beaches, coral reefs, mangroves, mud flats, and rocky subtidal zones.

AMPHIPODA

Suborder Amphilochidea

Amphilochidae

Hourstonius baciroa (Barnard, 1979) **Fig. 1**

Material examined. Bahía Málaga, Islote Morro Chiquito: 25/07/2005, depth 3 m, CERBMcr-UV 2005-067; 16/12/2005, depth 3 m, CERBMcr-UV 2005-081.

Description. Anterior head lobe rounded. Antennae short, subequal. Coxa 1 reduced, distinctly shorter than, and mostly hidden by, following coxa. Coxa 2 rounded ventrally and with small ornamentations. G1 and G2 stout, strongly subchelate, propodus strongly inflated, dactyl slender, finely pectinate behind. Carpal lobe of G1 spinose, margin of palm with robust setae. Carpal lobe of G2 with three to four distal robust setae, elongated, extending fully to posterior angle of propodus, propodus with two robust setae on anterolateral surface and with paired robust setae defining the palm. Rami of U1 markedly unequal. U2 shorter

than U1 and U3. U3 biramous, both rami 1-articulate. T longer than wide, but much shorter than peduncle of U3.

Remarks. *Hourstonius baciroa* resembles *H. vilordes* (Barnard, 1962) reported for southern California, and *H. laguna* (McKinney, 1978) and *H. tortugae* (Shoemaker, 1942) reported for the Caribbean cost of Colombia (Ortiz and Lemaitre 1994). *Hourstonius baciroa* has four robust setae on the carpal lobe of G2 which are lacking in *H. vilordes*. In *H. baciroa* the carpal lobe of G2 fully reaches the posterior margin of propodus, while in *H. laguna* it is short (three-fourths of the posterior margin of the propodus). In *H. baciroa*, coxa 2 is rounded, but it is quadrate in *H. laguna* and *H. vilordes*. *H. baciroa* differs from *H. tortugae* in that the propodus of G2 of the later lacks submarginal robust setae on the anterolateral surface.

ETP distribution. Ecuador (Galapagos Islands) and Colombia (this study). First record for Colombia.

Habitat. Intertidal and subtidal (3 m).

Leucothoidae

Leucothoe alata Barnard, 1959 **Fig. 2**

Material examined. Bahía Málaga, Islote Morro Chiquito: 09/04/2005, depth 3 m, CERBMcr-UV 2005-061; 16/12/2005, depth 3 m, CERBMcr-UV 2005-085.

Description. A1, article 1 stout and longer than articles 2 and 3. A2 slightly shorter than A1. Coxa 1 with beveled anteroventral corner, coxae 2 and 3 subquadrate, longer than wide, coxa 4 posterior margin long and deeply excavated dorsally. G1 carpochelate, carpus stout, propodus longer than wide, palmar margin with small serrations, dactyl very short. G2, carpal lobe spoon-like, setose, and apically serrated, propodus robust, longer than wide, and with distal setae, palm slightly scalloped. Pleosome, epimeral plate 1 rounded, epimeral plate 2 posteroventrally extended, epimeral plate 3 subcuadrate. U1 longer than U2. U1 biramous, ramus subequal in length. U2 biramous, outer ramus shorter than inner ramus. U3, absent. T longer than wide, apex with two-minute notches.

Remarks. The description provided by Barnard (1959) is very limited. Specimens found in this study have the propodus of G1 slenderer than in the original description. A similar variation in the G1 was found by Barnard (1962) in individuals from Monterey Bay, California. Furthermore, in the specimens examined in this study the article bearing the outer plate of the maxilliped is expanded, but not as it is shown in the original description.

As mentioned by Barnard (1970), *L. alata* is very similar to *L. lihue* Barnard, 1970; however, the palmar margin of propodus of G1 is smooth in *L. lihue*, whereas it has small serrations in *L. alata*. Likewise, the basis of P7 has a concave posterior margin in *L. lihue*, whereas it does not in *L. alata*. Based on the review of the family Leucothoidae made by White (2011), there are other three *Leucothoe* species in which the dactyl of G1 is also very short: *L. minima* (Schellenberg, 1925), *L. minuscula* Schellenberg, 1938, and *L. adelphe* White & Thomas, 2009. However, the propodus palm of G2 in these three species has strong dentitions, whereas these are small in *L. alata*.

ETP distribution. Ecuador (Galapagos Islands) and Colombia (this study). First record for Colombia.

Habitat. Subtidal (3–5 m).

Suborder Senticaudata

Ampithoidae

Ampithoe ramondi Audouin, 1826 **Fig. 3**

Material examined. Bahía Málaga, Islote Morro Chiquito: 09/04/2005, depth 3 m, CERBMcr-UV 2005-060.

Description. A1 60% of total body length. A1 and A2 similar in length. G1 subchelate, basis with anterodistal lobe, carpus smaller or equal to propodus, palm weakly excavated and defined by a robust seta on the posterior margin of hand. G2 subchelate, robust, basis with large anterodistal lobe, propodus densely setose on distal margin, propodus larger than carpus, palm deeply excavated defined by a protuberance. U1 and U2 biramous. U3 stout, peduncle two times longer than ramus, distal portion with three robust setae, outer ramus with two curved robust setae, inner ramus densely setose. T entire.

Remarks. *A. ramondi* differs from *A. hirsutimanus* Ortiz & Lemaitre, 1997, the other *Ampithoe* reported in Colombia but in the Caribbean coast (Ortiz and Lemaitre 1997), in that in *A. ramondi*, the propodus of G2 is densely setose only on the distal portion, whereas in *A. hirsutimanus*, it has long and dense setae on the carpus and propodus.

ETP distribution. Ecuador (Galapagos Islands and coastal region) and Colombia (this study). First record for the Colombian Pacific coast; the species has been reported in the Caribbean coast of Colombia (Shoemaker 1942, Ortiz 1983, Ortiz and Lemaitre 1994). In general, this is a circumtropical species.

Habitat. Intertidal and shallow subtidal.

Aoridae

***Grandidierella* sp. Fig.** 4

Material examined. Bahía Málaga, Isla Palma: 09/12/2006, intertidal, CERBMcr-UV 2006-111; 28/06/2007, intertidal, CERBMcr-UV 2007-067.

Remarks. Only two specimens were collected, but they lacked all appendages. *Grandidierella* sp. from the Pacific coast of Colombia is similar to *G. propodentata* Moore, 1986 and *G. koa* Barnard, 1977. However, G1 of the specimen found in this study is slenderer, the carpus is triangular, being 5 times longer than wide, while in *G. propodentata* and *G. koa*, the carpus is also triangular but massive, being approximately 1.6 times longer than wide.

Corophiidae

***Americorophium* sp. Fig. 5**

Material examined. Bahía de Buenaventura, Piangüita: 27/10/2006, intertidal in R. mangle roots, CERBMcr-UV 2006-097; Bahía Málaga, Playa Chucheros: 28/01/2008, intertidal in rocky cliffs, CERBMcr-UV 2008-179.

Remarks. Individuals found in this study have characteristics similar to *A. rioplatense* (Giambiagi, 1929) and *A. panamense* (Shoemaker, 1949). *Americorophium* sp. from the Colombian Pacific has separate urosome segments, sexually dimorphic A2, two teeth on the posterior margin of the dactyl of G2, and the rami of the U2 lack robust setae on the outer margin (Bousfield and Hoover 1997). However, in *Americorophium* sp. from the Colombian Pacific the peduncular segment 4 of A2 is sparsely setose, not lined with clusters of long setae as in *A. rioplatense* and *A. panamense*. This suggests that *Americorophium* sp. from the Colombian Pacific may correspond to a different species and possibly to an undescribed *Americorophium*.

Habitat. Intertidal.

Leptocheirus rhizophorae Ortiz & Lalana, 1980 **Fig. 6**

Material examined. Bahía de Buenaventura, Isla Cangrejo: 24/09/2006, intertidal, CERBMcr-UV-UV 2006-093.

Description. A1 longer than A2, accessory flagellum vestigial. Coxa 1 very small and partially covered by coxa 2. Coxae 1 to 5 with setae in the ventral margin. G1 subchelate. G2 simple and slender, anterior margin of basis and propodus with long setae; setae with setules. P3 to P7, basis with setae on the posterior margin. P6 and P7 propodus widened. U1 with interramal robust seta. U2, peduncle and ramus spinose. U3 outer ramus apically setose.

Remarks. Specimens found in the Pacific coast of Colombia agree with the original description by Ortiz and Lalana (1980) from Cuban waters. However, some differences were found in: 1) A1 is considerably longer than A2 (not similar in length); 2) G1 has a robust seta defining the palm; and 3) epimeral plate 3 has three robust setae on the anterior margin. These two last characteristics may be absent in specimens from Cuba because they are not specified in the original description. *Leptocheirus rhizophorae* differs from other species of *Leptocheirus* in its vestigial accessory flagellum, which is usually longer in the other species of the genus.

ETP distribution. Colombia (this study). First record for Colombia and for the ETP.

Habitat. Mangrove roots of *Rhizophora mangle* and intertidal rocky cliffs.

Hyalidae

Parhyale fascigera Stebbing, 1897 **Fig. 7**

Material examined. Bahía Málaga, Isla Palma: 30/06/2007, intertidal, CERBMcr-UV 2007-089.

Description. A1 about 50% of A2. A2, peduncle and flagellum weakly setose. Coxa 1 broadened distally and with a small shelf in posterior margin. Coxae 2 and 3 with distinct posterior marginal shelf. Coxa 4 with posterior margin excavated. G1, propodus short, palm defined with a paired of unequal robust setae. G2, basis anteroventral margin unproduced, palm spinose and defined by paired robust setae. P3 to P7, dactyls short with a distinct inner marginal seta. P6 and P7, propodus posterior margin without robust setae. U1 and U2, outer ramus without lateral robust setae. U3 biramous, peduncle with one distal robust seta, inner ramus very short, outer ramus shorter than peduncle and apically setose. T cleft.

Remarks. See comments for *Parhyale hawaiensis*.

ETP distribution. Peru, Ecuador (Galapagos Islands), Colombia (this study), and Mexico. First record for Colombia.

Habitat. Tidepools, beaches, intertidal rocky cliffs in the high fringe associated with filamentous algae.

Parhyale hawaiensis (Dana, 1853) **Fig. 8**

Material examined. Bahía de Buenaventura, Piangüita: 12/06/2006, intertidal, CERBMcr-UV 2006-089; Isla Cangrejo: 09/03/2007, intertidal, CERBMcr-UV 2007-061; Bahía Málaga, Isla Palma: 29/06/2007, intertidal, CERBMcr-UV 2007-077.

Description. Antennae, coxae, and G1 similar to *P. fascigera*. G2, basis anteroventral margin produced ventrally, palm spinose and defined by paired robust setae. P6 and P7, propodus posterior margin spinose. U1 and U2, outer ramus with a marginal robust seta. U3 biramous, inner ramus very small, outer ramus apically setose. T cleft.

Remarks. Variations in males of *P. hawaiensis* were found depending on total body length. In specimens of 5.7 mm, the flagellum of A2 has 11 articles, while in specimens of 7.1-7.8 mm it has 20 to 22 articles. In addition, in the smaller specimens: the presence of a shelf in the posterior margin of coxa 1 is ambiguous; in their U1, the outer ramus has one robust seta instead of two and the inner ramus has two robust setae instead of three; the inner ramus of their U3 is fused to the peduncle.

Parhyale hawaiensis differs from *P. fascigera* in that the former has robust setae in the posterior margin of P6 and P7, and has robust setae in the outer ramus of U1 and U2. These robust setae are absent in *P. fascigera*.

ETP distribution. Ecuador (Galapagos Islands and coastal region), Colombia (this study), Panama, and Costa Rica. First record for the Colombian Pacific coast; the species has been reported in the Caribbean coast of Colombia (Shoemaker 1956, Quintero et al. 1992). In general, this is a circumtropical species.

Habitat. Intertidal and shallow subtidal.

Ischyroceridae

Ericthonius brasiliensis (Dana, 1853) **Fig. 9**

Material examined. Bahía Málaga, Islote Morro Chiquito: 25/07/2005, depth 3 m, CERBMcr-UV 2005-069.

Description. Lateral cephalic lobes subtriangular. Coxa 1 small and widely separated from Coxa 2. Coxa 2 deeper than broad, ventral margin with stridulating ridges. G1, basis expanded and with knob-like process on posterior margin, carpus longer than propodus, propodus subovoid. G2 carpochelate, basis elongate, broadened distally, carpus massive, posterodistal margin with two carpal teeth, propodus slender, dactylus with distal setae. P3 and P4, basis broadened distally. U3, peduncle longer than ramus, ramus curved. Telson entire.

Remarks. Adult males of *E. brasiliensis* are easily distinguished from other species of the genus by the expanded basis of G1, the presence of the knob-like process on the basis of G1, and the slender basis of G2. In this study only one adult male (4.9 mm) presented the characteristics described above. However, in this specimen the eyes were large and not small as it is characteristic of the species (Myers and McGrath 1984).

ETP distribution. Ecuador (Galapagos Islands and coastal region), Colombia (this study), Panama, and Costa Rica. First record for the Colombian Pacific coast; the species has been reported in the Caribbean coast of Colombia (Ortiz 1983, Ortiz and Lemaitre 1994). In general, this is a circumtropical species.

Habitat. From 0–171 m, but mostly in shallow waters.

***Ericthonius* sp. Fig. 10**

Material examined. Bahía Málaga, Islote Morro Chiquito: 27/01/2005, depth 3 m, CERBMcr-UV 2005-054; 16/12/2005, depth 3 m, CERBMcr-UV 2005-083.

Remarks. Several ovigerous females (2.9 – 3.4 mm) and smaller males (2.9 – 3.1 mm) differed from the male of *E. brasiliensis* described above. In these males, the basis of G1 is slender (not expanded) and the posterior margin lacks the knob-like process. In G2, the basis is considerably broad (not slender) and the dactyl lacks the distal setae. In P3 and P4, the basis is expanded and widened in the middle (not distally). In both males and females, the peduncle of P3 has two long setae, whereas in the male of *E. brasiliensis* the peduncle has four short setae. Because identification of the genus *Ericthonius* is problematical and the shape of G2 in males varies during development (Myers and McGrath 1984, see their Fig. 2A and 2H), it is difficult to know if the male of *E. brasiliensis* found in this study corresponds to a hyperadult and the smaller males correspond to juveniles or to another species. In a preliminary analysis of samples collected in Cabo Marzo, further north in the Colombian Pacific, several small and large males of *E. brasiliensis* were found. In both the small and

large males found in Cabo Marzo, the shape of G1 and G2 were similar to the largest male found in Islote Morro Chiquito (Fig. 9, wide basis of G1, slender basis of G2), and none of them have the characteristics of the small males found in Islote Morro Chiquito (B.V. pers. obs.). This suggests that the small males of Islote Morro Chiquito may correspond to a different species and possibly to an undescribed *Ericthonius*.

ETP distribution. Ecuador (Galapagos Islands and coastal region), Colombia (this study), Panama, and Costa Rica. First record for the Colombian Pacific coast; the species has been reported in the Caribbean coast of Colombia (Ortiz 1983, Ortiz and Lemaitre 1994). In general, this is a circumtropical species.

Habitat. From 0–171 m, but mostly in shallow waters.

Maeridae

Elasmopus ocoroni Barnard, 1979 **Fig. 11**

Material examined. Bahía de Buenaventura, Piangüita: 02/06/2006, intertidal, CERBMcr-UV 2006-088; Bahía Málaga, Isla Palma: 30/11/2007, intertidal, CERBMcr-UV 2007-103.

Description. Mandibular palp deeply falcate. A1 longer than A2. G1 subchelate. G2, internal side of the palm with sharp falcate setose hump near dactylar hinge, palm short, middle tooth stout, palm defined by a broad conical tooth bearing a robust seta, palm and posterior margin of hand densely setose, setae highly elongated. P3 to P7, basis without long posterior setae. P6 and P7, basis normally serrated. U3 with shortened inner ramus, bearing one medial robust seta, outer ramus with two groups of lateral robust setae. T with apices rounded and protruded medially, bearing two apical and one marginal robust seta.

Remarks. Specimens found in this study agree with the original description by Barnard (1979) from the Galapagos Islands. Other three species of *Elasmopus*, *E. brasiliensis* (Dana, 1853), *E. balkomanus* Thomas & Barnard, 1988, and *E. thomasi* Ortiz & Lalana, 1994, have been reported for the Caribbean coast of Colombia (Ortiz 1983, Ortiz and Lemaitre 1994). *Elasmopus ocoroni* differs from *E. thomasi* in that the former has a strongly setose propodus of G2, while in the later the propodus is scarcely setose. The principal difference between *E. ocoroni*, *E. brasiliensis*, and *E. balkomanus* is the presence in the former of three prominences in the palm of G2 which are absent in the other two species.

ETP distribution. Ecuador (Galapagos Islands and coastal region), Colombia (this study), and Costa Rica. First record for Colombia.

Habitat. Rocks in mangroves and in the middle fringe of intertidal rocky cliffs associated with filamentous algae.

Melitidae

Melita bousfieldi García-Madrigal, 2010 **Fig. 12**

Material examined. Bahía Málaga, Islote Morro Chiquito: 25/07/2005, depth 3 m, CERBMcr-UV 2005-068.

Description. A1 longer than A2. A1 accessory flagellum 3-articulate, third segment minute. G1 subchelate, carpus elongated, longer than propodus, propodus palm projected distally with two robust setae on inner surface. G2 subchelate, distal margin of carpus short and setose, propodus strongly setose, palm oblique, dactyl crossing palm. Pleons 1 to 3 weakly dorso-laterally toothed. Urosomal segment 1 with a mediodorsal tooth. Urosomal segment 2 with a pair of dorsolateral robust setae of similar length that have a simple seta between them. U3, inner ramus small, outer ramus long, with four and five clusters of robust setae on the margins. T deeply cleft with truncated apices, outer margin with two setae, inner margin with one seta, apices with four robust setae and four simple setae.

Remarks. Specimens found in this study agree with the original description by García-Madrigal (2010) for Gulf of Tehuantepec waters (Mexico). Differences were found in: 1) G1, the propodus palm projection has two robust setae on the inner surface instead of three; 2) U3, the margin of the outer ramus has four and five clusters of robust setae instead of five clusters on each side; and 3) T, the two plumose setae on the apices reported in the original description were not visible in the specimens examined here.

Two other species of *Melita*, *M. nitida* Smith, 1873 and *M. palmata* Montagn, 1804, have been reported in the Caribbean coast of Colombia (Ortiz 1983, Ortiz and Lemaitre 1997). Specimens of *M. bousfieldi* have a dorsal tooth in the first urosomal segment, while it is smooth in *M. nitida*. *Melita palmata* has a massive, trapezoidal, and poorly setose propodus of G2, while the propodus is densely setose and ovate in *M. bousfieldi*.

ETP distribution. Colombia (this study) and Mexico. First record for Colombia.

Habitat. Intertidal and shallow subtidal in sediment with shells, coral rocks, and algae on coral.

Neomegamphopidae

Neomegamphopus heardi Barnard & Thomas, 1987 **Fig. 13**

Material examined. Bahía Málaga, Islote Morro Chiquito: 25/07/2005, depth 3 m, CERBMcr-UV 2005-071.

Description. A1, accessory flagellum half as long as article 1 of primary flagellum. G1 carpochelate, carpus wider than long, margin with two teeth, inner tooth weakly palmate, about 1/3 of the dominant tooth and separated by a weak incision from propodus, propodus anteriorly setose, longer than wide. G2 subchelate. U1 with interamal robust seta. T with a small excavation, each lobe with two small robust setae and one long seta.

Remarks. Specimens found in this study agree with the original description by Barnard and Thomas (1987) for Bahía Honda waters (Panama). Differences were found in the accessory

flagellum that is only half as long as article 1 of primary flagellum in the specimens examined in this study and not “as long as article 1 of primary flagellum”. *Neomegamphopus heardi* differs from other species of the genus by the presence of two teeth on the carpus of G1 instead of one.

ETP distribution. Colombia (this study) and Panama. First record for Colombia.

Habitat. Shallow subtidal.

Talitridae

Chelorchestia colombiensis Valencia & Giraldo, 2009 **Fig. 14**

Material examined. Bahía Málaga, Isla Palma: 08/12/2006, intertidal, CERBMcr-UV 2006-109; Bahía Málaga, Isla Palma: 09/12/2006, intertidal, CERBMcr-UV 2006-110; Bahía Málaga, Isla Palma: 29/06/2007, intertidal, CERBMcr-UV 2007-075; Bahía Málaga, Isla Palma: 30/06/2007, intertidal, CERBMcr-UV 2007-085; Playa Chucheros: 28/01/2008, intertidal, CERBMcr-UV 2008-180.

Description. A1 reaching 2/3 of fourth peduncular article of A2. A2, 60% of body length. G1 subchelate, merus, carpus and propodus with well-developed posterior lobe. G2, basis with one tubercle on the anterior margin, ischium with a well-developed lobe on the anterior margin, palm with two well-developed round humps, dactyl robust, with broad medial expansion. U1, peduncle spinose and with interramal robust seta. U2, peduncle and ramus spinose. U3 uniramus, peduncle with a large robust seta on the distal portion, ramus shorter and with one terminal robust seta. T with a shallow apical notch.

Variations on G2 of juvenile males: In the smallest juvenile males (2.4 – 2.5 mm), the tubercle on the basis is absent and the propodus has a small rounded hump. In juvenile males of intermediate size (4.2 – 4.7 mm), the tubercle on the anterior margin of the basis is present, although small. Propodus with two rounded humps, but small and close to each other.

Females: G1 subchelate, without posterior lobes. G2 subchelate, with merus, carpus, and propodus with posterior lobes, propodus with small dactyl.

Remarks. *Chelorchestia colombiensis* can be easily distinguished from other species of the genus because its G2 has a palm with two well developed rounded humps in adult males that are absent in the other species.

ETP distribution. Colombia.

Habitat. High intertidal zone associated with encrusting and filamentous algae.

***Chelorchestia* sp. Fig. 15**

Material examined. Bahía Buenaventura, Isla Cangrejo: 09/03/2007, intertidal, CERBMcr-UV 2007-062; 09/03/2007, intertidal, CERBMcr-UV 2007-125.

Remarks. Specimens of *Chelorchestia* sp. found during this study belong to two different morphotypes. Only one male of 12 mm length was found. In this individual the G2 has six tubercles on the anterior margin of the basis and the palm has a strong proximal process, being triangular and bigger than half of the length of the propodus. On the other hand, four males of 9.5 mm length were found. In these individuals, A1 reaches 3/4 of the fourth peduncular article of A2. Furthermore, A2 is 63% of body length, and G2 has four tubercles on the anterior margin of the basis, the palm is less developed, and the dactyl has a broad medial expansion. Within the genus *Chelorchestia* it is very common that males exhibit variations in the second gnathopod during development (Smith and Heard 2001, Serejo 2004, Valencia and Giraldo 2009). It is possible that these specimens correspond to a new species, where the second morphotype (specimens of 9.5 mm) belong to a juvenile stage of the first morphotype (specimen of 12 mm). Future studies are necessary to elucidate the status of specimens from Isla Cangrejo.

The two morphotypes found during this study differ from other species of the genus *Chelorchestia* in the length of A2, the shape of G2, and the number of tubercles on the anterior margin of the basis of G2. The process of the palm of G2 in the male of 12 mm found in Isla Cangrejo is similar to the described for *C. darwini* (Müller, 1864) by Serejo (2004). However, specimens from Isla Cangrejo have a longer A2 (> 60% of body length) compared to *C. darwini* and *C. forceps* Smith & Heard, 2001, in which A2 reaches 40% of body length. Likewise, specimens from Isla Cangrejo have four to six tubercles on the anterior margin of the basis of G2, while *C. colombiensis* and *C. costaricana* (Stebbing, 1906) have one and two tubercles, respectively.

Habitat. High intertidal zones in rocky cliffs.

Cocorchestia fritzi (Stebbing, 1903) **Fig. 16**

Material examined. Bahía Buenaventura, Piangüita: 05/01/2008, intertidal, CERBMcr-UV 2008-178; Bahía Málaga, Playa Chucheros: 28/01/2008, intertidal, CERBMcr-UV 2008-184; San Pedro: 13/07/2011, intertidal, CERBMcr-UV 2011-022.

Description. A1 reaching 2/3 of fourth peduncular article of A2. G1 subchelate, carpus and propodus with well-developed posterior lobes. G2, anterior margin of basis spinose, ischium with a small lobe on the anterior margin, propodus large and oval, palm oblique and spinose with a deep excavation near the hinge where a prominence of the dactylus fits. U1, peduncle and inner ramus spinose, outer ramus without robust setae. U2, peduncle and rami setose. U3 unirameus, ramus slightly shorter than peduncle, ramus and peduncle with small robust setae. T with a shallow apical notch and with five robust setae on each lobe.

Variations on G2 of juvenile males: in the smallest juvenile males examined (7.5 – 9.1 mm), the propodus is subquadrate with a small distal protuberance and a straight palm. In juvenile males of intermediate size (9.6 – 10.4 mm), the propodus is oval, but lacks the excavation near the hinge and the dactyl also lacks the prominence present on the adult males.

Females: G1 simple, without posterior lobes. G2 subchelate, anterior margin of basis expanded and spinose, propodus with a lobe that extends beyond dactyl, dactyl small.

Remarks. The genera of the family Talitridae have been under revision due to the difficulties in their identification (e.g., Bousfield 1982, Morino and Miyamoto 1988, Lowry and Myers 2019, 2022). In the most recent revision, Lowry and Myers (2022) reassigned some of the species to new genera and assigned *Talorchestia fritzi* as the type species of *Cocorchestia*. The authors based the diagnostic description of *C. fritzi* on the work by Shoemaker (1932), who revised additional males from Costa Rica and described a morphology of G2 that differed from the original description. Shoemaker (1932) stated that the propodus of G2 has a large sinus that occupies half the palm and that the prominence in the dactylus is absent in fully developed males. However, Shoemaker (1932) did not provide a reference of the size of the individuals he revised. In the larger males examined in this study (most 11-14 mm, the largest ~ 15 mm), the dactylus in all specimens has the prominence that fits the excavation of the propodus. Thus, the different morphologies of G2 in adult males of *C. fritzi* between the original description by Stebbing (1903), the revised description by Shoemaker (1932), and this study suggest that future revision is needed for this species, more importantly considering that Lowry and Myers (2022) assigned *T. fritzi* as the type species of *Cocorchestia*.

Characteristics of *C. fritzi* found in the Colombian Pacific agree well with the original description by Stebbing (1903) for Costa Rica. Differences were found in: 1) males, the dactylus of G1 is longer than the palm (not shorter than the palm); and 2) females, the basis of G2 is more expanded than in individuals illustrated in the original description. These two variations were also found by Monod (1970) in the Galapagos Islands (see Monod 1970, figures 59 and 67).

Males of *C. fritzi* differ from other species of the genus in that the propodus of G2 has an excavation near the hinge where a prominence of the dactylus fits, whereas in *C. margaritae* (Stephensen, 1948) the excavation on the propodus is deeper, the palm has a large distal projection, and the dactylus lacks the prominence. Likewise, in males of *C. fritzi* only the anterior margin of the basis of G2 has robust setae (not both margins). Females of *C. fritzi* differ from *C. margaritae* by its elongated G2 propodus (not posteriorly rounded).

ETP distribution. Ecuador (Galapagos Islands), Colombia, Panama, and Costa Rica. First record for the Colombian Pacific coast; the species has been reported in the Caribbean coast of Colombia (Stebbing 1903, Dexter 1974).

Habitat. Beach litter and under wood in the supralittoral zone of sandy beaches.

Key to the species of coastal amphipods (adult males) from the Pacific coast of Colombia

1 G1 carpochelate … 2

- G1 subchelate … 4

2 U3 uniramous … *Grandidierella* sp.

- U3 biramous … 3

3 G1 stout, carpus with two teeth at apex, propodus densely setose; T tiny … *Neomegamphopus heardi*

- G1 slender, carpus and propodus longer than wide, propodus without setae, dactyl very short; T longer than wide… *Leucothoe alata*

4 G2 coxa with stridulating ridges; G2 carpochelate, carpus with two teeth; U3 outer ramus curved … 5

- G2 coxa without stridulating ridges; G2 simple, subchelate or chelate; U3 outer ramus not curved … 6

5 G1, posterior margin of basis with knob-like process; G2 coxa deeper than broad; G2 basis elongate, dactyl with long distal setae … *Ericthonius brasiliensis*

- G1, posterior margin of basis without knob-like process; G2 coxa broader than deep; G2 basis massive, dactyl without distal setae … *Ericthonius* sp.

6 A1 shorter than A2 … 7

- A1 and A2 similar in length, or A1 longer than A2 … 12

7 A1 about 10% of A2 … 8

- A1 about 50% or 80% of A2 … 10

8 G2 basis spinose, propodus large and oval, palm spinose; U3 peduncle and ramus with small robust setae, ramus similar in size to peduncle … *Cocorchestia fritzi*

- G2 basis with tubercles, propodus large and chelate, palm without robust setae; U3 peduncle and ramus with only one robust seta on the distal portion, ramus shorter than peduncle … 9

9 G2, palm with two well developed rounded humps … *Chelorchestia colombiensis*

- G2, palm deeply excavated … *Chelorchestia* sp.

10 A1 about 80% of A2; A2, pediform; G2 simple, dactyl with three marginal teeth … *Americorophium* sp.

- A1 about 50% of A2; A2 not pediform; G2 subchelate … 11

11 P6 and P7, posterior margin of propodus without robust setae; U1 and U2, outer ramus without lateral robust setae … *Parhyale fascigera*

- P6 and P7, posterior margin of propodus spinose; U1 and U2, outer ramus spinose laterally … *Parhyale hawaiensis*

12 Coxa 1 very small and partially covered by coxa 2 … 13

- Coxa 1 not covered by coxa 2 … 14

13 U1 with interamal robust seta; G1 subchelate; G2 simple and elongate, anterior margin of basis with long setae … *Leptocheirus rhizophorae*

- U1 without interamal robust seta; G1 and G2 stout, strongly subchelate, propodus strongly inflated almost triangular … *Hourstonius baciroa*

14 U3 inner ramus short, outer ramus very long; pleon with several small dorsal teeth; urosomal segment 1 with one dorsal tooth … *Melita bousfieldi*

- U3 rami subequal or inner ramus longer than outer ramus; pleon without dorsal teeth; urosomal segment 1 without dorsal teeth … 15

15 U3 outer ramus stout, inner and outer rami with apical robust setae; A2 shorter than peduncle of A1; G2, inner face of propodus with a subquadrate process, and with a medial and a distal tooth … *Elasmopus ocoroni*

- U3 rami very short and subequal in size, outer ramus with two curved robust setae, inner ramus densely setose; A2 longer than peduncle of A1; G2 robust, palm deeply excavated, inner face of propodus without teeth … *Ampithoe ramondi*

Authors' contribution statement

BV, AMCV, JFL, and AG contributed to the collection of specimens and writing of the manuscript. BV identified the specimens, wrote the diagnosis, prepared the original draft, and the illustrations. All authors reviewed and approved the final manuscript.

Conflict of interest statement

The authors declare that there is no conflict of interest.

Research data availability statement

The entire dataset supporting the results of this study was published in the article and in the section "Supplementary materials”.

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FIGURES

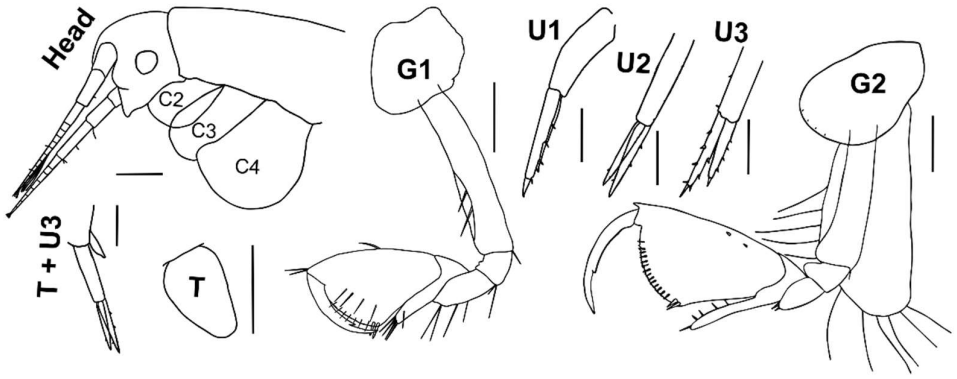

Figure 1. *Hourstonius baciroa* (Barnard, 1979), female, 2.2 mm, CERBMcr-UV 2005-067, Islote Morro Chiquito, Valle del Cauca. Scale bar: Head = 0.2 mm; G1-G2, U1-U3, T+U3 = 0.1 mm; T = 0.05 mm. C2-C4: coxa 2 to 4.

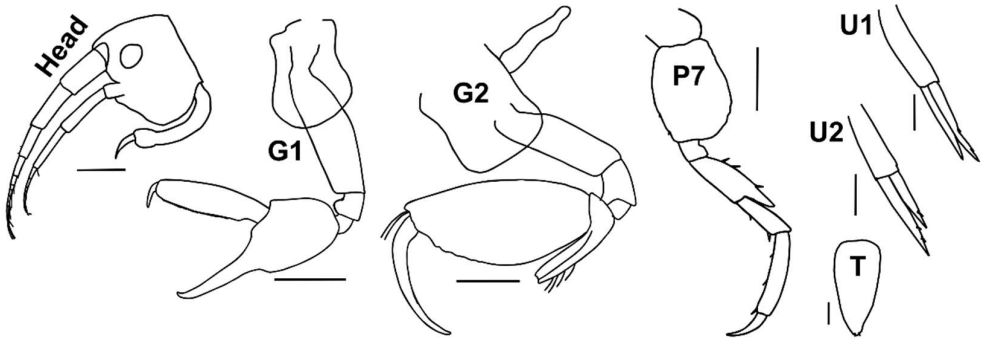

Figure 2. *Leucothoe alata* Barnard, 1959, female, 3.1 mm, CERBMcr-UV 2005-085, Islote Morro Chiquito, Valle del Cauca. Scale bar: Head, G1-G2, P7 = 0.2 mm; U1-U2 = 0.1 mm; T = 0.05 mm.

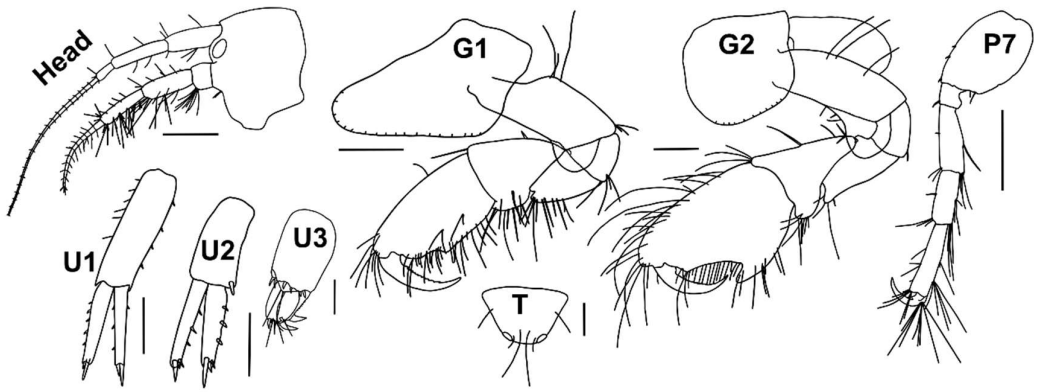

Figure 3. *Ampithoe ramondi* Audouin, 1826, male, 5.7 mm, CERBMcr-UV 2005-060, Islote Morro Chiquito, Valle del Cauca. Scale bar: Head, P7 = 0.5 mm; G1-G2, U1-U2 = 0.2 mm; U3 = 0.1 mm; T = 0.05 mm.

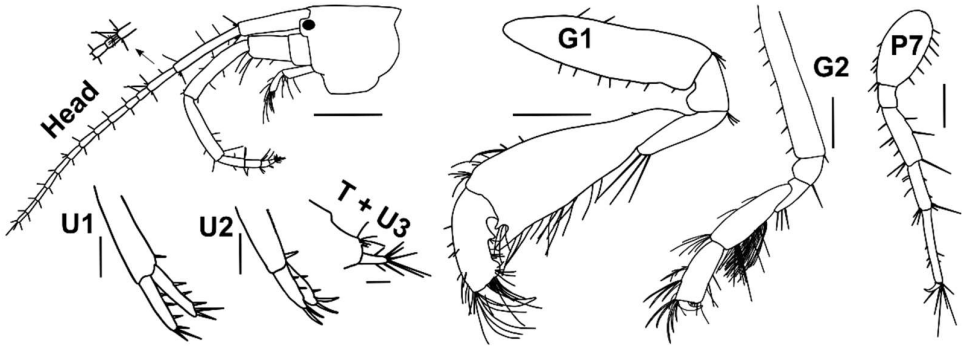

Figure 4. *Grandidierella* sp., male, 4.1 mm, CERBMcr-UV 2006-111, Isla Palma, Valle del Cauca. Scale bar: Head = 0.5 mm; G1-G2, P7 = 0.2 mm; U1-U2, T + U3 = 0.1 mm.

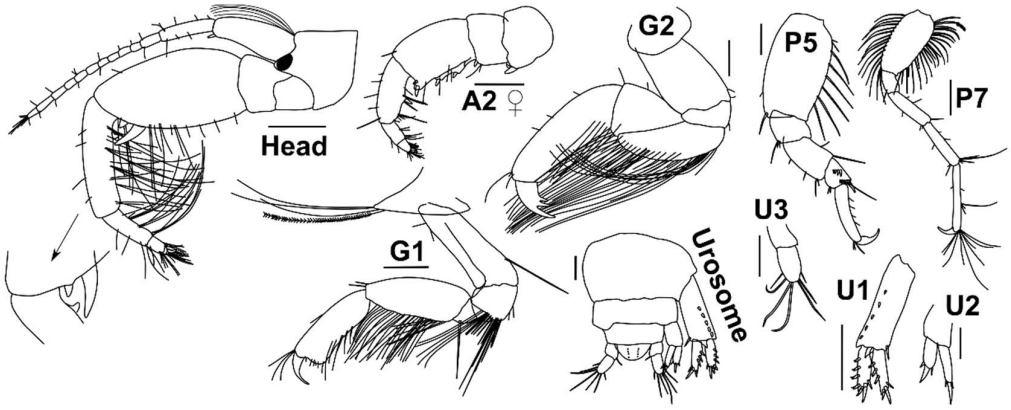

Figure 5. *Americorophium* sp., male, 2.5 mm, CERBMcr-UV 2006-097, Pianguita, Valle del Cauca. Scale bar: Head, P7, A2♀ = 0.2 mm, G1-G2, P5, Urosome, U1-U3 = 0.1 mm.

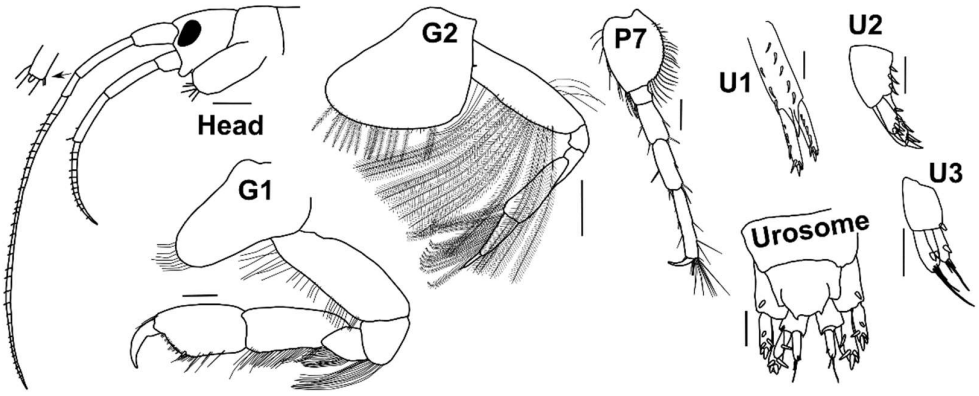

Figure 6. *Leptocheirus rhizophorae* Ortiz & Lalana, 1980, male, 7.6 mm, CERBMcr-UV 2006-093, Isla Cangrejo, Valle del Cauca. Scale bar: Head, G2 = 0.5 mm; G1, P7, U1, U2, U3, Urosome = 0.2 mm.

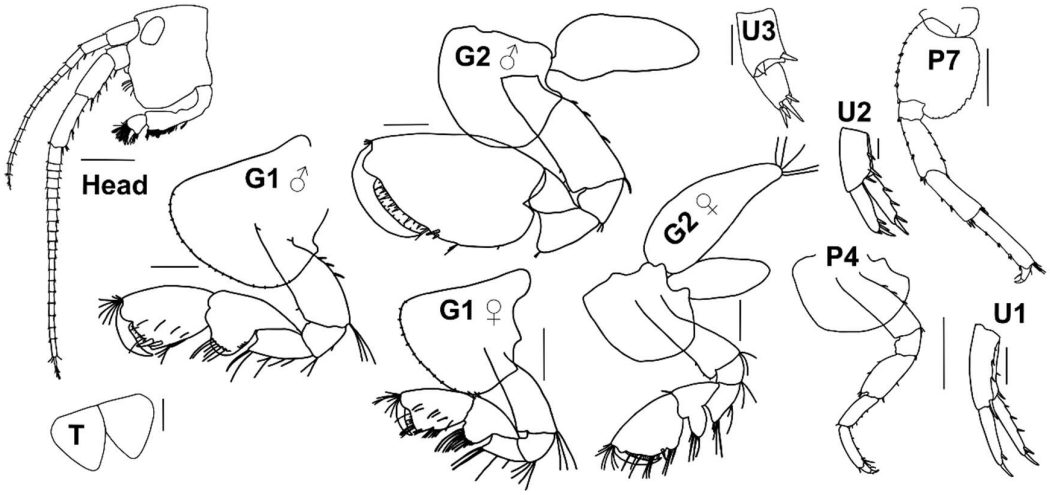

Figure 7. *Parhyale fascigera* Stebbing, 1897, male: 6.4 mm, female: 5.2 mm, CERBMcr-UV 2007-089, Isla Palma, Valle del Cauca. Scale bar: Head, P4, P7 = 0.5 mm; G1♂-G2♂, U1, G1♀-G2♀ = 0.2 mm; U2-U3, T = 0.1 mm.

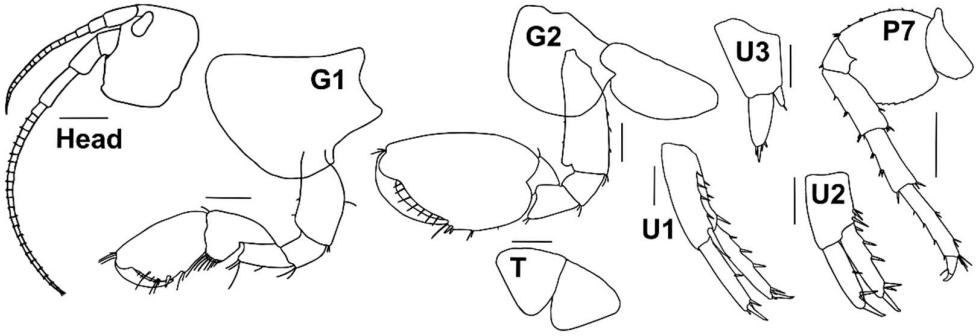

Figure 8. *Parhyale hawaiensis* (Dana, 1853), male, 7.8 mm, CERBMcr-UV 2007-077, Isla Palma, Valle del Cauca. Scale bar: Head, P7 = 0.5 mm; G1-G2, U1-U2 = 0.2 mm; U3, T = 0.1 mm.

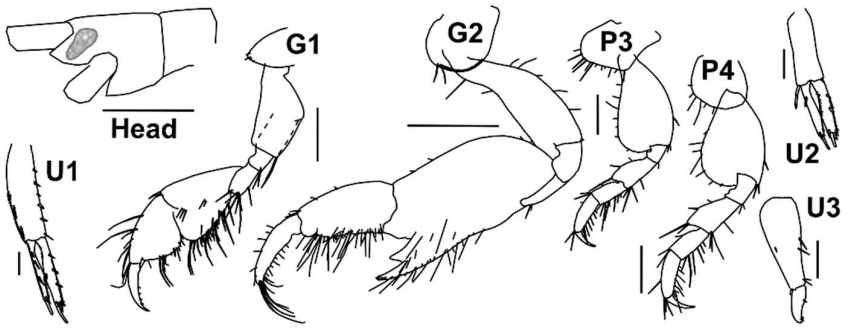

Figure 9. *Ericthonius brasiliensis* (Dana, 1853), male, 4.9 mm, CERBMcr-UV 2005-069, Islote Morro Chiquito, Valle del Cauca. Scale bar: Head, G2 = 0.5 mm; G1, P3-P4 = 0.2 mm; U1-U3 = 0.1 mm.

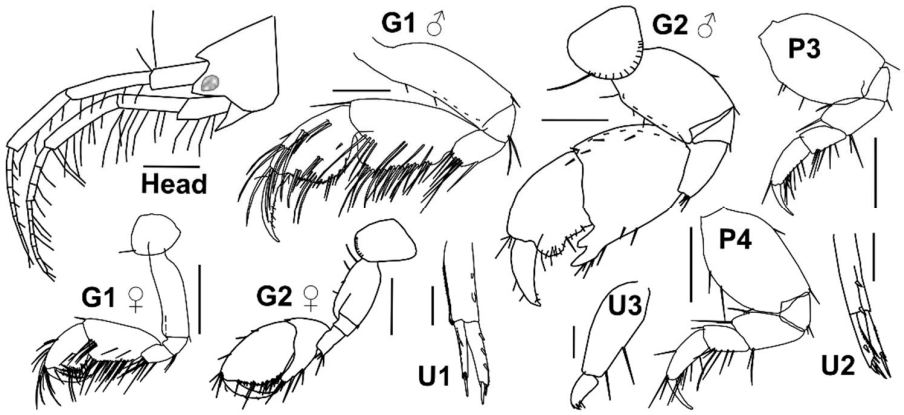

Figure 10. *Ericthonius* sp., male: 2.9 mm, CERBMcr-UV 2005-054, female: 3.2 mm, CERBMcr-UV 2005-076, Islote Morro Chiquito, Valle del Cauca. Scale bar: Head = 0.5 mm; G1♂, U1-U2 = 0.1 mm; G2♂, P3-P4, G1♀-G2♀ = 0.2 mm; U3 = 0.05 mm.

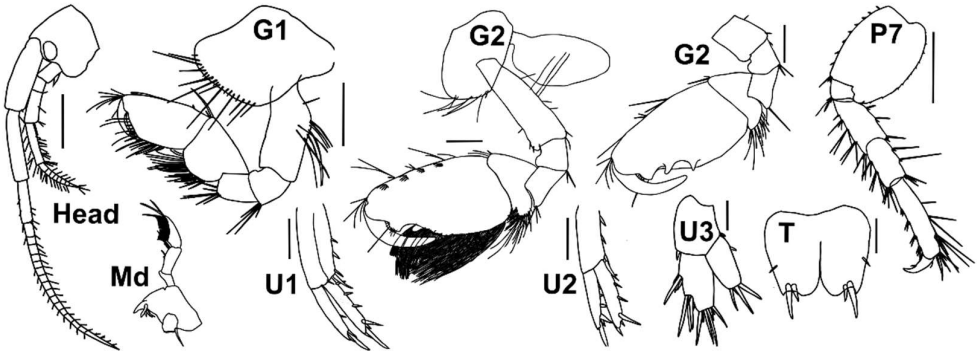

Figure 11. *Elasmopus ocoroni* Barnard, 1979, male, 4.8 mm, CERBMcr-UV 2007-103, Isla Palma, Valle del Cauca. Scale bar: Head, Pereopod 7 = 0.5 mm; G1, G2 (external and internal view), U1-U2 = 0.2 mm; U3 = 0.1 mm; T = 0.05 mm. Md = mandible.

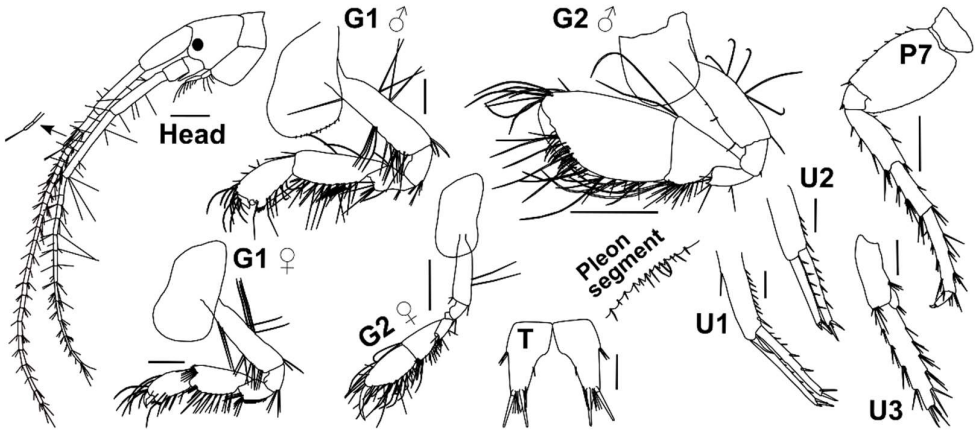

Figure 12. *Melita bousfieldi* García-Madrigal, 2010, male: 6.1 mm, female: 5.3 mm, CERBMcr-UV 2005-068, Islote Morro Chiquito, Valle del Cauca. Scale bar: Head, G2♂, P7, G2♀ = 0.5 mm; G1♂, U1-U3, G1♀ = 0.2 mm; T = 0.1 mm.

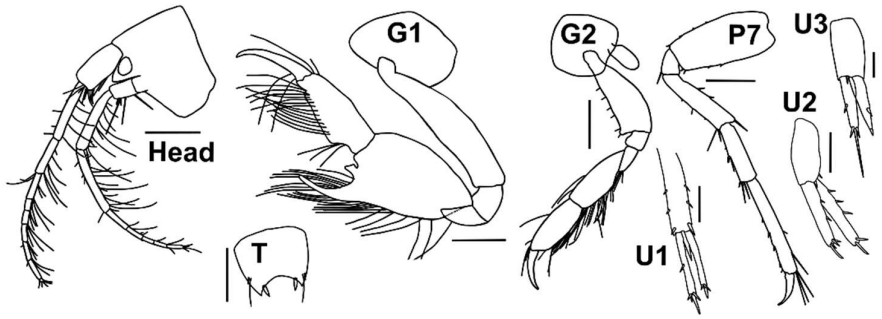

Figure 13. *Neomegamphopus heardi* Barnard & Thomas, 1987, male, 3.0 mm, CERBMcr-UV 2005-071, Islote Morro Chiqutio, Valle del Cauca. Scale bar: Head, G1-G2, P7 = 0.2 mm; U1-U2 = 0.1 mm; U3, T = 0.05 mm.

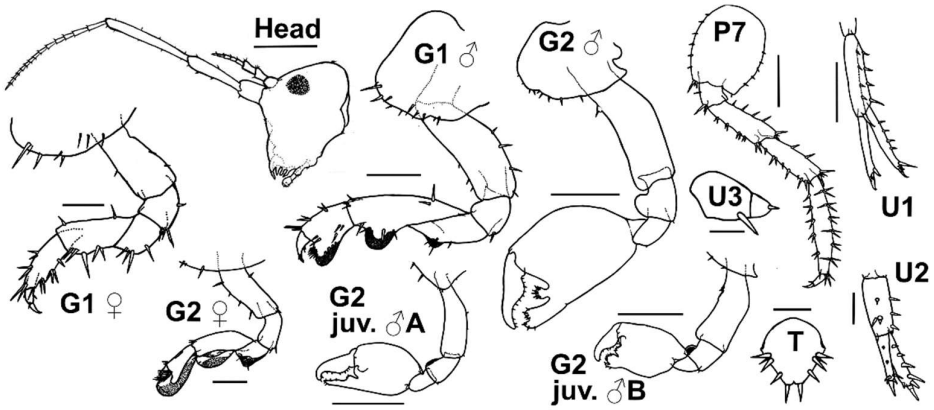

Figure 14. *Chelorchestia colombiensis* Valencia & Giraldo, 2009, male 8.6 mm, CERBMcr-UV 2007-085, female, 4.5 mm, CERBMcr-UV 2006-110, juvenile, 2.4 mm, CERBMcr-UV 2006-109, juvenile, 4.7 mm, CERBMcr-UV 2006-110, Isla Palma, Valle del Cauca. Scale bar: Head = 1.0 mm; G1♂, U2-U3, T, G1♀- G2♀ = 0.2 mm; G2♂, P7, U1, G2 juvenile ♂A (2.4 mm), G2 juvenile ♂B (4.7 mm) = 0.5 mm.

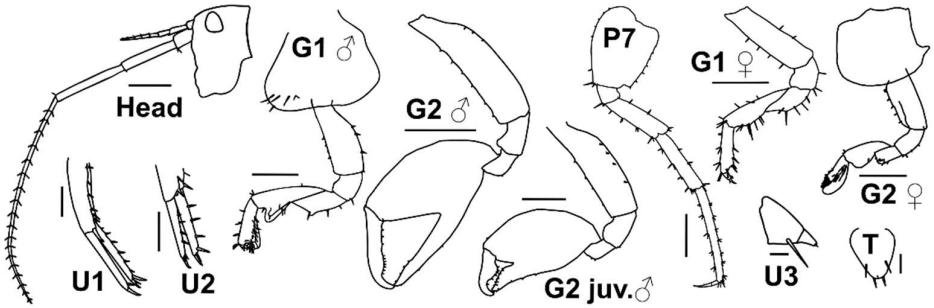

Figure 15. *Chelorchestia* sp., male, 14.0 mm, CERBMcr-UV 2007-062, female, 12.4 mm, CERBMcr-UV 2007-125, juvenile, 11.4 mm, CERBMcr-UV 2007-125, Isla Cangrejo, Valle del Cauca. Scale bar: Head, G2♂, P7 = 1.0 mm; G1♂, U1-U2, G1♀- G2♀, G2 juvenile ♂ = 0.5 mm; U3 = 0.1 mm; T = 0.2 mm.

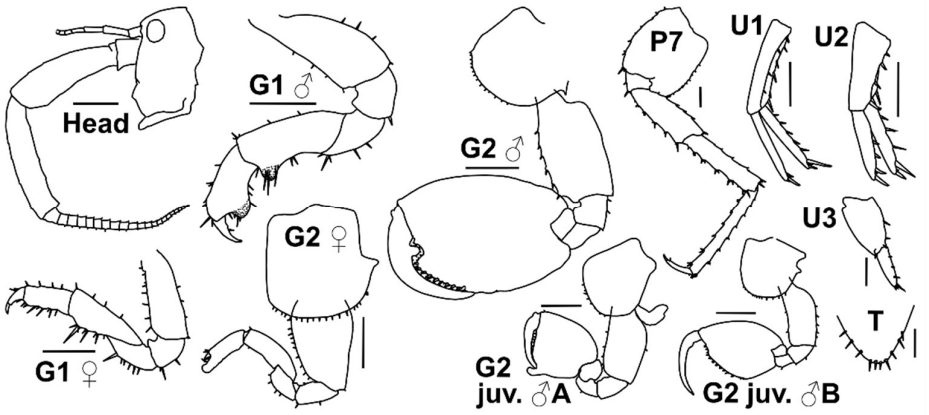

Figure 16. *Cocorchestia fritzi* (Stebbing, 1903), male, 14.2 mm, CERBMcr-UV 2008-178, Piangüita, female, 12.0 mm, CERBMcr-UV 2011-022, San Pedro, juvenile, 7.5 mm, CERBMcr-UV 2008-184, Playa Chucheros, juvenile, 9.4 mm, CERBMcr-UV 2008-184, Playa Chucheros, Valle del Cauca. Scale bar: Head = 1.0 mm; G1♂- G2♂, P7, U1-U2, G1♀- G2♀; G2 juvenile ♂B (9.4 mm) = 0.5 mm; U3, T, G2 juvenile ♂A (7.5 mm) = 0.2 mm.

SUPPLEMENTARY MATERIAL

Tabla S1. List of benthic amphipods registered in the Pacific coast of Colombia. Classification is based on the World Register of Marine Species (WoRMS, http://www.marinespecies.org/)

Species	Reported by	Department	Locality	Depth
Suborder Amphilochidea				
Family Ampeliscidae				
Ampelisca agassizi (Judd, 1896)	Barnard (1954) [a]	Chocó	Off Port Utria	80 m
	Barnard (1954) [a]	Chocó	Octavia Bay	60 - 70 m
	Barnard (1954) [a]	Chocó	Off Octavia Rocks	90 m
Ampelisca brevisimulata Barnard, 1954	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
Ampelisca cristata Holmes, 1908	Barnard (1954) [b]	Cauca	Off Gorgona Island	Shore
	Barnard (1967a)	Chocó	Off Port Utria	70 m
Ampelisca cristoides Barnard, 1954	Barnard (1954)	Cauca	Off Gorgona Island	40 m
	Barnard (1954)	Chocó	Port Utria	30 - 60 m
	Barnard (1967a)	Cauca	Off Gorgona Island	20 m
	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
Ampelisca lobata Holmes, 1908	Barnard (1954)	Chocó	Off Port Utria	40 m
	Barnard (1954)	Chocó	Octavia Bay	Shore
Ampelisca mexicana Barnard, 1954	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
Ampelisca pugetica Stimpson, 1864	Barnard (1954) [c]	Chocó	Octavia Bay	4 m
Ampelisca schellenbergi Shoemaker, 1933	Barnard (1967a)	Cauca	Off Gorgona Island	20 - 40 m

Tabla S1. Continued.

Species	Reported by	Department	Locality	Depth
Family Amphilochidae				
Hourstonius baciroa (Barnard, 1979)	This study	Valle del Cauca	Islote Morro chiquito	3 - 5 m
Family Cyphocarididae				
Cyphocaris richardi Chevreux, 1905	Barnard (1961)		Off Colombian Pacific	3270 - 3670 m
Family Eusiridae				
Rhachotropis sp.	Barnard (1961)		Off Colombian Pacific	3270 - 3670 m
Family Haustoriidae				
Acanthohaustorius sp.	Dexter (1974)	Valle del Cauca	Juanchaco	Intertidal
	Riascos (2002)	Valle del Cauca	Playa Chucheros	Intertidal
Family Leucothoidae				
Leucothoe alata Barnard, 1959	This study	Valle del Cauca	Islote Morro chiquito	3 - 5 m
Family Oedicerotidae				
Monoculodes (sens. str.) sp.	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
Family Phoxocephalidae				
Eyakia calcarata (Gurjanova, 1938)	Barnard and Barnard (1981)	Cauca	Off Gorgona Island	20 m
Foxiphalus obtusidens (Alderman, 1936)	Barnard (1960) [d]	Unknown	Unknown	Unknown

Tabla S1. Continued.

Species	Reported by	Department	Locality	Depth
Family Platyischnopidae				
Tiburonella viscana (Barnard, 1964)	Thomas and Barnard (1983)	Chocó	Port Utria	40 m
Family Synopiidae				
Syrrhoe oluta Barnard, 1972	Barnard (1972)		Off Colombian Pacific	2798 - 3251 m
cf. *Syrrhoe* sp.	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
Syrrhoites cu Barnard, 1972	Barnard (1972)		Off Colombian Pacific	3023 - 3251 m
Suborder Senticaudata				
Family Ampithoidae				
Ampithoe ramondi Audouin, 1826	This study	Valle del Cauca	Islote Morro chiquito	3 - 5 m
Family Aoridae				
Grandidierella sp.	This study	Valle del Cauca	Isla Palma	Intertidal
Microdeutopus sp.	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
Family Corophiidae				
Americorophium sp.	This study	Valle del Cauca	El Cangrejal	Intertidal
	This study	Valle del Cauca	Piangüita	Intertidal
	This study	Valle del Cauca	Playa Chucheros	Intertidal

Tabla S1. Continued.

Species	Reported by	Department	Locality	Depth
		Valle del		
Leptocheirus rhizophorae Ortiz & Lalana, 1980	This study	Cauca	El Cangrejal	Intertidal
Corophium (sens. str.) sp.	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
Family Hyalidae				
Hyachelia tortugae Barnard, 1967	Valencia et al. (2018)	Cauca	Gorgona Island	-
		Valle del		
Parhyale fascigera Stebbing, 1897	This study	Cauca	Isla Palma	Intertidal
		Valle del		
Parhyale hawaiensis (Dana, 1853)	This study	Cauca	El Cangrejal	Intertidal
		Valle del		
	This study	Cauca	Piangüita	Intertidal
		Valle del		
	This study	Cauca	Isla Palma	Intertidal
Family Ischyroceridae				
Cerapus sp.	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
		Valle del		
Ericthonius brasiliensis (Dana, 1853)	This study	Cauca	Islote Morro chiquito	3 - 5 m
Ericthonius spp.	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
		Valle del		
	This study	Cauca	Islote Morro chiquito	3 - 5 m
Family Maeridae				
			Off Colombian	3270 - 3670
Bathyceradocus stephenseni Pirlot, 1934	Barnard (1961)		Pacific	m
		Valle del		
Elasmopus ocoroni Barnard, 1979	This study	Cauca	Isla Palma	Intertidal

Tabla S1. Continued.

Species	Reported by	Department	Locality	Depth
Family Melitidae				
Melita bousfieldi	This study	Valle del Cauca	Islote Morro chiquito	3 - 5 m
Family Neomegamphopidae				
Neomegamphopus heardi Barnard & Thomas, 1987	This study	Valle del Cauca	Islote Morro chiquito	3 - 5 m
Neomegamphopus sp.	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
Family Photidae				
Photis spp.	Valencia et al. (2014)	Cauca	Gorgona Island	10 m
Family Talitridae *				
Chelorchestia colombiensis Valencia & Giraldo (2009)	Valencia and Giraldo (2009)	Valle del Cauca	Isla Palma	Supralittoral
	This study	Valle del Cauca	Piangüita	Supralittoral
	This study	Valle del Cauca	Playa Chucheros	Supralittoral
Chelorchestia sp.	Cobo-Viveros and Cantera-Kintz (2015)	Valle del Cauca	El Cangrejal	Supralittoral
Cocorchestia fritzi (Stebbing, 1903)	This study	Valle del Cauca	Playa Chucheros	Supralittoral
	This study	Valle del Cauca	San Pedro	Supralittoral
	This study	Valle del Cauca	Piangüita	Supralittoral

Tabla S1. Continued.

Species	Reported by	Department	Locality	Depth
Family Unciolidae				
Acuminodeutopus periculosus Barnard, 1969	Valencia et al. (2014)	Cauca	Gorgona Island	10 m

* *Talitrus* sp. was reported in the sandy beaches of Bahía Buenaventura and Bahía Málaga (Cantera et al. 1998, Herrera 2002). According to Lowry and Myers (2019), the genera *Talitrus* is distributed only in Europe and therefore, the reports of this genera in the Colombian Pacific likely corresponds to *Cocorchestia fritzi*.

[a] Reported as *Ampelisca vera*
[b] Reported as *Ampelisca cristata* f. *microdentata*
[c] Reported as *Ampelisca pugetica* f. *macrodentata*
[d] Reported as *Paraphoxus obtusidens*

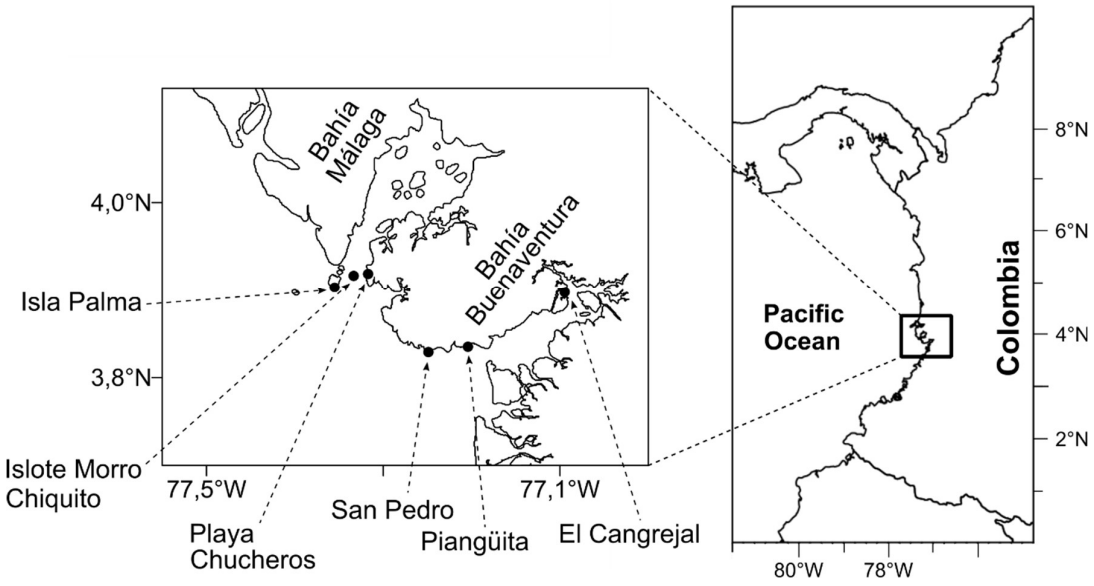

Figure S1. Location of sampling sites in Bahía Buenaventura and Bahía Málaga, Pacific coast of Colombia.

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