New species and records of small galatheids (Crustacea, Decapoda, Galatheidae) from the Southwest and Central Pacific Ocean

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ABSTRACT
Three new species of squat lobsters are described and illustrated from specimens collected during recent cruises carried out in the Southwest and Central Pacific. *Anoplonida patae* n. sp. has a well developed cardiac process, pairs of both epigastric spines and postcervical processes, one or two flexor marginal spines on the mxp 3 merus, and a single distolateral spine on the antennular basal article. *Bathymunida avatea* n. sp. is characterized by the dorsal surface of the carapace having numerous scale-like ridges, the distomesial spine of the basal article of the antennal peduncle reaching the end of article 2, and the distolateral spine of article 2 reaching the mid-length of article 3. *Heteronida clivicola* n. sp. has each posterior branchial region of the carapace without a distinct elevation, the gastric process being low and rounded, and the distolateral margin of antennal article 2 strongly produced, nearly reaching the end of article 3. New records of seven species (*Anoplonida inermis*, *Bathymunida sibogae*, *Heteronida aspinirostris*, *Neonida grandis*, *Onconida modica*, *O. tropis* and *Plesionida psyla*) also are reported.

KEY WORDS
Crustacea,
Decapoda,
Galatheidae,
Pacific Ocean,
new occurrences,
new species.

RÉSUMÉ
Nouvelles espèces et mentions de petits galathéidés (Crustacea, Decapoda, Galatheidae) de l'océan Pacifique sud-ouest et central.
Trois nouvelles espèces de galathéidés sont décrites et figurées d'après des spécimens récoltés durant des campagnes effectuées récemment dans le Pacifique sud-ouest et central. *Anoplonida patae* n. sp. possède un processus cardiaque bien développé, une paire d'épines épigastriques et de processus postcervicaux, une ou deux épines sur le bord interne du mérus des troisièmes maxillipèdes et l'article basal antennulaire armé d'une seule épine distolatérale. *Bathymunida avatea* n. sp. se caractérise par la face dorsale de la carapace ornée de nombreuses stries en forme d'écailles, l'épine distomésiale de l'article basal du pédoncule antennaire atteignant l'extrémité du deuxième article et l'épine distolatérale du deuxième article atteignant le milieu du troisième. *Heteronida clivicola* n. sp. présente des régions postbranchiales sans aucune élévation distincte, un processus gastrique peu saillant et arrondi, le bord distolatéral du deuxième article antennaire fortement saillant et atteignant presque l'extrémité du troisième article. De nouveaux signalements de sept espèces (*Anoplonida inermis*, *Bathymunida sibogae*, *Heteronida aspinirostris*, *Neonida grandis*, *Onconida modica*, *O. tropis* et *Plesionida psyla*) sont également mentionnés.

MOTS CLÉS
Crustacea,
Decapoda,
Galatheidae,
océan Pacifique,
nouveaux signalements,
nouvelles espèces.

INTRODUCTION

The genus *Bathymunida* Balss, 1914, and five related genera of small squat lobsters *Anoplonida*, *Heteronida*, *Neonida*, *Onconida* and *Plesionida*, described by Baba & de Saint Laurent (1996), were reviewed using numerous specimens collected in New Caledonia and adjacent waters (Baba & de Saint Laurent 1996). However, some lots collected in 1992 by MUSORSTOM 7 from the Wallis and Futuna Islands were not examined at that time. Since then, extensive surveys were carried out in Fiji (BORDAU 1, February-March 1999), Tonga (BORDAU 2, May-June 2000), French Polynesia (BENTHAUS, November 2002) and Solomon Islands (SALOMON 1, September-October 2001; SALOMON 2, October-November 2004) (see http://tropicaldeepseabenthos.org), and numerous representatives of these genera were collected. A study of all these specimens revealed the existence of three new species described herein, along with new records of seven species, some rare.

The terminology and measurements employed follow Baba & de Saint Laurent (1996) and Baba (2005). Measurements given under Material examined indicate postorbital carapace length. The material examined is deposited in the collections of the Muséum national d'Histoire naturelle, Paris (MNHN).

ABBREVIATIONS

CP	beam trawl;
DW	Warén dredge;
G1	first gonopod;
Mxp	maxilliped;
P1	first pereopod (cheliped);
P2-P5	second to fifth pereopods.

SYSTEMATICS

Family GALATHEIDAE Samouelle, 1819
Genus *Anoplonida* Baba & de Saint Laurent, 1996

Anoplonida inermis (Baba, 1994)

Bathymunida inermis Baba, 1994: 1, fig. 1.

Anoplonida inermis – Baba & de Saint Laurent 1996: 446, fig. 3a-c. — Baba 2005: 238.

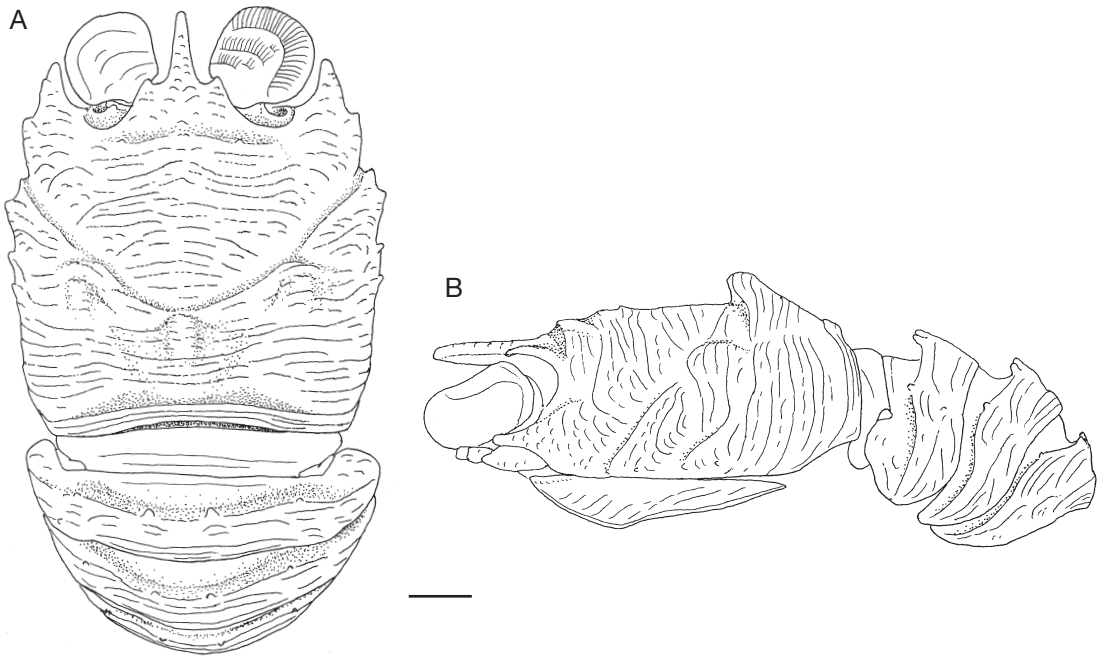

FIG. 1. — *Anoplonida patae* n. sp., ♂ holotype, Tonga (MNHN-Ga 5299): **A**, carapace and abdomen, dorsal; **B**, same, lateral. Scale bar: 1 mm.

MATERIAL EXAMINED. — **Solomon Islands.** SALOMON 1, stn CP 1831, 10°12.121'S, 161°19.236'E, 135-325 m, 5.X.2002, 4 ovig. ♀♀ 4.8-6.0 mm (MNHN-Ga 5317).
SALOMON 2, stn CP 2210, 7°33.5'S, 157°42.3'E, 240-305 m, 26.X.2004, 2 ♂♂ 5.6-5.9 m; 6 ovig. ♀♀ 5.5-6.8 mm (MNHN-Ga 5318).

DISTRIBUTION. — Previously known from Central Queensland and New Caledonia, at 296-397 m. The present occurrences extend the range of the species to the Solomon Islands, in 135-325 m.

Anoplonida patae n. sp.
(Figs 1; 2)

TYPE MATERIAL. — Holotype: **Tonga.** BORDAU 2, stn CP 1572, 19°42.31'S, 174°31.35'W, 391-402 m, 11.VI.2000, ♂ 4.7 mm (MNHN-Ga 5299).
Paratypes: **Fiji.** BORDAU 1, stn CP 1475, 19°40.70'S, 178°11.15'W, 321-424 m, 8.III.1999, 2 ovig. ♀♀ 4.9-5.2 mm (MNHN-Ga 5300). — Stn CP 1476, 19°41.50'S, 178°11.30'W, 310-420 m, 8.III.1999, 1 ovig. ♀ 5.4 mm (MNHN-Ga 5301).
Tonga. BORDAU 2, stn CP 1525, 21°17.25'S, 174°59.37'W, 349-351 m, 2.VI.2000, 1 ovig. ♀ 4.3 mm (MNHN-Ga 5302). — Stn CP 1572, 19°42.31'S, 174°31.35'W, 391-402 m, 11.VI.2000, 1 ♀ 4.9 mm (MNHN-Ga 5303).

ETYMOLOGY. — The species is named in honor of Patsy A. McLaughlin, our dear colleague and eminent decapod crustacean systematist.

DISTRIBUTION. — Tonga and Fiji, 310-424 m.

DESCRIPTION

Carapace 0.8 times longer than broad, greatest breadth measured behind end of anterior cervical groove; dorsal surface covered with numerous striae, mostly interrupted, with or without a number of tubercles on anterior branchial region. Gastric region posteriorly bordered by distinct cervical groove; epigastric transverse ridge distinctly elevated from level of rostrum, bearing pair of small, blunt spines; gastric process absent. Cardiac process well elevated, rounded in profile anteriorly. Anterior part of branchio-cardiac boundary elevated but much lower than cardiac process. Lateral margins somewhat convex, convergent behind anterior cervical groove; anterolateral spine stout, horizontal, directed

straight forward, ending in blunt tip, overreaching supraocular spines, terminating in mid-length of rostral spine; blunt short spine between anterolateral spine and end of anterior cervical groove; four short, blunt spines or processes on anterior branchial region.

Rostrum anteriorly narrowed; dorsal surface with low median ridge continued on to rostral spine; rostral spine straight, nearly horizontal or directed somewhat dorsally, laterally ridged, reaching end of cornea, length 0.3 times that of carapace. Supraocular spines very short, as illustrated.

Sternal plastron 3/4 as long as broad, sternites successively broader posteriorly, with interrupted ridges in moderate density; anterior margin of sternite 4 concave, contiguous with entire posterior margin of sternite 3.

Abdominal segments 2-4 with two pairs of small blunt spines on each tergite, lateral pair obsolescent. Telson subdivided into 12 platelets, length 0.64 breadth.

Cornea strongly dilated; long eyelashes reaching end of cornea.

Antennules having basal article somewhat granulate, mesial margin with few denticles on distal half, distally ending in blunt small spine accompanying few small spines dorsal to it; distolateral margin ending in short spine distinctly larger than distomesial spine. Segment 1 of antennal peduncle ventrally with depressed distomesial process ending in acute spine; article 2 with acute distomesial spine and blunt, mesio-laterally compressed distolateral process; flagellum reaching mid-length of P1 merus in male, overreaching P1 in female.

Mxp 3 ischium 1.5 times longer than merus when measured on mid-lateral line, dorsoventrally depressed and thin, mesial ridge with 11-13 tubercle-like denticles rather distant from one another; flexor margin with blunt short distal spine. Merus short relative to length; flexor margin with one or two median spines proximally followed by a number of tubercles; extensor margin with small distal spine.

Male P1 9.7 times longer than carapace, remarkably slender. Merus longer and broader than carpus, and much more granulate and even tuberculate; mesially with two spines (one distal to and one proximal to mid-length). Carpus unarmed, *c.* 30 times longer than broad (breadth measured at mid-length). Palm unarmed, much narrower than, and 1.6 times longer than carpus, 14 times longer than movable finger; length 70 times width. Fingers very short, distally sharp and incurved, crossing each other when closed; opposable margins with small denticles, without gaping.

Female P1 1.5-2.0 times longer than carapace, short and broad relative to male P1; surface sparsely tuberculate. Merus 1.4-1.9 times longer than carpus, terminally bearing three blunt spines (mesial, middorsal, lateral), distomesial largest. Carpus twice as long as broad, bearing three mesial spines, proximal-most smaller and slightly dorsal in position. Palm narrower than carpus, 2.4 times longer than broad; length 1.4 times that of movable finger. Fingers not gaping, distally ending in sharp, incurved spines.

P2-P4 relatively slender, sparsely tuberculate, with sparse iridescent setae along extensor margin of merus. Male P2 slightly overreaching mid-length of P1 merus, female P2 reaching distal end of P1 palm. Meri successively shorter posteriorly; extensor margin with row of small spines, distal-most terminal, distinct on P2 and P3, very small on P4; flexor margin with row of small spines, terminal spine distinct on P2, distinct or obsolescent on P3, nearly absent on P4. Carpus with four to six small, blunt extensor marginal spines subparalleling to row of three smaller spines on lateral surface. Propodus 1.3-1.4 (male holotype) or 1.1-1.2 (female paratypes) times longer than dactylus; extensor margin with row of small spines; flexor margin with slender, movable distal spine. Dactylus slender, somewhat curved, extensor margin crenulate, with stiff setae in moderate density on distal half, plumose setae on proximal half; flexor margin smooth, with two to five seta-like movable spines on P2, zero to two similar spines on P3, zero or one on P4.

Male P5 chela without brush of plumose setae on flexor face, very setose on fingers and distal portion of propodus (relatively long setae); movable finger more than half length of palm. Female P5 with much shorter, less numerous setae.

Male G1 absent.

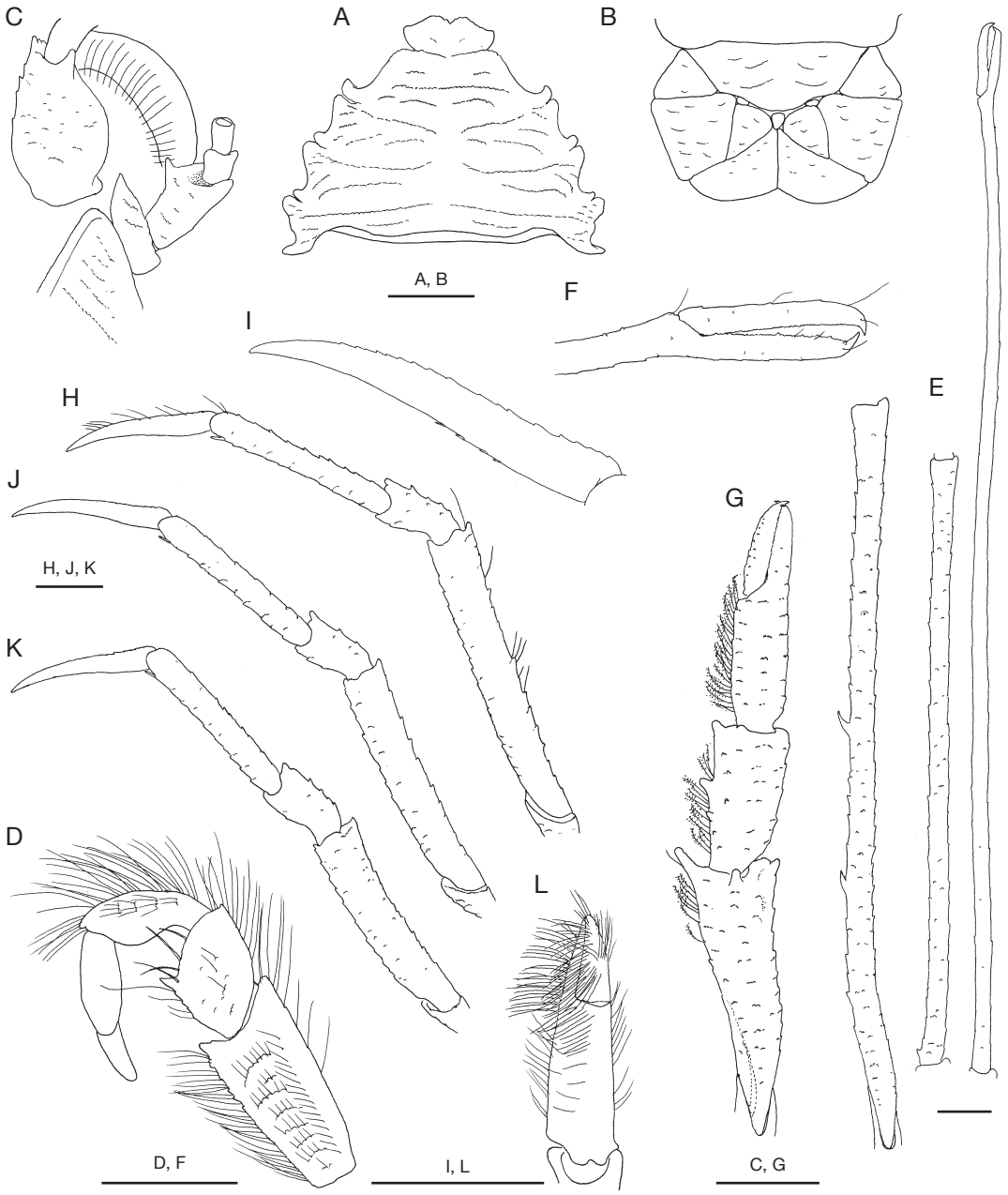

FIG. 2. — *Anoplonida patae* n. sp., Tonga: **A**-**F**, **H**-**L**, ♂ holotype (MNHN-Ga 5299); **G**, ♀ paratype 4.9 mm (MNHN-Ga 5303); **A**, sternal plastron; **B**, telson; **C**, left antennule, antenna, eye and anterior part of pterygostomian flap, ventral; **D**, endopod of left Mxp 3, lateral; **E**, right P1, dorsal; **F**, same, distal part of chela; **G**, right P1, dorsal; **H**, left P2, lateral; **I**, same, distal part, setae omitted; **J**, left P3, setae omitted, lateral; **K**, left P4, setae omitted, lateral; **L**, right P5, distal part, extensor side. Scale bars: 1 mm.

Remarks

The new species cannot be placed in any genera lacking male G1. Among the genera proposed by Baba & de Saint Laurent (1996), *Anoplonida* may be the one that could be considered for this new species. However comparison of *A. patae* n. sp. with the two known species of *Anoplonida* (see Baba & de Saint Laurent 1996) shows that the well developed cardiac process, pairs of both epigastric spines and postcervical processes, Mxp 3 merus bearing one or two flexor marginal spines, and the antennular basal article bearing a single distolateral spine, all displayed by the new species, do not fit the diagnosis of the genus. In other essential characters the three species are very similar. We propose here to emend the diagnosis of *Anoplonida* to accommodate these three species.

The male P1 of the new species is nearly the same as that of *A. cracentis* Baba & de Saint Laurent, 1996. In the latter species, however, the female P1 was lacking. The female P1 of *A. patae* n. sp. is very much like that of *A. inermis* (Baba, 1994). The male P1 of *A. inermis* is noted to be the same as the female P1 in small specimens, but in large specimens it grows up to much greater length. Sexual dimorphism in P1 as shown by *Anoplonida* is unique among the genera of Galatheidae.

Emended diagnosis of genus *Anoplonida*

Carapace with distinct, uninterrupted, transverse ridges, without gastric process; cardiac process and postcervical processes present or absent. Rostrum relatively narrow, rostral spine stout, laterally ridged, close to supraocular spines. Abdominal segments 2-3 each with two pairs of spines, lateral pair obsolescent. Sternite 4 with remarkably broad, concave anterior margin, contiguous with whole posterior margin of preceding sternite. Telsonal subdivision complete. Ocular peduncles dorso-ventrally flattened, cornea dilated. Antennular basal article with one or two distolateral spines. Antennal flagellum more than twice as long as carapace. Endopods of Mxp 3 with three distal articles reduced in size, merus with one or two median spines on flexor margin and distal spine on extensor margin. P1 much more slender and longer in male than in female. P2-4 dactyli slender, nearly entire on flexor margin. Chelae of P5 with setae moderate in density on flexor face, without brush of plumose setae, fingers more setose, setae simple, not ribbon-like.

Genus *Bathymunida* Balss, 1914

Bathymunida avatea n. sp.
(Figs 3; 4)

Type material. — Holotype: **French Polynesia. Austral Archipelago.** BENTHAUS, stn CP 1989, 22°36,20'S, 150°59,99'W, 456 m, 22.XI.2002, ovig. ♀ 5.0 mm (MNHN-Ga 5304).
Paratypes: same station as for the holotype, 4 ♂♂ 4.1-5.0 mm; 8 ovig. ♀♀ 4.2-5.3 mm; 1 ♀ 3.2 mm (MNHN-Ga 5306).
Tonga. BORDAU 2, stn DW 1534, 302-307 m, 1 ♂ 4.3 mm (MNHN-Ga 5305).

Etymology. — The name refers to the goddess of the moon of Polynesian mythology (Avatea).

Distribution. — Tonga and French Polynesia, 302-456 m.

Description

Carapace 1.2 times as wide as long; dorsal surface with weak, relatively sparse striae. Gastric and cardiac regions somewhat elevated in profile, each with sharp, anteriorly directed, moderate-sized median spine. Two epigastric spines. Mesial part of branchial region longitudinally elevated, anteriorly with blunt postcervical spine. Frontal margin strongly concave. Anterolateral spine well developed, not overreaching supraocular spines and followed by one or two small spines on hepatic margin. Branchial margin with four spines.

Rostrum slightly wider than long, 0.2 times as long as carapace, laterally elevated; rostral spine reaching end of corneae, horizontal, slightly longer than rostrum, with dorsal rounded carina continued posteriorly on to anterior portion of rostrum.

Sternal plastron 2/3 as long as broad, sternites successively broader posteriorly. Sternite 3 having anterior margin moderately convex with weak median concavity, surface slightly depressed medially, width half that of following sternite; anterior margin of sternite 4 contiguous with entire posterior margin of sternite 3, surface slightly depressed medially.

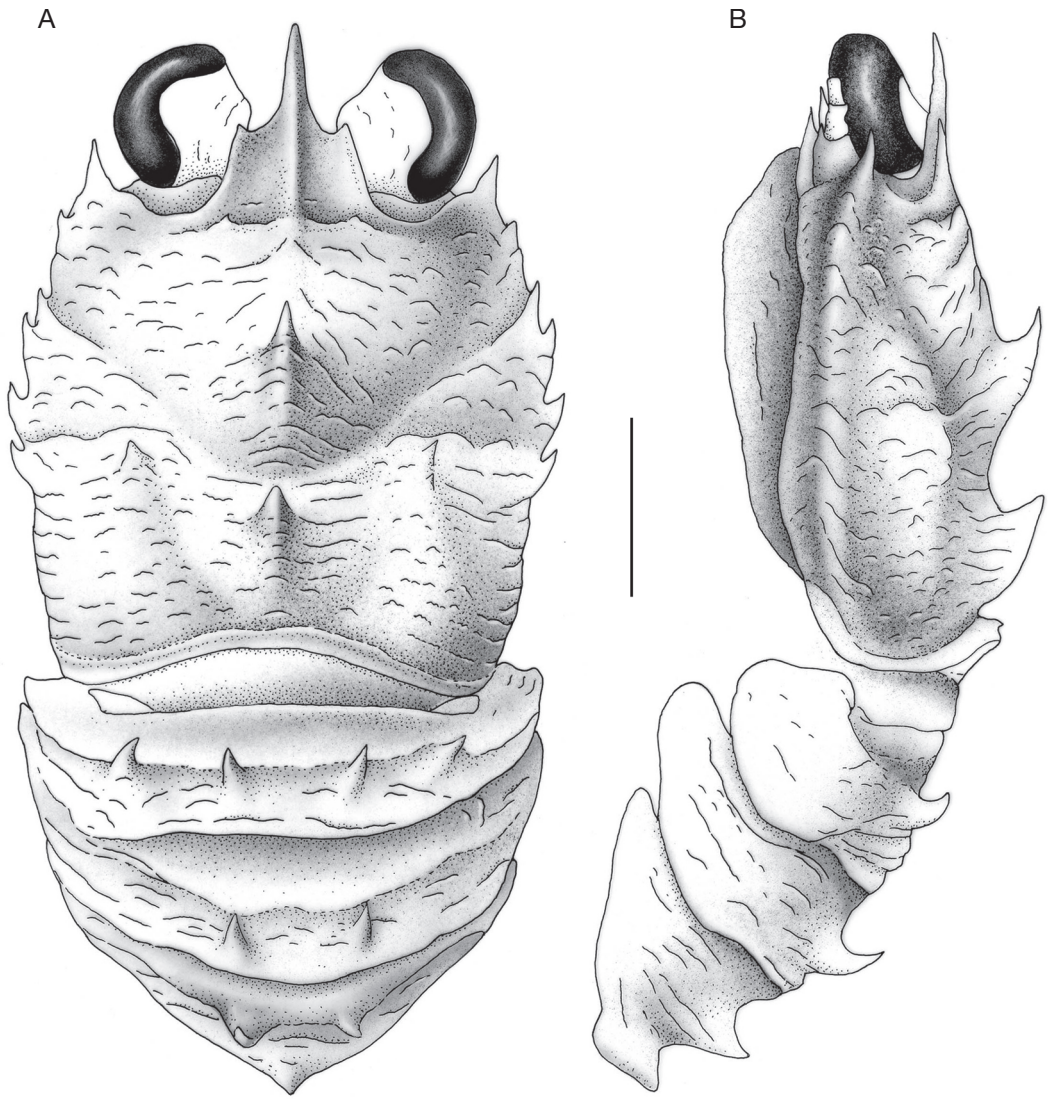

FIG. 3. — *Bathymunida avatea* n. sp., ovigerous ♀ holotype, French Polynesia (MNHN-Ga 5304): **A**, carapace and abdomen, dorsal; **B**, same, lateral. Scale bar: 2 mm.

Abdominal segment 2 with four spines on anterior ridge, median 2 prominent, lateral one short and blunt; segments 3-4 each with two median spines on anterior ridge, posterior ridge of segment 4 with acute median spine.

Eyes well developed, depressed, corneae without eyelashes.

Antennular peduncle slightly overreaching cornea, with two small blunt distal spines, distolateral spine slightly larger than distomesial, lateral border unarmed. Basal article of antennal peduncle with strong distomesial spine reaching end of article 2; article 2 with strong distomesial spine reaching end of article 4, distolateral spine small; articles 3 and 4 unarmed.

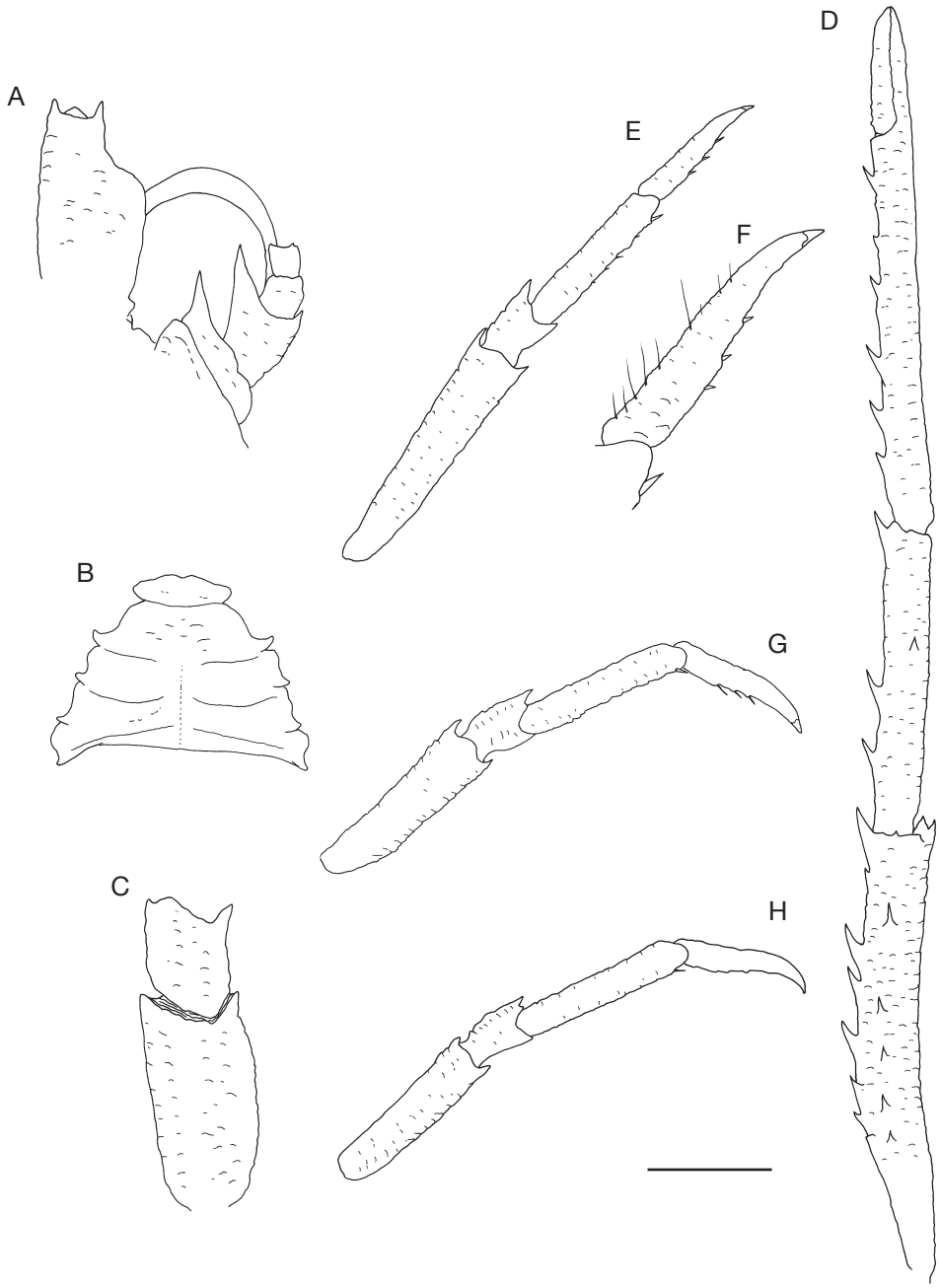

FIG. 4. — *Bathymunida avatea* n. sp., ovigerous ♀ holotype, French Polynesia (MNHN-Ga 5304): **A**, left antennule, antenna, eye and anterior part of pterygostomian flap, ventral; **B**, sternal plastron; **C**, right Mxp 3, ischium and merus, lateral; **D**, right P1, dorsal; **E**, right P2, setae omitted, lateral; **F**, same, dactylus; **G**, right P3, setae omitted, lateral; **H**, right P4, setae omitted, lateral. Scale bar: A, C, F, 1 mm; B, D, E, G, H, 2 mm.

Mxp 3 ischium 1.5 times longer than merus, flexor and extensor margins each with blunt distal spine. Extensor margin of merus with small distal spine, flexor margin with well developed median spine.

Male P1 missing. Female P1 subcylindrical, long and slender, 3-4 times longer than carapace, surface granulate. Merus 1.4-1.9 times longer than carpus; carpus 6.4-6.8 times longer than broad and 0.8-0.9 times length of palm; palm 2-3 times longer than fingers. Merus with row of spines along mesial and dorsal sides; carpus with three or four spines on mesial margin and a few on dorsal side; palm with mesial row of spines; fingers unarmed.

P2-4 moderately slender, surface granulate. P2 1.7-2.3 times longer than carapace. Meri successively shorter posteriorly, each of extensor and flexor margins with distal spine. P2 merus about 4 times longer than wide, 1.5-1.7 times longer than propodus; extensor margin of carpus with distal spine; propodus slightly longer than dactylus, with some movable spinules along flexor margin; dactylus slightly curving, somewhat more so on P3 and P4, flexor margin with three movable spine-like setae.

P5 in male without ribbon-like setae on propodus.

REMARKS

Bathymunida avatea n. sp. belongs to the group of species with rostral and supraocular spines separated by a concave margin, and supraocular spines shorter than the rostral spine. The new species is most similar to *B. sibogae* van Dam, 1938, from New Caledonia, Chesterfield Islands, Indonesia and Japan, in 205-350 m (Baba & de Saint Laurent 1996; Baba 2005).

The two species are easily distinguished by the following characters:

– the dorsal surface of the carapace has numerous distinct transverse ridges in *B. sibogae*, whereas this surface has scale-like ridges in the new species;

– the distomesial spine of the basal segment of the antennal peduncle reaches the end of article 2 in the new species, whereas this spine is clearly shorter in *B. sibogae*. Furthermore, the distolateral spine of the article 2 is long, reaching the end of article 3 in *B. sibogae*, whereas this spine terminates in the mid-length of that article in the new species.

Bathymunida sibogae van Dam, 1938

Bathymunida sibogae van Dam, 1938: 197, figs 2, 3. — Baba & de Saint Laurent 1996: 430, figs 2f, 21, 22, 32c. — Baba 2005: 72, 238, 239.

MATERIAL EXAMINED. — **Solomon Islands.** SALOMON 1, stn CP 1761, 8°46.535'S, 160°01.604'E, 191-290 m, 27.IX.2002, 1 ovig. ♀ 3.6 mm (MNHN-Ga 5319). — Stn CP 1831, 10°12.121'S, 161°19.236'E, 135-325 m, 5.X.2002, 1 ♂ 4.4 mm; 4 ovig. ♀♀ 3.7-4.0 mm (MNHN-Ga 5320).

DISTRIBUTION. — Previously known from Japan, Indonesia (Ceram Sea, Kei Islands), Chesterfield Islands, New Caledonia, between 118 and 350 m. The present material from the Solomon Islands was collected between 135 and 325 m.

Genus *Heteronida* Baba & de Saint Laurent, 1996

Heteronida aspinirostris (Khodkina, 1981)

Bathymunida aspinirostris Khodkina, 1981: 1261, figs 1-5.

Heteronida aspinirostris – Baba & de Saint Laurent 1996: 475, fig. 3d, e. — Baba 2005: 246.

MATERIAL EXAMINED. — **Tonga.** BORDAU 2, stn CP 1510, 21°04.65'S, 175°22.52'W, 461-497 m, 31.V.2000, 1 ♂ 3.2 mm (MNHN-Ga 5321). — Stn DW 1543, 21°16'S, 175°18'W, 427-436 m, 5.VI.2000, 1 ovig. ♀ 4.3 mm (MNHN-Ga 5322). — Stn DW 1615, 23°03'S, 175°53'W, 482-504 m, 17.VI.2000, 1 ♂ 3.5 mm; 1 ovig. ♀ 4.2 mm (MNHN-Ga 5323). — Stn DW 1628, 23°22'S, 176°18'W, 400-416 m, 19.VI.2000, 1 ovig. ♀ 3.5 mm (MNHN-Ga 5324). — Stn DW 1631, 23°23'S, 176°18'W, 407-443 m, 19.VI.2000, 1 ovig. ♀ 2.9 mm (MNHN-Ga 5325).

DISTRIBUTION. — Known from Norfolk Ridge, New Caledonia, Loyalty Islands, Chesterfield Islands and Vanuatu, in 345-930 m. The present material from Tonga was collected between 400 and 504 m.

Heteronida clivicola n. sp. (Figs 5; 6)

TYPE MATERIAL. — Holotype: **French Polynesia. Austral Archipelago.** BENTHAUS, stn DW 1897, 27°34.27'S,

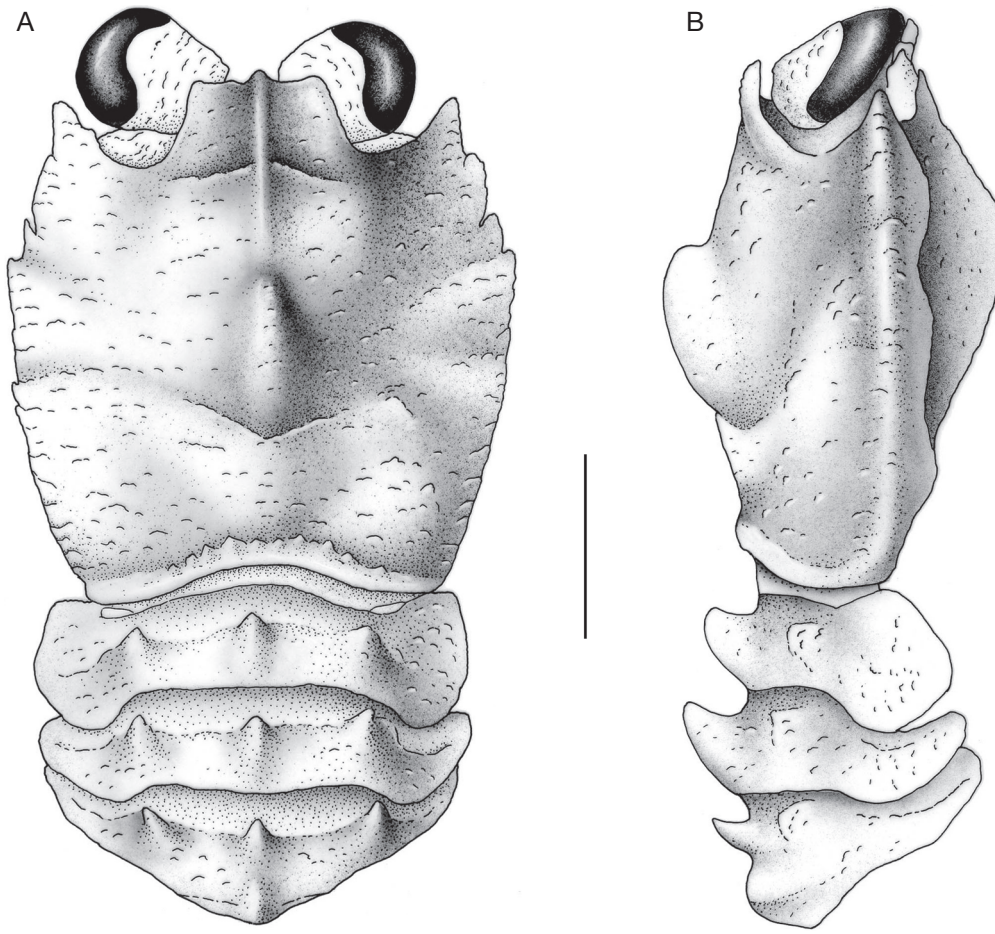

FIG. 5. — *Heteronida clivicola* n. sp., ♂ holotype, French Polynesia (MNHN-Ga 5307): **A**, carapace and abdomen, dorsal; **B**, same, lateral. Scale bar: 2 mm.

144°26.68'W, 480-700 m, 8.XI.2002, ♂ 3.9 mm (MNHN-Ga 5307).
Paratypes: same station as for the holotype, 1 ♂ 3.4 mm (MNHN-Ga 5308). — Stn DW 2207, 22°26,60'S, 151°18,59'W, 323-580 m, 24.XI.2002, 2 ♂♂ 2.9 and 3.0 mm (MNHN-Ga 5309).

ETYMOLOGY. — The name refers to the roman goddess protecting the hills of Rome (Clivicola).

DISTRIBUTION. — French Polynesia (Austral Archipelago), 323-700 m.

DESCRIPTION

Carapace slightly longer than broad, greatest breadth behind end of anterior cervical groove; dorsal surface finely granulated, posterior branchial region without distinct elevation. Gastric region with epigastric transverse ridge moderately distinct, epigastric spines absent or very small, papilla-like; strong median process rounded in profile, anterior extremity not produced, height less than 1/5 that of carapace (measured in lateral view between dorsal surface and linea anomurica). Cardiac region with somewhat elevated transverse ridge preceded by distinct cervical groove. Front margins strongly concave. Anterolateral spines strong, blunt, horizontal, directed straight forward, not reaching anterior margin of rostrum; small, blunt process in front of cervical groove. Lateral branchial margins somewhat

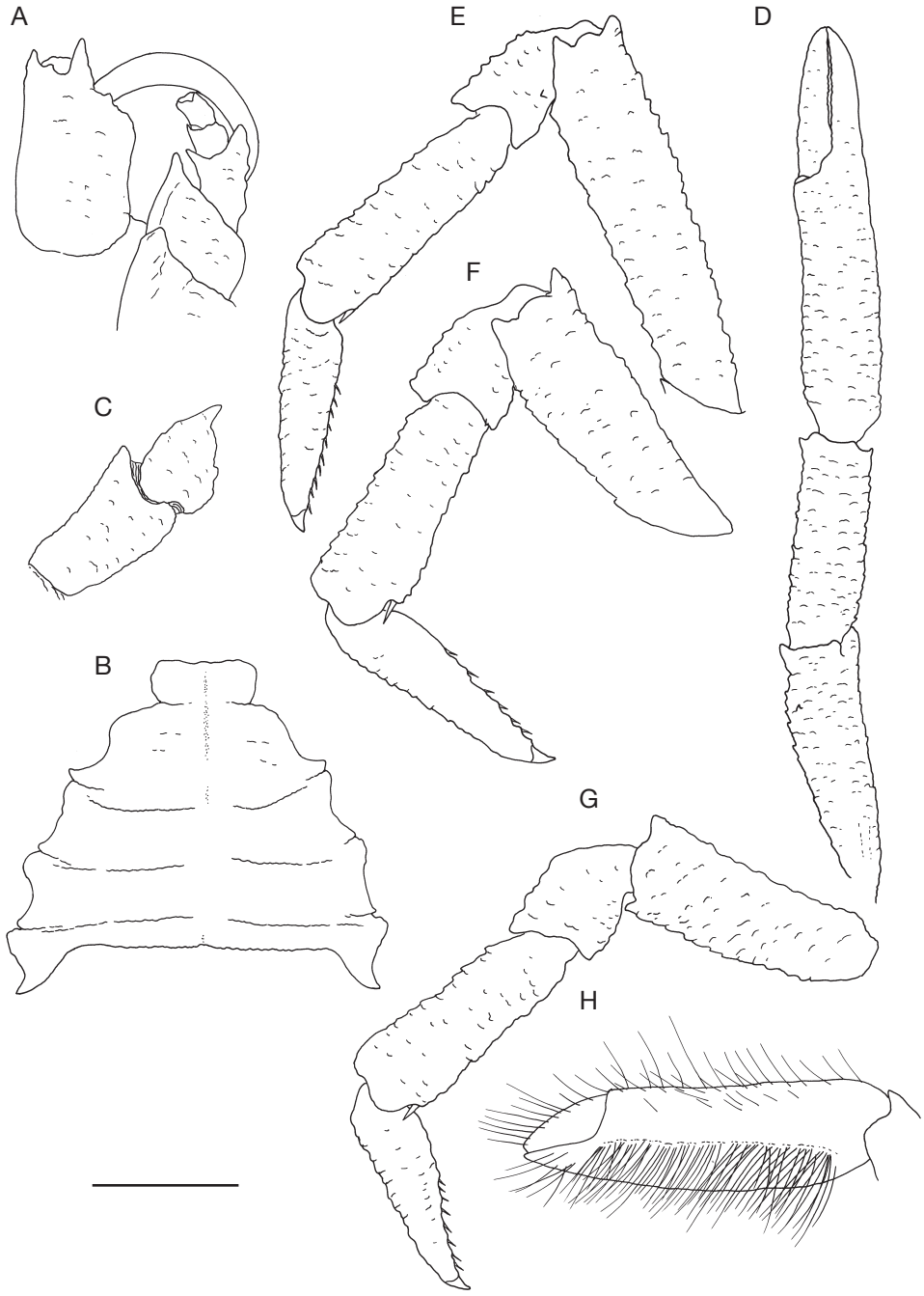

FIG. 6. — *Heteronida clivicola* n. sp., ♂ holotype, French Polynesia (MNHN-Ga 5307): **A**, left antennule, antenna, eye and anterior part of pterygostomian flap, ventral; **B**, sternal plastron; **C**, right Mxp 3, ischium and merus, lateral; **D**, right P1, dorsal; **E**, left P2, setae omitted, lateral; **F**, left P3, setae omitted, lateral; **G**, left P4, setae omitted, lateral; **H**, left P5. Scale bar: A-C, E-G, 1 mm; D, 2 mm; H, 0.5 mm.

convex, convergent behind end of anterior cervical groove, with a few small processes, anteriormost process rounded, produced laterally.

Rostrum much wider than long, horizontal, dorsal surface with median carina continued on to rostral spine and posteriorly to epigastric level; rostral spine small and blunt, barely exceeding supraocular spines. Lateral margins slightly convergent anteriorly, ending in small, blunt supraocular spines; anterior margins slightly concave.

Sternal plastron 3/4 as long as broad, sternites successively broader posteriorly. Sternite 3 having anterior margin transversal, surface depressed medially, width slightly less than half that of following sternite; anterior margin of sternite 4 contiguous with entire posterior margin of sternite 3, surface depressed medially.

Abdominal segments 2-4 each with strong hump-like median process flanked by low process. Telson subdivided into nine platelets.

Cornea strongly dilated, without eyelashes; dorsal surface of peduncle granulate.

Antennular basal segment with two distal spines (distolateral larger than distomesial), and one very small lateral spine. Article 1 of antennal peduncle with stout distomesial process reaching end of article 2; article 2 moderately elongate, narrow, distomesial margin with small spine, distolateral margin strongly produced, nearly reaching end of article 3; articles 3 and 4 unarmed.

Mxp 3 ischium 1.5 times longer than merus when measured in mid-lateral border, with rounded distal process on each of flexor and extensor margins; merus with strong spine on extensor margin, flexor border with a few tubercles.

P1 2.7-2.9 times longer than carapace, granulate, subcylindrical; merus and carpus with small distomesial spine, palm 1.6 times longer than fingers.

P2-4 granulate. P2 reaching end of P1 carpus. Meri successively shorter posteriorly; extensor margin moderately cristate, with blunt distal spine; flexor margin tuberculate. Extensor margin of carpi tuberculate, with blunt distal spine. Propodi occasionally somewhat widened distally; flexor margin with movable distal spine; length 2/3 that of merus and slightly more than that of dactylus on P2, slightly less than that of dactylus on P3 and P4. Dactyli slender, somewhat curved; flexor margin with six to 10 spines, distal one rather close to tip; extensor margin with plumose setae.

P5 fingers with simple, long, dense setae.

REMARKS

The new species is closely related to *H. aspinirostris* (Khodkina, 1981) from Norfolk Ridge, New Caledonia, Loyalty Islands, Chesterfield Islands and Vanuatu, between 345 and 930 m. The two species are clearly distinguished by the following differences:

– each posterior branchial region of the carapace in *H. aspinirostris* has a distinct elevation, which is absent in the new species;

– the gastric process is prominently high and anteriorly produced in *H. aspinirostris*, whereas this process is low and rounded in the new species;

– and the distolateral margin of the article 2 of the antennal peduncle is strongly produced, nearly reaching the end of article 3 in the new species, whereas this margin is rounded in *H. aspinirostris.*

The new species is also clearly distinguished from *H. barunae* Baba & de Saint Laurent, 1996, from Indonesia (205-425 m), by the presence of a carina in the midline of the rostrum, which is absent in *H. barunae*; and the strong distolateral spine of antennal article 2, which is very small, barely reaching the mid-length of article 3, in *H. barunae*.

Genus *Neonida* Baba & de Saint Laurent, 1996

Neonida grandis Baba & de Saint Laurent, 1996

Neonida grandis Baba & de Saint Laurent, 1996: 480, figs 3g, h, 25, 34a. — Baba 2005: 303 (list).

MATERIAL EXAMINED. — **Solomon Islands.** SALOMON 1, stn CP 1831, 10°12.121'S, 161°19.236'W, 135-325 m, 5.X.2001, 1 ♂ 3.3 mm; 6 ovig. ♀♀ 6.7-7.8 mm (MNHN-Ga 5326).

REMARKS

This species was only known by the holotype collected in Vanuatu at 397-402 m. The specimens collected from the Solomon Islands agree quite well with the original description and illustrations provided in Baba & de Saint Laurent (1996). The

tubercular processes in the posterior part of the cardiac region are more reduced than in the holotype, being absent in two specimens. This new record extends the distribution of the species to the Solomon Islands.

Genus *Onconida* Baba & de Saint Laurent, 1996

Onconida modica Baba & de Saint Laurent, 1996

Onconida modica Baba & de Saint Laurent, 1996: 486, figs 27, 33c, d. — Baba 2005: 300.

MATERIAL EXAMINED. — **Tonga.** BORDAU 2, stn CP 1510, 21°04.65'S, 175°22.52'W, 461-497 m, 31.V.2000, 9 ♂♂ 5.7-6.1 mm; 1 ovig. ♀ 5.5 mm; 1 ♀ 5.2 mm (MNHN-Ga 5327).
French Polynesia. Austral Archipelago. BENTHAUS, stn DW 1961, 23°20,89'S, 149°33,51'W, 470-800 m, 19.XI.2002, 1 ♂ 5.4 mm (MNHN-Ga 5328). — Stn DW 1983, 23°25.65'S, 150°44.29'W, 300-540 m, 21.XI.2002, 1 ♂ 5.6 mm (MNHN-Ga 5329). — Stn DW 1999, 22°25.12'S, 151°22.15'W, 270-500 m, 23.XI.2002, 3 ovig. ♀♀ 6.0-6.4 mm; 1 ♀ 5.5 mm (MNHN-Ga 5330).

DISTRIBUTION. — Known from Wallis Island and Waterwitch Banc, in 325-450 m. The present material extends the distribution range to Tonga, in 461-497 m, and French Polynesia (Austral Archipelago), in 270-800 m.

Onconida tropis Baba & de Saint Laurent, 1996

Onconida tropis Baba & de Saint Laurent, 1996: 491, figs 29, 34c. — Baba 2005: 299, 300.

MATERIAL EXAMINED. — **Tonga.** BORDAU 2, stn CP 1526, 21°15.80'S, 174°59.20'W, 463-464 m, 2.VI.2000, 1 ♂ 6.1 mm (MNHN-Ga 5331). — Stn CP 1527, 21°16'S, 174°59'W, 483-509 m, 3.VI.2000, 1 ♂ 6.7 mm; 2 ovig. ♀♀ 5.7-6.7 mm; 1 ♀ 4.9 mm (MNHN-Ga 5332). — Stn CP 1538, 21°39'S, 175°19'W, 471-508 m, 4.VI.2000, 2 ♂♂ 5.9-6.7 mm (MNHN-Ga 5333). — Stn CP 1545, 21°17'S, 175°17'W, 444-447 m, 5.VI, 2000, 1 ♂ 4.9 mm; 3 ovig. ♀♀ 5.3-5.9 mm (MNHN-Ga 5334). — Stn CP 1552, 20°38'S, 174°58'W, 491-500 m, 6.VI.2000, 1 ♂ 4.6 mm (MNHN-Ga 5335). — Stn CP 1593, 19°06'S, 174°18'W, 436-442 m, 14.VI.2000, 1 ♀ 6.6 mm (MNHN-Ga 5336). — Stn CP 1643, 21°04.54'S, 175°22.50'W, 487 m, 22.VI.2000, 2 ♂♂ 4.2-5.2 mm; 3 ♀♀ 5.2-6.7 mm (MNHN-Ga 5337).
Solomon Islands. SALOMON 1, stn CP 1831, 10°12.121'S, 161°19.236'E, 135-325 m, 5.X.2002, 25 ♂♂ 4.4-6.6 mm; 15 ovig. ♀♀ 5.0-7.3 mm; 6 ♀♀ 5.5-6.8 mm (MNHN-Ga 5338).

DISTRIBUTION. — Known from Indonesia (Kei Islands) and New Caledonia in 210-480 m. The new occurrences extend the distribution range to the Solomon Islands and Tonga, in 135-509 m.

Genus *Plesionida* Baba & de Saint Laurent, 1996

Plesionida psila Baba & de Saint Laurent, 1996

Plesionida psila Baba & de Saint Laurent, 1996: 494, figs 4d, e, 31. — Baba 2005: 305.

MATERIAL EXAMINED. — **Wallis and Futuna Islands.** MUSORSTOM 7, stn DW 530, 12°32.7'S, 176°39.3'W, 580-600 m, 16.V.1992, 1 ♀ 6.0 mm (MNHN-Ga 5339). — Stn DW 534, 12°23.3'S, 176°42.0'W, 440-500 m, 16.V.1992, 1 ovig. ♀ 7.9 mm (MNHN-Ga 5340). — Stn DW 540, 12°26.7'S, 177°28.4'W, 600 m, 17.V.1992, 1 juv. 3.8 mm (MNHN-Ga 5341). — Stn DW 571, 12°31,3'S, 176°51.7'W, 502-508 m, 21.V.1992, 1 ovig. ♀ 7.2 mm (MNHN-Ga 5342). — Stn DW 575, 12°30.9'S, 176°52.3'W, 425 m, 21.V.1992, 1 ♂ 7.6 mm (MNHN-Ga 5343).

DISTRIBUTION. — Previously known from New Caledonia in 590-613 m. The new occurrences extend the range to Wallis and Futuna area, in 425-600 m.

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