

NEW RECORDS FOR PORCELLANID CRABS (CRUSTACEA: DECAPODA: ANOMURA: PORCELLANIDAE) IN THE WEST INDIAN ISLANDS, WITH DIAGNOSTIC CHARACTERS AND ECOLOGICAL NOTES

Novos registros para caranguejos porcelanídeos (Crustacea: Decapoda: Anomura: Porcellanidae) nas ilhas das Índias ocidentais, com caracteres diagnósticos e dados ecológicos

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ABSTRACT

New records and extensions of the distribution range of seven species of porcellanid crabs, representing four genera, are reported in the West Indian Islands: *Megalobrachium mortensenii*, *M. poeyi*, *M. roseum*, *Pachycheles ackleianus*, *P. riisei*, *Petrolisthes rosariensis* and *Porcellana sayana*. The analyzed species are deposited in the National Museum of Natural History, Smithsonian Institution, and the American Museum of Natural History. It is provided new records from Bahamas, Jamaica, Haiti, Dominican Republic, Puerto Rico, Antigua and Barbuda, St. Vincent and The Grenadines and Trinidad and Tobago. Diagnostic characters and ecological notes are given for each species.

Keywords: Biodiversity, Caribbean islands, range extension, porcelain crabs, west Indies.

RESUMO

Novos registros e aumento de distribuição de sete espécies de caranguejos porcelana, representando quatro gêneros, são registrados para as ilhas das Índias ocidentais: *Megalobrachium mortensenii*, *M. poeyi*, *M. roseum*, *Pachycheles ackleianus*, *P. riisei*, *Petrolisthes rosariensis* e *Porcellana sayana*. As espécies analizadas estão depositadas no National Museum of Natural

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History, Smithsonian Institution, e American Museum of Natural History. São fornecidos novos registros para Bahamas, Jamaica, Haiti, República Dominicana, Porto Rico, Antígua e Barbuda, São Vicente e Granadinas e Trindade e Tobago. Caracteres diagnósticos e dados ecológicos são dados para cada espécie.

Palavras-chave: Biodiversidade, ilhas do Caribe, aumento de distribuição, caranguejos porcelana, Índias ocidentais.

INTRODUCTION

Porcelain crabs occur worldwide in intertidal and sublittoral zones of tropical and subtropical regions. Most of them are free-living but few species live as commensals of other crustaceans, gastropods, polychaetes and echinoderms (Haig, 1960; Gore, 1982; Harvey, 1999; Hernández, 1999; Rodríguez *et al.*, 2005; Hiller *et al.*, 2006; Ferreira & Melo, 2016). From 30 genera and 277 species known worldwide (Osawa & McLaughlin, 2010), 11 genera and 40 species are recorded for the West Indies (including the Greater Antilles, the Lesser Antilles and the Lucayan Archipelago). Seven species are recorded herein from additional localities and constitute new records for Bahamas, Jamaica, Haiti, Dominican Republic, Puerto Rico, Antigua and Barbuda, St. Vincent and The Grenadines and Trinidad and Tobago.

MATERIAL AND METHODS

Material studied is deposited in the collections of the National Museum of Natural History, Smithsonian Institution, Washington D.C. (USNM), and American Museum of Natural History, New York (AMNH). For each species (listed alphabetically), collection data, diagnostic characters and a list of previous records are given. Distributional previous records are given by Rodríguez *et al.* (2005), Ferreira (2009), Poupin & Lemaitre (2014), Ferreira & Melo (2016) and Ferreira & Tavares (2017). Ecology, taxonomic information and additional collection data were gathered and interpreted under the subheading "Remarks".

Species recorded for the West Indies are listed in Table I.

Abbreviations used include: P1, cheliped (pereopod 1); P2-P4, pereopods 2-4; Sta, Station.

Table I – List of porcelain crabs recorded for the West Indies

Species	Reference
1. <i>Clastotoechus nodosus</i> (Streets, 1872)	Rodríguez <i>et al.</i> , 2005; Diez & Lira, 2017
2. <i>Madarateuchus vanderhorsti</i> (Schmitt, 1924)	Rodríguez <i>et al.</i> , 2005; Diez & Lira, 2017
3. <i>Megalobrachium mortenseni</i> Haig, 1962	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014; Ferreira & Melo, 2016
4. <i>Megalobrachium poeyi</i> (Guérin-Méneville, 1855)	Rodríguez <i>et al.</i> , 2005; Diez & Lira, 2017
5. <i>Megalobrachium roseum</i> (Rathbun, 1900)	Rodríguez <i>et al.</i> , 2005; Diez & Lira, 2017
6. <i>Megalobrachium soriatum</i> (Say, 1818)	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014; Ferreira & Melo, 2016
7. <i>Minyocerus angustus</i> (Dana, 1852)	Rodríguez <i>et al.</i> , 2005; Ferreira & Melo, 2016
8. <i>Neopisosoma angustifrons</i> (Benedict, 1901)	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014; Diez & Lira, 2017
9. <i>Neopisosoma curacaoense</i> (Schmitt, 1924)	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014; Diez & Lira, 2017
10. <i>Neopisosoma neglectum</i> Werding, 1986	Rodríguez <i>et al.</i> , 2005

(continuation of Table I)

Species	Reference
11. <i>Neopisosoma orientale</i> Werding, 1986	Rodríguez <i>et al.</i> , 2005
12. <i>Pachycheles ackleianus</i> A. Milne Edwards, 1880	Rodríguez <i>et al.</i> , 2005; Lira <i>et al.</i> , 2007; Ferreira & Melo, 2016; Diez & Lira, 2017
13. <i>Pachycheles chacei</i> Haig, 1956	Rodríguez <i>et al.</i> , 2005
14. <i>Pachycheles monilifer</i> (Dana, 1852)	Rodríguez <i>et al.</i> , 2005; Ferreira & Melo, 2016
15. <i>Pachycheles pilosus</i> (H. Milne Edwards, 1837)	Rodríguez <i>et al.</i> , 2005; Lira <i>et al.</i> , 2007; Poupin & Lemaitre, 2014; Diez & Lira, 2017
16. <i>Pachycheles riisei</i> (Stimpson, 1859)	Rodríguez <i>et al.</i> , 2005; Ferreira & Melo, 2016
17. <i>Pachycheles rugimanus</i> A. Milne Edwards, 1880	Rodríguez <i>et al.</i> , 2005; Ferreira & Melo, 2016; Diez & Lira, 2017
18. <i>Pachycheles serratus</i> (Benedict, 1901)	Rodríguez <i>et al.</i> , 2005
19. <i>Pachycheles susanae</i> Gore & Abele, 1974	Rodríguez <i>et al.</i> , 2005
20. <i>Parapetrolisthes tortugensis</i> (Glassell, 1945)	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014; Diez & Lira, 2017
21. <i>Petrolisthes amoenus</i> (Guérin-Méneville, 1855)	Rodríguez <i>et al.</i> , 2005; Lira <i>et al.</i> , 2012; Poupin & Lemaitre, 2014; Ferreira & Melo, 2016; Diez & Lira, 2017; Ferreira & Tavares, 2017
22. <i>Petrolisthes armatus</i> (Gibbes, 1850)	Rodríguez <i>et al.</i> , 2005; Lira <i>et al.</i> , 2012; Poupin & Lemaitre, 2014; Ferreira & Melo, 2016; Diez & Lira, 2017
23. <i>Petrolisthes caribensis</i> Werding, 1983	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014
24. <i>Petrolisthes columbiensis</i> Werding, 1983	Rodríguez <i>et al.</i> , 2005; Diez & Lira, 2017
25. <i>Petrolisthes dissimulatus</i> Gore, 1983	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014; Diez & Lira, 2017
26. <i>Petrolisthes galathinus</i> (Bosc, 1802)	Rodríguez <i>et al.</i> , 2005; Lira <i>et al.</i> , 2012; Poupin & Lemaitre, 2014; Ferreira & Melo, 2016; Diez & Lira, 2017
27. <i>Petrolisthes gertrudae</i> Werding, 1996	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014
28. <i>Petrolisthes hispaniolensis</i> Werding & Hiller, 2005	Poupin & Lemaitre, 2014
29. <i>Petrolisthes jugosus</i> Streets, 1872	Rodríguez <i>et al.</i> , 2005; Lira <i>et al.</i> , 2012; Poupin & Lemaitre, 2014; Diez & Lira, 2017
30. <i>Petrolisthes magdalenensis</i> Werding, 1978	Rodríguez <i>et al.</i> , 2005
31. <i>Petrolisthes marginatus</i> Stimpson, 1859	Rodríguez <i>et al.</i> , 2005; Ferreira & Melo, 2016; Diez & Lira, 2017; Ferreira & Melo, 2017
32. <i>Petrolisthes politus</i> (Gray, 1831)	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014; Diez & Lira, 2017
33. <i>Petrolisthes quadratus</i> Benedict, 1901	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014; Diez & Lira, 2017
34. <i>Petrolisthes rosariensis</i> Werding, 1978	Poupin & Lemaitre, 2014
35. <i>Petrolisthes tonsorius</i> Haig, 1960	Rodríguez <i>et al.</i> , 2005; Diez & Lira, 2017
36. <i>Petrolisthes tridentatus</i> Stimpson, 1895	Rodríguez <i>et al.</i> , 2005; Diez & Lira, 2017
37. <i>Pisidia brasiliensis</i> (Haig in Rodrigues da Costa, 1968)	Rodríguez <i>et al.</i> , 2005; Ferreira & Melo, 2016
38. <i>Polyonyx gibbesi</i> Haig, 1956	Rodríguez <i>et al.</i> , 2005; Ferreira & Melo, 2016; Diez & Lira, 2017
39. <i>Porcellana sayana</i> (Leach, 1820)	Rodríguez <i>et al.</i> , 2005; Lira <i>et al.</i> , 2012; Poupin & Lemaitre, 2014; Ferreira & Melo, 2016; Diez & Lira, 2017
40. <i>Porcellana sigsbeiana</i> A. Milne Edwards, 1880	Rodríguez <i>et al.</i> , 2005; Poupin & Lemaitre, 2014; Ferreira & Melo, 2016; Diez & Lira, 2017

RESULTS AND DISCUSSION

Family Porcellanidae Haworth, 1825

Megalobrachium Stimpson, 1858

Megalobrachium mortensenii Haig, 1962

(Figure 1)

Megalobrachium mortenseni Haig, 1962: 189, figures 2-5.

Material examined. Puerto Rico, Begueron Bay, "R/V Fish Hawk", 1 male (USNM 275881).

Diagnostic characters. Carapace subcircular; quite eroded, rugose dorsally, slightly pubescent; frontal region remarkable depressed, granulate, with median longitudinal furrow separating two shallow mounds, slightly convex on dorsal view, trilobate on frontal view; carapace lateral margin well defined by crenulate carina extending posteriorly from epibranchial region to mesobranchial margin; carapace posterolateral surface with prominent, transverse, subparallel ridges extending laterally to meso and metabranchial margins. P1 equal, moderate robust, with scattered setae, eroded dorsally, with rugae and flattened granules ventrally; carpus mesial lobe subtriangular on proximal third, four dorsoaxial, subparallel carinas; palm with three dorsoaxial, subparallel carinas. Walking legs flattened laterally, slender, granulate, fringed with scattered, long plumose setae; P2-P4 propodi with 5 movable, corneous spines ventrally (3 medially aligned, 2 on distal corner near articulation with dactylus); P2-P4 dactyli with longitudinal row of 4 spines ventrally. Pleon subrectangular in males and females. Male gonopods well-developed. Telson subdivided into 7 plates.

Distribution. Western Atlantic: Puerto Rico, Begueron Bay; Virgin Islands, St. John; Guadeloupe, Cochons Island; Honduras, Roatán, Bay Islands; Costa Rica, Limón; Panama, Bocas del Toro and Limón Bay; Colombia, Santa Marta, Gulf of Morrosquillo and Rosario Islands; Venezuela, Margarita Island; and Brazil (from Pará to São Paulo).

Remarks. Found on coastal region down to depths of 30 m, usually on rocky substrates (Veloso & Melo, 1993), on gravel, sand and wood bottoms (Almeida *et al.*, 2010; Coelho *et al.*, 1983). Previously occurring in the Virgin Islands, St. John and Guadeloupe, it is presented herein a new northern record (Puerto Rico).

***Megalobrachium poeyi* (Guérin-Menéville, 1855)**
(Figure 2)

Porcellana poeyi Guérin-Menéville, 1855: xvi, plate 2, figure 4.

Megalobrachium granuliferum Stimpson, 1858: 228.

Megalobrachium poeyi - Benedict, 1901: 136, plate 3, figure 8

Material examined. Bahamas, Abaco, "R/V Albatross", 1886, 2 males, 2 females (USNM 23066). Jamaica, "R/V Albatross" 1-11 March 1884, 2 males, 1 ovigerous female (USNM 23018); 1 male (USNM 17235). Haiti, Cap Haitien, next to Oames Point, shore, W. L. Schmitt coll., 22 March 1937, 2 females (USNM 275876). Puerto Rico, San Juan Island, San Geronimo, shore, W. L. Schmitt coll., 27 March 1937, 1 male, 1 female, 1 ovigerous female (USNM 1253600). Trinidad and Tobago, Tobago, Sandy Bay, B. Werding coll., 07 April 1992, 1 male (USNM 268871).

Diagnostic characters. Carapace subcircular, rugose, granulate dorsally, quite pubescent; frontal region depressed, granulate, trilobate on dorsal and frontal views; carapace lateral margin poorly defined by longitudinal row of scattered granules extending posteriorly from epibranchial angle to mesobranchial margin; carapace posterolateral

surface with pilose ridges. P1 equal, robust, pubescent, especially on lateral margin, granular dorsally; carpus with conspicuous granules mesially; palm fringed with long, plumose setae laterally. Walking legs slender, rugose, fringed with dense, long plumose setae; P2-P4 propodi with 4 movable, corneous spines ventrally (3 medially aligned, 2 on distal corner near articulation with dactylus); P2-P4 with longitudinal row of 4 to 5 spines ventrally. Pleon subrectangular in males and females. Male gonopods well-developed. Telson subdivided into 7 plates.

Distribution. Western Atlantic: United States, eastern Florida; Mexico, Quintana Roo; Bahamas, Abaco; Jamaica; Haiti, Cap Haitien; Puerto Rico, San Juan Island; Guadeloupe, Rat and Cochens Islands; Barbados, Carlinle Bay; Trinidad and Tobago, Tobago; Costa Rica, Limón; Panama, Galeta Island, Limón Bay, Bocas del Toro and Caledonia Bay; continental coast of Colombia, Old Providence Island; Venezuela, Tortuga Islands, Coche, Margarita and Cubagua.

Remarks. According to Werding (1984), the species is found on rocks and dead corals (shallow and protected areas). It is recorded from the intertidal down to depths of 46 m (Gore & Abele, 1976; Gore, 1982). This species is additionally recorded from new Caribbean localities (Bahamas, Jamaica, Haiti, Puerto Rico and Trinidad and Tobago).

***Megalobrachium roseum* (Rathbun, 1900)**

(Figure 3)

Porcellana rosea Rathbun, 1900: 148, plate 8, figure 3.

Porcellanopsis rosea - Haig, 1956: 34; Coelho, 1963/64: 59.

Megalobrachium roseum - Haig, 1960: 225, 227.

Material examined. Trinidad and Tobago, Tobago, Sandy Bay, B. Werding coll., 07 April 1992, 3 females (USNM 268872); B. Werding coll., 07 April 1992, 1 female (USNM 268882).

Diagnostic characters. Carapace subtriangular, granulate dorsally, slightly pubescent; frontal region depressed, granular, subtriangular on dorsal view, tridentate on frontal view; carapace lateral margin quite defined by crenulate carina extending posteriorly from epibranchial angle to metabranchial margin; carapace posterolateral surface wrinkled. P1 equal, robust, eroded dorsally, with flattened, well developed granules ventrally; carpus mesial lobe subtriangular; palm with three dorsoaxial, subparallel carinas. Walking legs short, robust, granulate dorsally, fringed with scattered, long plumose setae; P2-P4 propodi with 3 movable, corneous spines ventrally (1 median, 2 on distal corner near articulation with dactylus); P2-P4 dactyli with longitudinal row of 4 spines ventrally. Pleon subtriangular in males, subrectangular in females. Male gonopods well-developed. Telson subdivided into 7 plates.

Distribution. Western Atlantic: Trinidad and Tobago, Tobago; Costa Rica, Limón; Panama, Bocas del Toro; Martinique; Colombia, Santa Marta, Gulf of Morrosquillo; Venezuela, Margarita Islands and Cubagua, La Restinga Lagoon; Suriname; and from Maranhão to São Paulo and Santa Catarina, Brazil.

Remarks. It is a species that occurs from the intertidal down to 5 m depth, on coral reefs and under rocks (Veloso & Melo, 1993). Additionally, this species can be found associated with bryozoans, polychaetes and sponges. Previously only with records for Martinique (Rodríguez *et al.*, 2005; Poupin & Lemaitre, 2014), this is an additional record of the species for the Caribbean Islands (Trinidad and Tobago).

Pachycheles Stimpson, 1858

Pachycheles ackleianus A. Milne-Edwards, 1880

(Figure 4)

Pachycheles ackleianus A. Milne-Edwards, 1880: 36.

Pisosoma angustifrons - Boone, 1930: 70, plate 18 [non *Pisosoma angustifrons* Benedict].

Material examined. Bahamas, Bimini Islands, Sta. 6, Sample 6, 1 male (AMNH 12866). St. Vincent and The Grenadines, Baradel, Tobago Keys, west side, Nicholson coll., 17 April 1956, 3 males, 2 ovigerous females (USNM 275708); Mustique, reef along shore near anchorage, E. Haingot coll., 19 April 1956, 3 males, 1 female (USNM 275709). Trinidad and Tobago, Tobago, Goat Island, R. Heard coll., 14 June 1993, 1 male, 1 ovigerous female (USNM 268873); Pigeon Point, East of, T. E Bowman coll., 10 April 1959, 1 female (USNM 275706).

Diagnostic characters. Carapace subcircular, distinctly broader than long in males and females, rugose dorsally; frontal region distinctly depressed, nearly straight in dorsal view, trilobate in frontal view; carapace lateral margin poorly-defined, rugose; carapace posterolateral surface with pilose rugae. P1 subequal, robust, covered with flattened tubercles; carpus with 3 tooth-shaped tubercles mesially. Walking legs robust, rugose, fringed with scattered, long setae; P2-P4 propodi with 4 spines on ventral surface (2 medially aligned, 2 on distal corner near articulation with dactylus); P2-P4 with longitudinal row of 3 well-developed spines ventrally. Pleon subrectangular in males and females. Male gonopods absent. Telson subdivided into 5 plates.

Distribution. Western Atlantic: Florida, USA; north of Gulf of Mexico; Mulatas Archipelago and Canal Zone; Bahamas; Cuba; Jamaica; Dominican Republic; St. Thomas; Antigua; Martinique; St. Lucia; St. Vincent and The Grenadines; Barbados; Trinidad and Tobago, Tobago; Panama; Colombia, Cabo de La Vela and Santa Marta; Venezuela, Los Roques, Margarita and Los Testigos Islands; Guyanas, and Brazil, from Pará to Rio de Janeiro.

Remarks. Some gaps in the knowledge from Caribbean Islands are filled (Bahamas, St. Vincent and The Grenadines and Trinidad and Tobago). The species can be found associated with sponges (Werding, 1977), down to depths of 82 m (Gore, 1974).

Pachycheles riisei (Stimpson, 1858)

(Figure 5)

Pisosoma riisei Stimpson, 1858: 228 [nomen nudum]; 1859: 75.

Pachycheles riisei - Haig, 1956: 12.

Material examined. Dominican Republic, Santo Domingo, J. C. Armstrong coll., 30 June 1933, 1 female (AMNH 8489); J. C. Armstrong coll., 8 July 1933, 1 male (AMNH 8850); North of sand pit, J. C. Armstrong coll., 20 July 1933, 1 ovigerous female (AMNH 8848). Antigua and Barbuda, Antigua, English Harbor, Charlotte Point, Schmitt *et al.* coll., 02 April 1956, 1 female (USNM 275760). St. Vincent and The Grenadines, The Grenadines, Carriacou Island, Tyrrell Bay, sand flat inside reef, D. V. Nicholson coll., 16 March 1956, 1 male (USNM 275761).

Diagnostic characters. Carapace subcircular, slightly rugose dorsally; frontal region poorly depressed, distinctly granular, double, sinuous in dorsal view, trilobate in frontal

view, devoid of setae; carapace lateral margin poorly-defined, wrinkled; carapace posterolateral surface with pilose rugae. Branchiostegite split into calcified plates of different sizes: one large anterior, one small posterior, and several much smaller plates. P1 subequal, robust, scattered rugosae dorsally; carpus mesial margin with 1 to 3 lamelliform lobes; carpus and propodus distinctly grooved along lateral margins. Walking legs robust, slightly rugose, fringed with dense, long setae; P2-P4 propodi with 4 spines on ventral surface (2 medially aligned, 2 on distal corner near articulation with dactylus); P2-P4 dactyli with longitudinal row of 5 spines ventrally. Pleon subrectangular in males and females. Male gonopods absent. Telson subdivided into 5 plates.

Distribution. Western Atlantic: United States, Florida; Dominican Republic; Puerto Rico; Virgin Islands, St. Thomas; Antigua and Barbuda; St. Vincent and The Grenadines, The Grenadines; Barbados; Trinidad and Tobago, Tobago; Belize, Carrie Bow Cay; Colombia, Gulf of Darién, Santa Marta, Providencia and Rosario Islands; Venezuela, Margarita and Cubagua Islands; and Brazil (Atol das Rocas, Fernando de Noronha and Trindade Islands, Ceará and from Paraíba to São Paulo).

Remarks. It is found on intertidal region, under rocks, calcareous algae cavities and coral reefs (Veloso, 1998). Some gaps in the knowledge of the geographic distribution from Caribbean Islands (Dominican Republic, Antigua and Barbuda and St. Vincent and The Grenadines) are filled.

Petrolisthes Stimpson, 1858

Petrolisthes rosariensis Werding, 1978

(Figure 6)

Petrolisthes sp I Werding, 1977: 208, figure 26.

Petrolisthes rosariensis Werding, 1978: 214.

Material examined. St. Vincent and The Grenadines, The Grenadines, Carriacou Island, outer edge of exposed reef near, W. L. Schmitt coll., 16 March 1956, 2 males (USNM 270472).

Diagnostic characters. Carapace subcircular, covered with strong, transverse piliferous rugae interrupted at grooves separating regions; frontal region serrate, depressed; subtriangular in dorsal view; outer orbital angle produced into acute spine, small supraorbital spine; carapace lateral margin slightly upturned; two epibranchial spines. P1 equal, robust; carpus mesial margin with 4 to 5 serrate teeth; propodus fringed with plumose setae laterally. Walking legs slender, rugose, fringed with long setae; P2-P4 propodi with 4 to 5 spines on ventral surface (2 to 3 medially aligned, 2 on distal corner near articulation with dactylus); P2-P4 dactyli with longitudinal row of 4 spines ventrally. Pleon subrectangular in males and females. Male gonopods well-developed. Telson subdivided into 7 plates.

Distribution. Western Atlantic: Guadalupe; St. Vincent and The Grenadines, Carricou Island; Trinidad and Tobago, Tobago; Belize, Carrie Bow Cay; Panama, Limón Bay and Bocas del Toro; Colombia, Rosario and Santa Marta Islands; and Brazil (Ceará and from Paraíba to Bahia).

Remarks. The species is found on coral reefs, calcareous algae and under rocks (shallow waters) (Werding, 1982) down to depths of 24 m. The first records of *P. rosariensis* for the Caribbean Islands (Guadalupe and Trinidad and Tobago) are reported by Poupin

& Lemaitre (2014). A gap in the knowledge of the distribution from Caribbean Islands (St. Vincent and The Grenadines) is herein filled.

Porcellana Lamarck, 1801

***Porcellana sayana* (Leach, 1820)**

(Figure 7)

Pisidia sayana Leach, 1820: 54.

Porcellana sayana - White, 1847: 64.

Porcellana frontalis Heller, 1862: 523.

Porcellana stimpsoni A. Milne-Edwards, 1880: 35.

Porcellana robertsoni Henderson, 1888: 111, plate 11, figure 6.

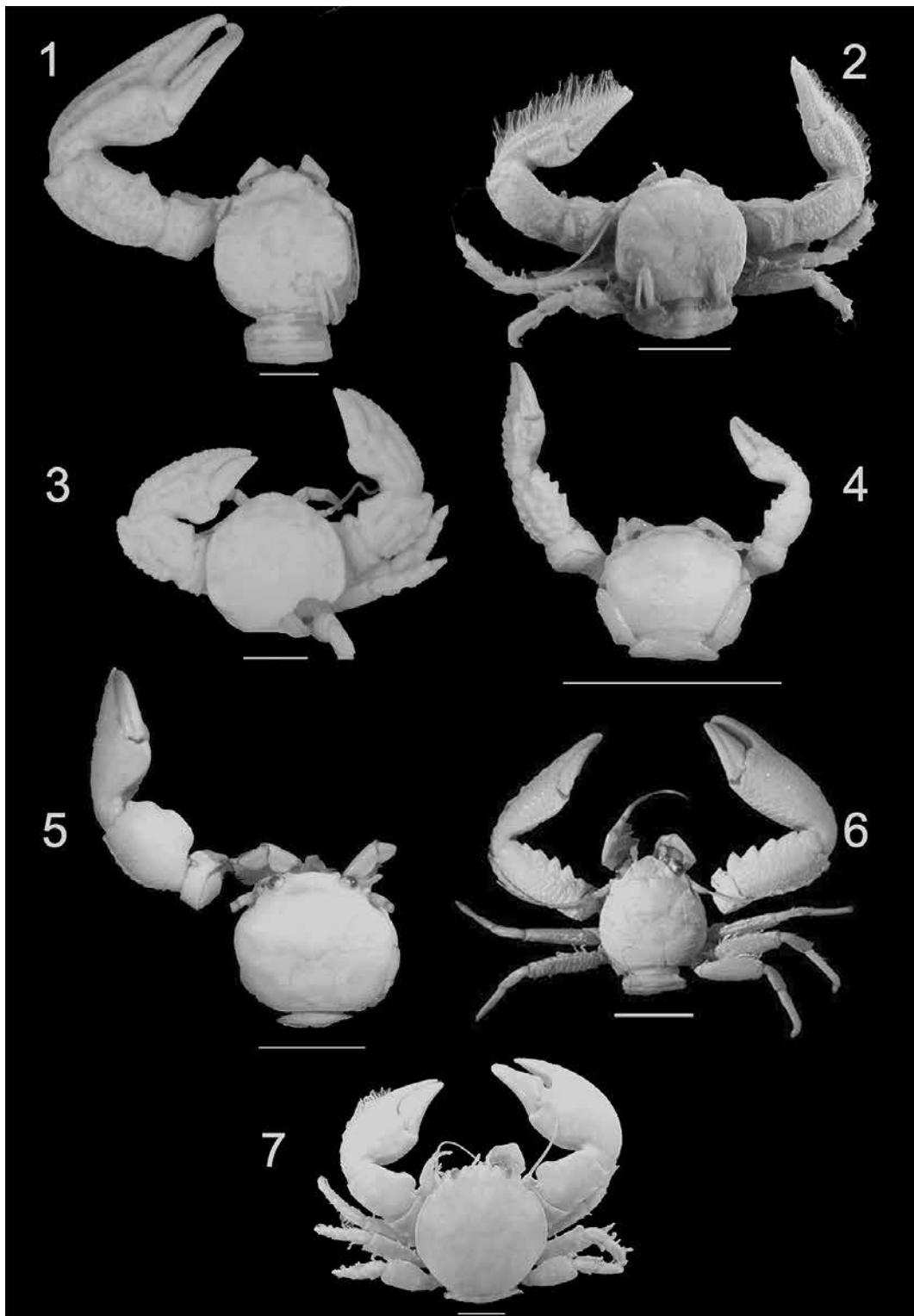
Material examined. Trinidad and Tobago, Trinidad, Chacachacare Island, Rusts Bay, J. M. Stohley coll., 5 July 1970, 1 ovigerous female (USNM 141363).

Diagnostic characters. Carapace subcircular, rugose dorsally; frontal region poorly depressed, tridentate in dorsal view, trilobate in frontal view, devoid of setae; carapace lateral margin poorly-defined, wrinkled; carapace posterolateral surface with pilose rugae. P1 subequal, robust, flattened; carpus mesial margin with prominent, lamelliform lobe; palm broad, fringed with long, dense setae laterally. Walking legs robust, rugose, fringed with dense, long setae; P2-P4 propodi with 3 spines on ventral surface (1 medially, 2 on distal corner near articulation with dactylus); P2-P4 dactyli with longitudinal row of 3 to 4 spines ventrally. Pleon subrectangular in males and females. Male gonopods well-developed. Telson subdivided into 7 plates.

Distribution. Western Atlantic: United States, North Carolina, South Carolina, Georgia, western and eastern Florida, Mississippi, Louisiana and Texas; Mexico, Tamaulipas, Veracruz, Campeche, Yucatán and Quintana Roo; Bahamas; Cuba; Jamaica; Puerto Rico; Virgin Islands; Antigua; Barbados; Trinidad and Tobago, Trinidad; Belize, Twin Cays; Panama, Caledonia Bay; Colombia, Gulf of Morrosquillo, La Guajira, Cabo De La Vela and Providencia, Rosario and Santa Marta Islands; Venezuela, Blanquilla, Los Roques, Margarita, Cubagua and Coche Islands; Guyana; Suriname; French Guyana; Brazil (from Amapá to Rio Grande do Sul); and Uruguay.

Remarks. This species is found on oyster clusters and commensal with paguroids genera *Petrochirus*, *Dardanus*, *Paguristes*, *Pagurus* and gastropod *Strombus gigas* (Veloso, 1999; Ferreira & Melo, 2016). It is also free living on sandy, muddy and seashells bottoms (Veloso, 1999), from the intertidal down to 100 m depth (Scelzo & Varela, 1988). It is presented herein a northern limit of Caribbean Sea (Trinidad and Tobago).

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Figures 1-6. Porcelain crabs in the West Indian islands.

(Figure 1) *Megalobrachium mortensenii* Haig, 1962, male (USNM 275867).

(Figure 2) *Megalobrachium poeyi* (Guérin-Ménéville, 1855), male (USNM 23018).

(Figure 3) *Megalobrachium roseum* (Rathbun, 1900), female (USNM 268872).

(Figure 4) *Pachycheles ackleianus* A. Milne-Edwards, 1880, male (USNM 275708).

(Figure 5) *Pachycheles riisei* (Stimpson, 1858), male (USNM 275761).

(Figure 6) *Petrolisthes rosariensis* Werding, 1978, male (USNM 270474).

Figure 7) *Porcellana sayana* (Leach, 1820), ovigerous female (USNM 141363). Scale bars: 1 mm.

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