

DESIGNATION OF LECTOTYPES FOR THE
SPECIES OF *MUNIDA* (CRUSTACEA: ANOMURA:
GALATHEIDAE) COLLECTED BY THE U.S. COAST
SURVEY STEAMER *BLAKE* (1877–1879) AND THE
DESCRIPTION OF A NEW SPECIES

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Abstract. — Lectotypes of *Munida stimpsoni*, *M. irrasa*, *M. longipes*, *M. miles*, *M. microphthalma* and *M. constricta* A. Milne Edwards are designated. These species were collected by the U.S. Coast Survey Steamer *Blake* during its voyage to the Gulf of Mexico (1877–1878) and the Caribbean Sea (1878–1879). The name *Munida chacei* is proposed for a female specimen of a galatheid decapod from the syntype series of *M. stimpsoni* A. Milne Edwards, 1880, that represents a new species. The specimen, collected by the *Blake* near St. Croix, West Indies, is described and compared to *M. stimpsoni*.

Résumé. — Les lectotypes de *Munida stimpsoni*, *M. irrasa*, *M. longipes*, *M. miles*, *M. microphthalma* et *M. constricta* A. Milne Edwards sont désignés. Ces espèces ont été récoltées par le *Blake* pendant ces voyages au Golfe du Mexique (1877–1878) et à la Mer des Caraïbes (1878–1879). Le nom *Munida chacei* est proposé pour un spécimen femelle de galathéidés auparavant séparé de la série syntypique de *M. stimpsoni*. Le spécimen récolté par le *Blake* dans les proximités de St. Croix, dans les Indes Occidentales, est décrit et comparé avec *M. stimpsoni*.

Working with part of the type material of Galatheidae of the genus *Munida* collected by the U.S. *Blake* during its cruise to the Gulf of Mexico (1877–1878) and the Caribbean Sea (1878–1879) under the supervision of Alexander Agassiz and deposited at the Harvard Museum of Comparative Zoology (MCZ) and the Muséum national d'Histoire naturelle de Paris (MNHN), we verified that the majority of the species, all described by A. Milne Edwards (1880) were represented by syntype series. Exceptions are those described from a single specimen (*M. affinis*, *M. robusta*, *M. iris* and *M. forceps*). Descriptions of the remaining species (*M. stimpsoni*, *M. irrasa*, *M. longipes*, *M. miles*, *M. microphthalma* and *M. constricta*) were based on extensive syntype series, composed of specimens from several sta-

tions. A. Milne Edwards & Bouvier (1897) described each of these species in more detailed fashion on the basis of syntypes from a single specified station. Chace (1942) examined part of this material; however, he did not designate lectotypes. These are selected herein among the syntypes described by A. Milne Edwards & Bouvier. A diagnosis and measurements (mm) are provided for each lectotype.

Chase verified the existence of several other species in the syntype series of *M. stimpsoni* and described some of these. From this series we separated an ovigerous female, with label: "MCZ-11527, Syntype, *Munida stimpsoni* A. Milne Edwards, 1880; 1 ovig. female, *Blake* st. 134, 248 fms., off Saint Croix, 1878–79. Identified as *Munida* sp.n. by Chace." Comparing this specimen

with types of the remaining species from the Western Atlantic, it became clear that it was an undescribed species.

Munida stimpsoni A. Milne Edwards, 1880

Munida Stimpsoni A. Milne Edwards, 1880: 47 (part).—A. Milne Edwards & Bouvier, 1897:48 (part), pl. IV, figs. 2–13 (not fig. 1).

Munida stimpsoni.—Chace, 1942:57, text-fig. 23a, b.

Lectotype.—♂, MCZ 2825, *Blake* st. 143, Saba Bank, 17°30'00"N, 68°43'30"W, 270 m.

Measurements (mm).—Length of carapace + rostrum 12.1; rostrum length 4.4; carapace breadth 6.5; supra-ocular spines length 2.3; cornea diameter 2.5; chelipeds: lacking.

Diagnosis.—Lateral borders of carapace subparallel. Outer orbital spines followed by 3 lateral spines. Gastric area with 6 spines: 1 pair behind supra-oculars, followed by 1 smaller pair; 1 single median spine in line with rostrum, and 1 spine at division with right hepatic area, corresponding area on left side without spine. Anterior branchial areas with 1 spine. One strong post-cervical spine on each side. Cardiac area with median spine. Rostrum projecting horizontally. Supra-ocular spines long, slightly divergent. Eyes with rounded corneas, broader than peduncles. Abdominal tergite 2 with 8 (3-2-3), tergite 3 with 4 (1-2-1), and tergite 4 with 6 (2-2-2) spines on anterior ridge and 1 median posterior spine, forming triangle with 2 anterior submedian spines. Peduncle of antennule with inner spine little larger than outer spine, and with lateral margin with distal spine longer than proximal spine. Segment 2 of peduncle of antenna distally with small outer spinule and 1 inner spine. Third maxilliped with strong spine on ventral margin of merus.

Remarks.—According to Chace (1942) the syntype series of *M. stimpsoni* is composed of several species in addition to *M. stimp-*

soni; these are *M. benedicti* Chace (*Blake* st. 143, 203 and 231); *M. evermanni* Benedict (*Blake* st. 148, 206, 219, and 238); *M. flinti* Benedict (*Blake* st. 36 and 262); *M. miles* A. Milne Edwards (*Blake* st. 148 and 215); *M. striata* Chace (*Blake* st. 128, 134 and 139); and a *Munida* n.sp. (*Blake* st. 134), identified by Chace as a new species and described herein.

The specimen from *Blake* st. 36, *M. flinti*, according to Chace (1942) was used by A. Milne Edwards & Bouvier (1897: pl. IV, fig. 1) to illustrate *M. stimpsoni*.

Munida benedicti, *M. striata* and *M. flinti* are very similar to *M. stimpsoni*. In addition to the differences listed by Chace (1942) between *M. stimpsoni* and *M. flinti*, the distal spines of the second antennal segment in *M. stimpsoni*, are absent or much reduced in *M. flinti*, as indicated by the syntypes of the latter (U.S. National Museum of Natural History, USNM 5778) as well as by the specimens from *Blake* st. 262. In spite of the fact that A. Milne Edwards & Bouvier (1897) compared *M. stimpsoni* with *M. longipes*, there is apparently no close relationship between these two species.

Among the many stations cited by A. Milne Edwards (1880) and A. Milne Edwards & Bouvier (1897), from which the syntype series of *M. stimpsoni* originated, only at stations 23 (off the north coast of Cuba); 128 (off St. Croix); 143 (off Saba Bank); 148 (off St. Kitts); 167, 172 (off Guadeloupe); 184, 186 (off Dominica); and 238 (off Grenadines), were true *M. stimpsoni* obtained (Chace 1942).

Note also that the coordinates furnished by A. Milne Edwards & Bouvier (1897) for *Blake* st. 143 (17°30'N, 69°43'½"W) are not confirmed by the tag which accompanies the specimen (17°30'00"N, 63°43'30"W).

Munida irrasa A. Milne Edwards, 1880

Munida caribaea Stimpson, 1860:246.—A. Milne Edwards & Bouvier, 1897:25, pl. I, figs. 16–20, pl. II, fig. 1.

Munida irrasa A. Milne Edwards, 1880: 49.—Faxon, 1895:73.—Chace, 1942:46.

Munida cariboea A. Milne Edwards, 1880: 49.

Munida caribea.—Türkay, 1968:249.

Lectotype.—♀, MCZ 4714, *Blake* st. 253, off Grenada, 1878–1879, 165 m.

Measurements (mm).—Length of carapace + rostrum 14.1; rostrum length 5.3; carapace breadth 7.8; cornea diameter 2.3; supra-ocular spines length 0.8; right cheliped: length 34.9, length of dactyl and fixed finger 8.2, palm length 8.1, palm height 1.7; left cheliped: lacking.

Diagnosis.—Lateral borders of carapace arcuate. Outer orbital spine followed by 6 lateral spines. Gastric line with 9 spines: 1 large gastric pair behind supra-oculars, 3 spines on left side and 4 on right side. One pair of para-hepatic spines on each side of carapace. Anterior branchial regions with 2 spines. Two post-cervical spines on each side of carapace. Rostrum with tip upturned. Supra-ocular spines short. Eyes with rounded corneas, broader than peduncles. Abdominal tergites without ornament. Peduncle of antennule with inner terminal spine much longer than outer terminal spine. Peduncle of antenna with 2 spines on segment 2, outer distal spine longer. Segment 3 with outer distal denticle and 1 small inner distal spine. Merus of third maxilliped with 3 spines on dorsal margin and 4 or 5 spines on ventral margin. Sternite of third maxilliped with upper margin spinous. Sternites of chelipeds with crenulate margins and strong spine on each antero-lateral angle.

Remarks.—A. Milne Edwards & Bouvier (1897) considered *M. irrasa* a junior synonym of *M. caribaea* Stimpson, 1860. Thus, the syntypes of *M. irrasa* collected by the *Blake*, especially those of st. 253, were utilized by the former authors in a detailed description of *M. caribaea*. Nevertheless, the opinion of Faxon (1895), that *M. caribaea* should be suppressed in favor of *M. irrasa*, because of the destruction of the types of

the former species and the insufficiency of the description of Stimpson (1860), was supported by Benedict (1902) and by Chace (1942). *M. irrasa* is closely related to *M. elfina* Boone, *M. sculpta* Benedict, and *M. simplex* Benedict.

MCZ lot 4714 from *Blake* st. 253 consists of two females, one of these ovigerous. The latter specimen being incomplete, the lectotype selected is the former, non-ovigerous female.

Munida longipes A. Milne Edwards, 1880

Munida longipes A. Milne Edwards, 1880: 50.—A. Milne Edwards & Bouvier, 1897: 44, pl. III, figs. 9–13.—Chace, 1942:47.

Lectotype.—Ovigerous ♀, MNHN Ga 543, *Blake* st. 274, off Barbados, 376 m.

Measurements (mm).—Length of carapace + rostrum 19.4; rostrum length 3.9; carapace breadth 14.6; supra-ocular spines length 4.0; right cheliped (broken): length of merus 23.3, palm length 14.1, palm height 2.2; left cheliped: lacking, length of merus of 1st ambulatory leg 25.6.

Diagnosis.—Lateral borders of carapace arcuate. Outer orbital spine followed by 5 lateral spines. Gastric area with 3 spines: 1 pair of strong spines behind supra-oculars and 1 para-hepatic spine on right side, left side lacking spine. Anterior branchial areas without ornament; posterior branchial areas with 1 spine aligned with post-cervical spine. Cardiac area with 1 central spine above meso-cardiac groove. Posterior margin of carapace with 1 pair of spines. Rostrum short, upturned. Supra-ocular spines strong, divergent, length equal to length of rostrum. Eyes with rounded corneas, broader than peduncles and ciliated. Abdominal tergites 2 and 3 each with 4 spines on anterior margin; tergite 4 with only 1 pair of spines. Peduncle of antennule with inner terminal spine much smaller than outer terminal spine. Peduncle of antenna with 2 small spines on second segment. Third

maxilliped with 1 strong spine on ventral margin. Sternum without ornament, rugose. Ambulatory legs characteristically long, length equal to length of cheliped.

Remarks.—Chace (1942) synonymized *Munida paynei* Boone with *M. longipes*. Although Boone (1927) had listed several differences between the two species, Chace concluded that *M. paynei* is within the gradient of variation of *M. longipes*.

Munida miles A. Milne Edwards, 1880

Munida miles A. Milne Edwards, 1880:51 (part).—A. Milne Edwards & Bouvier, 1897:35 (part).—Chace, 1942:36 (part).

Munida decora Benedict, 1902:257.

Not *M. miles*.—Henderson, 1888:126 (see Remarks).

Lectotype.—♂, MCZ 4728, Blake st. 274, off Barbados, 1878–1879, 376 m.

Measurements (mm).—Length of carapace + rostrum 23.9; rostrum length 6.0; carapace breadth 14.9; cornea diameter 3.4; supra-ocular spines length 2.0; right cheliped: length 59.8, length of dactyl and fixed finger 13.5, palm length 14.1, palm height 6.0; left cheliped: length 57.8, length of dactyl and fixed finger 13.2, palm length 13.4, palm height 6.7.

Diagnosis.—Lateral borders of carapace arcuate. Outer orbital spines on frontal margin of carapace followed by 6 lateral spines. Gastric area with 8 spines: 5 spines on left side and 3 on right side, including 1 pair of small spines between pair of large median spines. One para-hepatic spine on either side of carapace. Remainder of carapace without ornament. Rostrum upturned. Supra-ocular spines short and divergent. Eyes with rounded corneas, broader than peduncles. Abdominal tergite 2 with a row of 8 spines on anterior ridge. Tergite 3 with 1 pair of median spines. Tergite 4 without spines. Peduncle of antennule with outer terminal spine longer than inner spine. Peduncle of antenna with 1 distomesial spine on seg-

ment 1, and 1 distomesial and 1 distolateral spine on segment 2. Merus of third maxilliped with 2 spines on ventral margin and 1 little tubercle between them. Sternum smooth and without ornament, sternites with crenulate margins.

Remarks.—The MCZ lot 4728 contains two males. It seems that A. Milne Edwards & Bouvier (1897) described and measured the specimen bearing unequal chelipeds, the left one clearly smaller; however, this specimen is incomplete since it is broken at the fourth abdominal tergite. Thus, the lectotype chosen is the other male, in which the chelipeds have about the same length. According to Chace (1942) the specimens from Blake st.11 (1 male and 1 female syntypes of *M. miles*) plus one female from st. 45 and another female from st. 232, should be referred to *M. nuda*, a much smaller species. This author considered *M. decora* Benedict synonymous with *M. miles* and mentioned the latter from Blake st. 45, 53, 129, 146, 147, 148, 153, 154, 209, 215, 218, 232, 241, 275 and from off Grenada (unknown station). We have examined specimens from Blake st. 148 (1 male, MNHN Ga 545), 218 (1 male with parasite, MNHN Ga 546) and 215 (1 ovigerous female, MCZ 2826, syntype of *M. stimpsoni*, actually *M. sanctipauli* Henderson). Based on the poor description of *M. miles* given by A. Milne Edwards (1880), Henderson (1888) considered it synonymous with *M. valida* Smith, but we think they are different species. Re-examination of the *Challenger* material is under way and will resolve this question.

Munida microphthalmalma

A. Milne Edwards, 1880

Munida microphthalmalma A. Milne Edwards, 1880:51 (part).—A. Milne Edwards & Bouvier, 1897:32, pl. II, figs. 9–13.—Chace, 1942:40, text-fig. 16.

Lectotype.—♂, MCZ 4727, Blake st. 227, off St. Vincent, 1878–1879, 1031 m.

Measurements (mm).—Length of carapace + rostrum 21.7; rostrum length 7.3; carapace breadth 11.2; cornea diameter 1.6; supra-ocular spines length 2.5; right cheliped: length 36.5, length of dactyl and fixed finger 8.8, palm length 8.5, palm height 3.9; left cheliped: lacking.

Diagnosis.—Lateral borders of carapace arcuate. Outer orbital spine on frontal margin of carapace, followed by 6 strong lateral spines. Gastric area with row of 6 spines. Remainder of carapace unarmed. Rostrum distinctly upturned. Supra-ocular spines divergent, slightly exceeding cornea. Eyes characteristically small, cornea scarcely broader than stalk. Abdominal tergite 2 with row of spines on anterior ridge. Tergites 3 and 4 unarmed. Peduncle of antennule with outer terminal spine much longer than inner spine. Segment 1 of peduncle of antenna with 1 inner spine; segment 2 distally with 1 inner spine and 1 outer spine; and segment 3 with 1 inner terminal spine. Merus of third maxilliped with 2 spines on ventral margin and 2 tubercles between them. Sternum without ornament except for fine granulation on sternites of third ambulatory legs.

Remarks.—*Munida microphthalma* is very similar to *M. microps* Alcock, *M. perlata* Benedict and *M. subcaeca* Bouvier. *M. microps* is larger and has post-cervical and anterior branchial spines. *M. perlata* has shorter supra-ocular spines and only one spine on the ventral margin of the merus of the third maxilliped. *M. subcaeca* is smaller and presents external orbital spines reduced and abdominal tergites unarmed.

Chace (1942) was aware that the male specimen from *Blake* st. 2 (Morro Castle, Cuba, 1450 m, syntype of *M. microphthalma*) and the male from st. 131 (St. Croix, 1044 m) should actually be considered *M. subcaeca*.

Except for its reduced cornea, *M. microphthalma* is similar to *M. sanctipauli* as it became evident when the type-series of both species were compared. Bouvier (1922) had

already noted this similarity: "L'espèce me paraît très voisine du *M. Sancti-Pauli*, elle n'en diffère que par ses yeux réduits . . . Dès lors, le *M. microphthalma* serait une simple variété du *M. Sancti-Pauli*. Des recherches ultérieures jetteront certainement de la lumière sur ce point." We prefer to consider both species distinct until the relative diameter of the cornea can be better evaluated as a character.

Munida constricta

A. Milne Edwards, 1880

Munida constricta A. Milne Edwards, 1880: 52 (part).—A. Milne Edwards & Bouvier, 1897:40, pl. III, fig. 5.—Chace, 1942:34, text-figs. 14a, b.

Lectotype.—♂, MNHN Ga 534, *Blake* st. 221, St. Lucie, 13°53'N, 60°58'W, 760 m.

Measurements (mm).—Length of carapace + rostrum 15.7; rostrum length 5.0; carapace breadth 7.6; supra-ocular spines length 2.0; cornea diameter 2.5; right cheliped (only chela): length of dactyl and fixed finger 6.5, palm length 5.9, palm height 2.6; left cheliped (only chela): length of dactyl and fixed finger 6.5, palm length 6.5, palm height 2.6.

Diagnosis.—Lateral borders of carapace parallel. Outer orbital spine followed by 6 lateral spines. Gastric line with 8 spines, including 1 pair of small spines between pair of large medial spines. Strong para-hepatic spine on margin of anteriormost continuous transverse line. Remainder of carapace without ornament. Rostrum long, distal extremity upturned. Supra-ocular spines short and slightly divergent. Abdominal tergite 2 with 7 spines on anterior margin. Tergite 3 with 1 pair of strong central spines and 1 denticle on each side. Tergite 4 with 1 pair of median spines. Peduncle of antennule with outer terminal spine longer than inner spine and with outer dorso-lateral spine followed by 1 smaller proximal outer lateral spine. Peduncle of antenna with 1 long dis-

tomesial spine on segment 1 and 1 distolateral denticle on segment 2. Third maxilliped with 1 long proximal spine and 1 shorter distal spine. Sternum smooth, without ornament.

Remarks.—According to Chace (1942) there exists a female of this species at the MCZ, collected at *Blake* st. 230, off St. Vincent, not mentioned by A. Milne Edwards & Bouvier (1897). Two lots of the syntype series, however, from St. Kitts (st. 146 and 147) are *M. miles*. The difficulty in separating *M. constricta* from *M. miles* was noted by A. Milne Edwards & Bouvier (1897: 41): “. . . les différences qui séparent la *M. miles* de la *M. constricta* ne nous paraissent pas irréductibles, mais les termes de passage entre les deux espèces faisant jusqu'ici complètement défaut, il est nécessaire de les séparer l'une de l'autre en attendant des recherches nouvelles.”

Munida chacei, new species
(Figs. 1–7)

Munida stimpsoni.—A. Milne Edwards, 1880:47 (part).—A. Milne Edwards & Bouvier, 1897:52 (part).

Material examined.—Holotype: 1 ovigerous ♀ (MCZ 11527), *Blake* st. 134, off Saint Croix, West Indies, 17°54'N, 64°45'W, 1878–1879, 446 m.

Diagnosis.—Lateral margins of carapace with 3 spines. Gastric area with longitudinal row of 6 spines, aligned with rostrum; 3 pairs of gastric spines behind supra-oculars. One pair of spines outside line of supra-oculars, near second gastric spine pair. One para-hepatic and 2 hepatic spines on each side. Right anterior branchial region with 1 spine, left with 2 spines. Two pairs of post-cervical spines and 1 cardiac spine. Two spines on intestinal region. Posterior margin of carapace with 2 pairs of spines. Second abdominal tergite with 8 (2-2-2-2) and third tergite with 4 (1-2-1) spines. Antennular peduncle with inner terminal spine longer than

outer. Merus of third maxilliped with 1 ventral spine. Sternum unarmed, smooth.

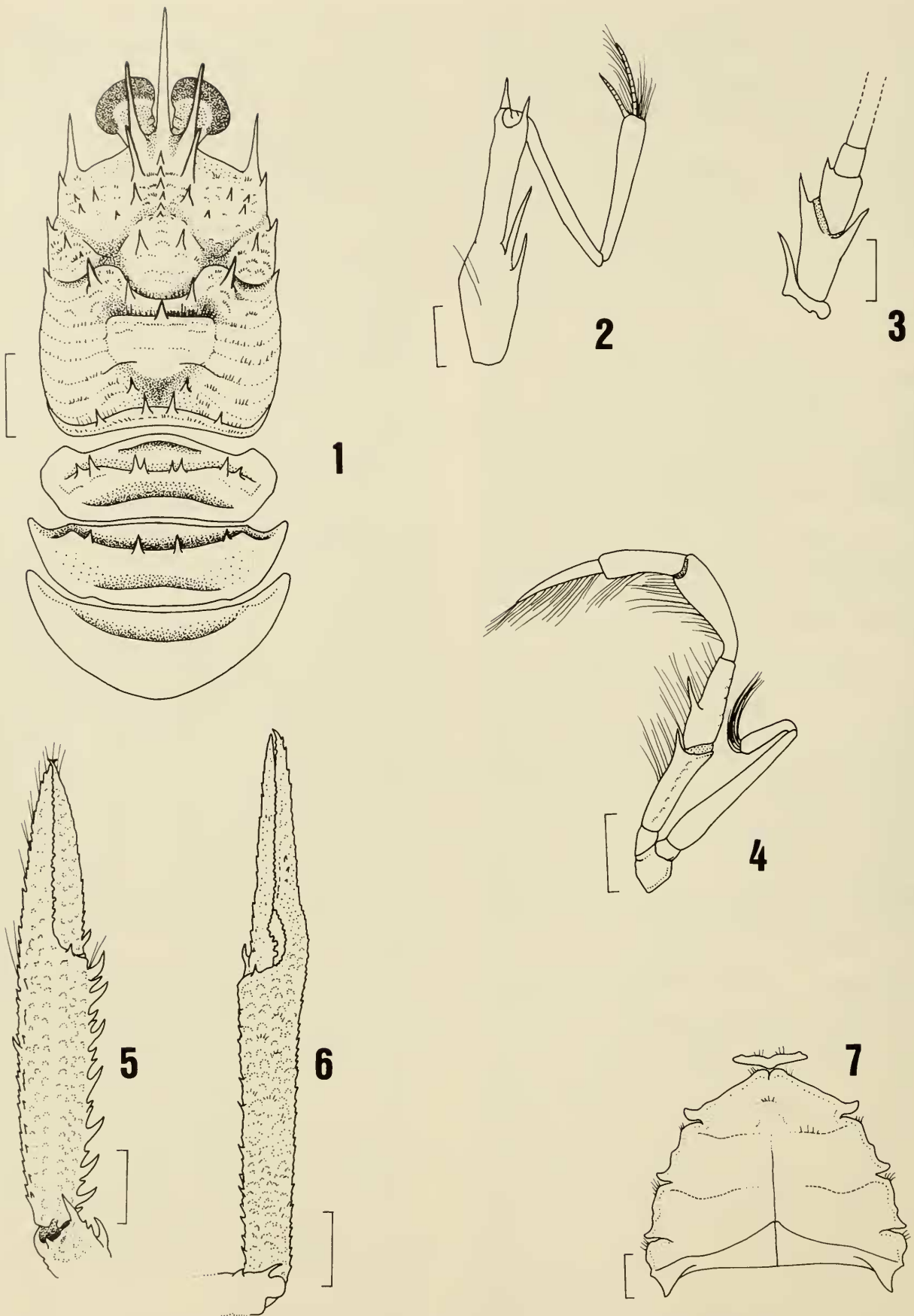
Description.—Carapace slightly longer than broad. Greatest breadth at level of meso-cardiac groove. Outer orbital spines long, overreaching corneas, followed by 3 lateral spines: 1 above lateral angle of carapace, 1 on anterior margin of branchial region, and 1 slightly behind posterior branch of cervical groove, this last spine smaller than preceding 2 and located more ventrally. Gastric area with longitudinal row of 6 small spines in line with rostrum, 3 pairs of large spines behind supra-oculars: first pair epigastric, extremely long, equal to outer orbital, curved upwards and forwards, at same angle as supra-oculars; middle pair proto-gastric, much smaller than anterior pair; and 1 metagastric pair, smallest and set more closely together than preceding pair. One pair of small spines postero-lateral to proto-gastric pair. One para-hepatic and 2 hepatic pairs of spines on each side. Anterior branchial region with 2 spines on left side and 1 spine on right side. Four strong post-cervical spines: 1 inner pair, behind proto-gastric pair, and 1 outer pair, proximal to branching of cervical groove. Cardiac region with 1 spine above meso-cardiac groove. Intestinal region with 1 pair of spines. Posterior margin of carapace with 4 spines.

Rostrum directed forwards and upwards, distal third with indistinct serrations on upper surface. Supra-ocular spines long, divergent, directed upwards and slightly sinuous.

Eyes with rounded corneas, broader than peduncles which have naked margins.

Second and third abdominal tergites armed with 8 (2-2-2-2) and 4 (1-2-1) spines respectively, both with broad central ciliated groove. Fourth and fifth tergites unarmed and smooth.

Basal segment of antennular peduncle with distal half elongate and with 2 distal spines, inner spine slightly longer than outer. Prox-



Figs. 1-7. *Munida chacei*, new species. Holotype ovigerous female: 1, carapace and abdominal somites 2-4, dorsal view; 2, antennular peduncle; 3, antennal peduncle; 4, third maxilliped; 5, left chela, dorsal view; 6, right chela, dorsal view; 7, sternum. Scales equal 3 mm (1, 6), 1 mm (2, 3, 7), 5 mm (4), and 4 mm (5).

Table 1.—Characters that differentiate *M. chacei*, new species, from *M. stimpsoni* A. Milne Edwards.

	<i>M. chacei</i>	<i>M. stimpsoni</i>
Gastric spines aligned with rostrum	6	0
Spines on metagastric region	2 lateral	1 central
Post-cervical spines	4	2
Spines on posterior margin	4 (1-2-1)	2
Spines on intestinal region	2	0
Spines on 2nd abdominal tergite	8 (2-2-2-2)	8 (3-2-3)
Spines on 3rd abdominal tergite	4 (1-2-1)	6 (2-2-2)
Spines on antenna segment 3	1 (inner border)	0
Sternum	smooth	wholly rugose
Coxa of cheliped	spinous	smooth
Pleura of abdominal somites	somites 4 acute, others rounded	somite 2 rounded, others acute

imal half with 1 long dorsolateral spine curved longer than outer. Proximal half with 1 long dorsolateral spine curved upwardly, and 1 spine proximal to first spine, strong but shorter than first spine.

Basal segment of peduncle of antenna with long inner distal spine. Second segment of antenna with strong inner distal spine and another outer distal spine. Third segment with 1 small inner distal spine.

Third maxilliped with dorsal inner margin of ischium denticulate. Ischium with 1 distal spine on ventral margin. Ventral margin of merus with 1 long median spine. Hair-bearing line extending from ischium to dactylus.

Chelipeds scaly, sparsely hairy. Left cheliped more robust, with carpus bearing 3 rows of spines in addition to terminal spine: 1 row on each margin, excepting unarmed lower mesial margin. Palm with rows of strong spines on mesial surface, some spines on dorsal lower surface and 2 small spines on ventral and dorsal sides near articulation with movable finger. Movable finger with row of spinules on mesial surface. Entire cutting surfaces of both fingers denticulate. Fingers each with curved terminal spine crossing at tips. Right cheliped more slender than left. Carpus with row of spinules on dorsal lateral margin and some spinules near

articulation with chela. Palm elongate, with row of spinules on dorsal mesial margin. Fixed finger with proximal hiatus on cutting surface and subterminal spines on lateral surface. Movable finger with 2 proximal molars on cutting surface and mesial surface with only 2 subterminal spines. Cutting surface denticulate between hiatus and distal end.

Ambulatory legs laterally compressed, sparsely haired. Merus with 2 rows of strong, forwardly-curved spines on dorsal and ventral surfaces, including long terminal spine. Carpus with row of spines on dorsal and ventral surfaces, and 1 terminal spine on each surface. Propodus and dactylus each with rows of movable spines on ventral surface.

Sternum smooth, without spines. Sternite of third maxilliped with upper and lateral margins denticulate. Dividing lines of sternites finely granulate.

Measurements of holotype (mm).—Carapace length excluding rostrum 10.9; carapace breadth 9.2; rostrum length (point broken) 5.7; supra-ocular spines length 3.3; cornea diameter 2.6; right cheliped: length of dactyl and fixed finger 9.4, palm length 13.6, palm height 2.1; left cheliped: length of dactyl and fixed finger 12.2, palm length 13.6, palm height 2.1.

Type locality.—Near St. Croix, West Indies, 17°54'N, 64°45'W, 446 m.

Etymology.—This species is dedicated to Dr. Fenner A. Chace, Jr., in recognition of his great contributions to carcinology and of his first indication that this species was new to science.

Remarks.—Similarities exist between *M. chacei* and *M. stimpsoni*. Characters that differentiate the two species are summarized in Table 1.

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Literature Cited

- Benedict, J. E. 1902. Description of a new genus and forty-six new species of crustaceans of the family Galatheidae, with a list of the known marine species.—Proceedings of the United States National Museum 26:243–334.
- Boone, L. 1927. Crustacea from Tropical east American Seas. Scientific results of the first oceanographic expedition of the *Pawnee*, 1925.—Bulletin of the Bingham Oceanographic Collection 1(2):1–147.
- Bouvier, E. L. 1922. Observations complémentaires sur les Crustacés Décapodes (abstraction faite des Carides) provenant des campagnes de S. A. S. le Prince de Monaco.—Résultats des Campagnes Scientifiques accomplies sur son Yacht par Albert I, Prince souverain de Monaco 62, 106 pp.
- Chace, F. A., Jr. 1942. Reports on the scientific results of the *Atlantis* Expeditions to the West Indies, under the joint auspices of the University of Havana and Harvard University. The Anomuran Crustacea. I. Galatheidea.—Torreia 11:1–106.
- Faxon, W. 1895. Reports on an exploration off the West coasts of Mexico, Central and South America, and off Galapagos Islands, in charge of Alexander Agassiz, by the U.S. Fish Commission Steamer *Albatross*, during 1891, Lieut. Commander Z. L. Tanner, U. S. N., Commanding. XV. The stalk-eyed Crustacea.—Memoirs of the Museum of Comparative Zoology at Harvard College 18:1–292.
- Henderson, J. R. 1888. Report on the Anomura collected by H. M. S. *Challenger* during the years 1873–76.—Report on the scientific results of the voyage of H. M. S. *Challenger* during the years 1873–76, Zoology 27(69):1–221.
- Milne Edwards, A. 1880. Reports on the results of dredging, under the supervision of Alexander Agassiz, in the Gulf of Mexico and in the Caribbean Sea, 1877, 78, 79, by the U.S. Coast Survey Steamer *Blake*, Lieut.-Commander C. D. Sigsbee, U. S. N., and Commander J. R. Bartlett, U. S. N., Commanding. VIII. Études préliminaires sur les Crustacés.—Bulletin of the Museum of Comparative Zoology at Harvard College 8(1):1–68.
- , & E. L. Bouvier. 1897. Reports on the results of dredging under the supervision of Alexander Agassiz, in the Gulf of Mexico (1877–78), in the Caribbean Sea (1878–79) and along the Atlantic coast of the United States (1880), by the U.S. Coast Survey Steamer *Blake*, Lieut.-Commander C. D. Sigsbee, U. S. N., and Commander J. R. Bartlett, U. S. N., Commanding. XXXV. Description des Crustacés de la Famille des Galathéidés recueillis pendant l'Expedition.—Memoirs of the Museum of Comparative Zoology at Harvard College 19(2):1–141.
- Stimpson, W. 1860. Notes on North American Crustacea, in the Museum of the Smithsonian Institution. II.—Annals of the Lyceum of Natural History of New York 7:176–246.
- Türkay, M. 1968. Dekapoden von den Margaritainseln (Venezuela) (Crustacea).—Senckenbergiana biologica 49(3/4):249–257.

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