

131 ヒラコウシンカイコシオリエビ(新称) *Munidopsis plana* Baba, new species



Types (in preservative) from Okinawa Trough, 560-692 m: *a*, carapace and abdomen, dorsal view; *b*, same, ventral view; *c*, same, lateral view; *d*, left cheliped, dorsal view; *e*, same, ventral view; *f*, right 2nd or 3rd pereopod, dorsal view. *a-c*, holotype, cl 48.4 mm; *d-f*, detached appendages present in a lot containing all types.

131 ヒラコウシンカイコシオリエビ(新称) *Munidopsis plana* Baba, new species

形態 甲および腹部が強く扁圧され、体全体が軟毛におおわれる。甲の長さは幅の1.5倍ある。背面には棘がなく、顆粒が分布し、横条は後縁に沿う1個のみである。心域だけが明瞭に区画され、前鰓域の内側に無毛のくぼみがある。眼窩の後の額縁はやや傾斜し、触角上棘が明瞭である。甲側縁は後方へ向かってやや開いてふくらみ、後方の鰓域には棘状の小突起が多い。額角は狭い三角形で平たく、甲の1/3の長さで、やや下方を向く。眼柄は可動で、扁圧されて先細りとなり、角膜は小さく腹側に位置するので背面からは見えない。腹節には棘がない。尾節は8個の板に分かれる。尾肢の内肢の後方表面には小棘の横列が分布する。第3顎脚の座節の咬合縁に16-21個の小歯が並ぶ。長節は内縁に大きさの等しい2個の棘をもつ。鉗脚はやや扁圧され、弱い顆粒が分布する。長節は背面と両側縁に弱い稜をつくり、4列の棘をもつが、いずれの棘も小さく鋭く尖る。腕節には両側先端にのみ棘がある。掌節には棘がなく、先端が幅広く、長さの1/5をはかる。両指は背腹に高く、掌節の1/3の長さがあり、基部に間隙がある。咬合縁はひづめ形で、微小な歯によって咬合する。不動指の腹面先端近くに歯列のある隆起稜があり、指の外縁と末端縁に沿って湾曲する。第2-4脚の長節は前縁に約10棘、後縁に約7棘をもつ。腕節の前縁にも3棘がある。指節は太く、6個の低い歯が並ぶが軟毛が多いため見えにくい。第1-5脚に副肢を欠く。体色不明。**調査標本** 奄美大島西方の沖縄舟状海盆, 560-692 m: 1 ♂ (cl 48.4 mm), 1 ovig. ♀ (cl 46.0 mm), 2 ♀ (cl 46.3, 47.3 mm) [完模式標本, ♀, 水産大学校に保存]。**備考** 本種は体が強く扁圧され、軟毛におおわれ、眼柄の角膜が腹側に位置することに特徴があり、特に、このような眼柄を持つ種は大西洋にも知られていない。甲の一般的な形態は *M. andamanica* MacGilchrist¹²⁶⁾に似るが、眼柄のほか鉗脚の指の形が全く異なる。(馬場敬次)

Munidopsis plana Baba, new species

DIAGNOSIS: Body and appendages thickly setose, setae plumose. Carapace strongly depressed, 1.5 times as long as wide, dorsally spineless, laterally with small spiniform processes. Cardiac region well defined. Naked depression at innermost portion of anterior branchial region. Front margin slightly oblique, with distinct antennal spine on each side. Rostrum narrowly triangular, flattish and deflexed. Abdominal segments flattish, spineless. Endopod of uropod with transverse rows of spinelets on posterior surface. Telson divided into 8 plates. Eyes movable, flattish, tapering, cornea small and ventral. Merus of 3rd maxilliped with 2 equal-sized mesial marginal spines. Chelipeds moderately depressed distally, merus with 4 rows of small, sharp spines; palm spineless, fingers rather high, cutting edges roughly hoof-shaped, dentate, touching each other with fine intermeshing teeth; immovable finger with finely toothed ridge curving along outer and terminal margins of distal portion. Second to 4th pereopods relatively depressed; merus carinate on anterior margin, armed with spines on both margins. Two pairs of male gonopods. Pereopods lacking epipod.

DESCRIPTION: Body and appendages thickly setose. Carapace excluding rostrum strongly depressed, rather long, fully 1.5 times as long as wide; dorsal surface spineless, granulate, lacking transverse ridges except posterior one; gastric region moderately convex; cervical groove indistinct; cardiac region well defined, triangular in outline, separated by distinct groove from metagastric region; rather deep, naked depression present on innermost portion of anterior branchial region. Front margin oblique, with distinct antennal spine. Lateral margins weakly diverging posteriorly and convex, constricted directly behind pronounced

anterolateral process, bearing tubercular processes markedly numerous on posterior branchial region.

Rostrum narrowly triangular, flattish, distally sharp, about 1/6 as long as remaining carapace, somewhat deflexed.

Eyestalks movable, flattish, setose, basally broad, tapering, roughly triangular in dorsal view; cornea small and ventral, not visible in dorsal view.

Abdominal segments rather flattish, spineless, 2nd, 3rd and 4th segments with 2 weak transverse carinae each, anterior carina more distinct. Telson triangular in outline, distinctly wider than long, divided into 8 plates, paired posterior plates relatively small, elongate; lateral marginal setae of midlateral plates plumose, soft in female, rather stiff in male. Endopod of uropod with longitudinal ridge outer to midline, posterior surface with transverse rows of spinelets; outer half and posterior margins also with similar spinelets.

Basal segment of antennule stocky, inner terminal spine absent; armed with 1 outer terminal and 2 laterals, occasionally with 1 or 2 spines ventral to proximal lateral. Second segment of antennal peduncle with outer terminal spine only.

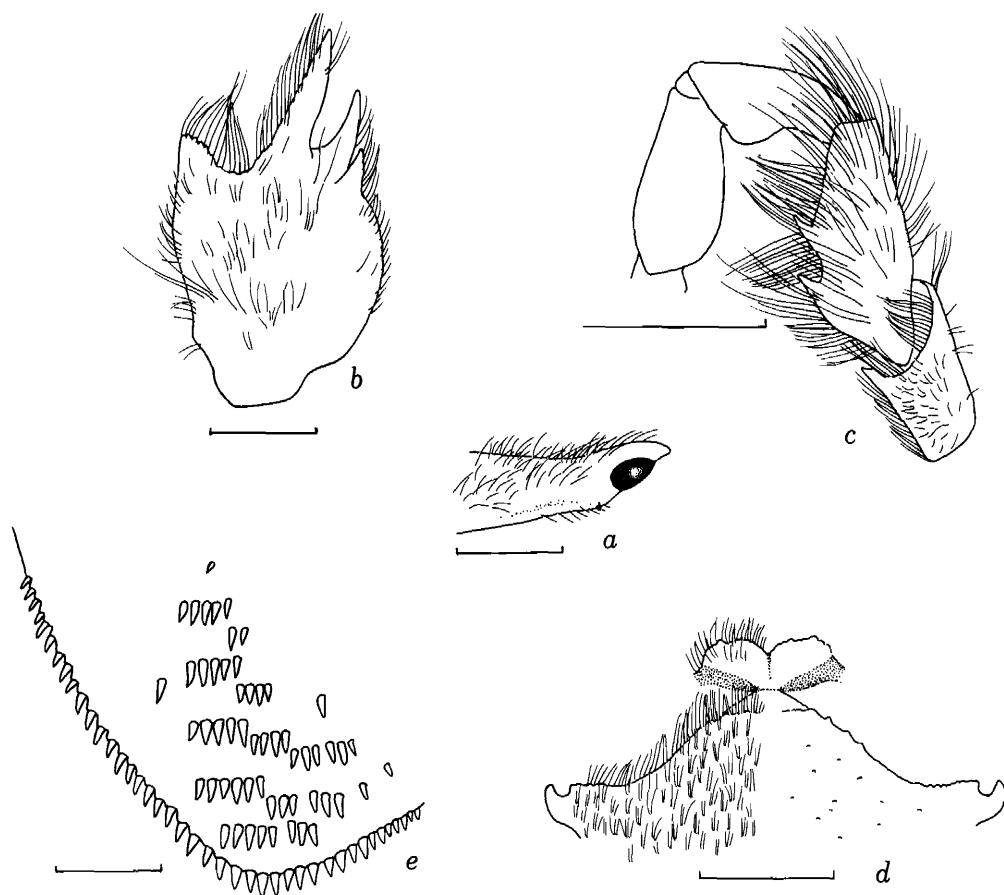


Fig. 21. *Munidopsis plana*, new species, female holotype from Okinawa Trough: a, right eyestalk, lateral view; b, basal segment of left antennule; c, endopod of left 3rd maxilliped; d, anterior part of sternal segments; e, posterior part of endopod of uropod. Scales for a, b and e, 2 mm; for c and d, 5 mm.

Merus of 3rd maxilliped very long, about twice as long as ischium when measured on mesial margin, with 2 equal-sized spines on mesial margin. Ischium with 16-21 denticles on inner toothed ridge.

Sternal segments relatively wide, anterior part as illustrated.

Chelipeds detached from body, thickly setose, weakly granulate, more or less depressed, at least twice as long as carapace. Merus dorsally and marginally carinate, armed with 4 rows of spines, spines small but sharp. Carpus with inner and outer terminal spines only, dorsally smooth. Palm somewhat widened distally, more strongly depressed, spineless, more than 5 times as long as wide, barely 4 times as long as carpus, 0.6-0.7 as long as merus. Fingers about 1/3 as long as palm, distally rather high with rounded tips, proximally gaping, cutting edges hoof-shaped, dentate, touching each other with small intermeshing teeth; ventral surface of immovable finger provided distally with finely toothed ridge curving along outer and terminal margins. Second to 4th pereopods also detached; relatively short, moderately compressed, setose especially on anterior and posterior margins. Merus ventrally flattish, anteriorly carinate, with 10 anterior marginal and 7 posterior marginal spines. Carpus with 3 acute anterior marginal spines. Dactylus stocky, nearly straight, distal claw strongly curving inward, posterior margin with 6 conical, low teeth decreasing in size proximally, all obscured by thickly beset setae.

Two pairs of male gonopods; 1st gonopod nearly naked excepting terminal setae, distolateral edges curving dorsad and rolled, distal portion semicircular in cross section; terminal segment of 2nd gonopod simply elongate, straightly flattish, ventrally and marginally setose.

Epipods absent from pereopods.

MATERIAL: Okinawa Trough west of Amami-oshima, 560-692 m, 1 ♂ (cl 48.4 mm), 1 ovig. ♀ (cl 46.0 mm), 2 ♀ (cl 46.3, 47.3 mm [larger ♀ is holotype]). Type-specimens are deposited in Shimonoseki University of Fisheries, Shimonoseki.

REMARKS: The strongly depressed and elongate body totally covered with soft fine setae, the movable eyestalks flattish and triangular, with the corneas completely ventral and invisible in dorsal view, all are quite unique to this new species. None of the previously known species of *Munidopsis* share the combination of these characters. The general appearance of the carapace is somewhat similar to that of *M. andamanica* MacGilchrist from the Andaman Sea,¹²⁶⁾ but the differences between the two are markedly sharp in the eyes and fingers of the cheliped.

ETYMOLOGY: Derived from *planus* (L., = flat), alluding to the depressed, flattish carapace and abdomen. (K. Baba)

115 *Eumunida dofleini* Gordon, 1930

Carapace covered with very fine setae, anterior half surface with feeble, scale-like ridges, posterior half with feebly elevated, interrupted transverse ridges; oblique row of 3 hepatic spines, anteriormost much pronounced, median occasionally absent. Outer supraocular spine not close to inner one. Lateral margin posteriorly diverging, with 5-6 spines. Merus of 3rd maxilliped mesially spineless, laterally with small terminal spine. Third thoracic sternum with blunt median processes, following sternum lacking lateral spine. Chelipeds relatively slender, lacking pad on ventral surface of palm; merus with 4 rows of spines continued onto carpus; palm 1.2-1.5 times as long as movable finger, bearing 2 rows of spines. Meri and carpi of 2nd to 4th pereopods spinose dorsally, distal 2 segments depressed, propodi with 7-10 equidistant spinelets on ventral margin. Gonopods absent in male. Color: Carapace pale pink, with reddish spines. Abdomen pink. Appendages reddish. Material: Kyushu-Palau Ridge, 697-1320 m, 1 ovig. ♀ (cl 24.3 mm); Okinawa Trough, 680-770 m, 1 ♂ (cl 48.4 mm), 2 ovig. ♀ (cl 36.4+, 41.2 mm).

Remarks: The absence of the male gonopods is one of the generic characters. For identification, attention should be accorded to the presence or absence of spines on the lateral margin of the 4th thoracic sternum, also of a ventral pad on the cheliped palm. This species is unique in very feeble, interrupted transverse ridges on the carapace.

Distribution: Previously known from Sagami Bay southward to Izu Islands, Kyushu-Palau Ridge and Okinawa Trough; in 425-870 m.^{14,63} (K. Baba)

116 *Eumunida pacifica* Gordon, 1930

Transverse ridges on carapace distinct, more or less elevated, those on anterior gastric region interrupted and scale-like. Three pairs of hepatic spines, foremost pronounced. No gastric spines. Lateral margin with 7 spines. Rostrum half as long as remaining carapace. Outer supraocular spine moderately remote from, and slightly overreaching midlength of, inner supraocular spine. Third thoracic sternum with 2 processes on anterior median margin; following sternum with well developed lateral spine. Chelipeds slender, merus with 3 rows of spines, carpus short, with 2 inner marginal and 1 distoventral spines, palm sparsely provided with coarse setae, ventrally unarmed, or with 4 or 5 spines near inner margin; ventral pad of densely packed hairs present or absent. Propodi of 2nd to 4th pereopods lacking anterior marginal spines. Color: Totally orange red. Material: Kyushu-Palau Ridge, 520-1320 m, 2 ♂ (cl 40.4+, 44.4 mm), 1 ovig. ♀ (cl 49.4 mm), 1 ♀ (cl 62.0 mm).

Remarks: The ovigerous female of the four specimens here examined shows typical features as described earlier for this species; however, the ventral pad on the cheliped palm is rather rudimentary in the nonovigerous female, well developed in the remainder; in addition, the spinulation on the same segment is lost in those having the pad. Miyake's specimen of *E. funambulus*,¹³⁴ the source of which is the same to ours, is identical with the present species.

Distribution: Savu Sea off Roti, Ceram Sea off Obi Island and Kyushu-Palau Ridge in 293-1320 m.^{63,134} The range is now extended northward to the vicinity of Japan. (K. Baba)

117 *Gastroptychus hendersoni* (Alcock and Anderson, 1899)

Carapace covered with spines and less numerous spinules; 2 larger spines behind eyes constantly present; stout spines arranged roughly in longitudinal rows. Rostrum spiniform, distally upturned. Cervical groove distinct. Cardiac region well defined. All abdominal segments spinose at least on pleura; telson divided into anterior and posterior segments, posterior one longer. Eyes more or less dilated distally. Membranous folds present behind pterygostomial flap and directly ventral to posterior lateral margin of carapace. Antennal scale reduced to small triangular lappet. Third thoracic sternum with 2 pairs of spines anteriorly, following sternum with strong lateral spines and 2 rows of 3 or 4 spines flanking median groove. Chelipeds subcylindrical, spinose, spines rather regularly arranged in rows; fully 6 times as long as carapace; fingers gaping, less than half as long as palm. Second to 4th pereopods also spinose, subcylindrical basally, moderately depressed distally, propodi somewhat widened distally, posterodistal marginal spinelets closely arranged. Color: Body salmon pink, eyes deeply pigmented.⁵⁾ Material: Kyushu-Palau Ridge, 910 m, 1 ovig. ♀ (cl 26.5 mm).

Remarks: *Gastroptychus hendersoni* is closely related to *G. investigatoris* (Alcock and Anderson) previously known from the Indian Ocean, from which it differs in having the carapace less spinulose and the 3rd abdominal segment with spines at least on the pleura.

Distribution: Off southwest coast of India, South Arabian coast, and Kyushu-Palau Ridge; in 787-1415 m.^{5,7,195)} (K. Baba)

118 *Cervimunida princeps* Benedict, 1902

Carapace strongly striated, armed with 6 epigastric, 2 lateral protogastric, 2 postcervical and 2 anterior branchial spines. Cervical groove distinct. Lateral margin with 7 spines, anterolateral spine well developed. Rostrum laterally compressed, strongly arched, with 2 dorsal and 1 ventral teeth. Supraocular spines curving dorsad and outward, barely half as long as rostrum. Eyes distally dilated. Second, 3rd and 4th abdominal segments armed with 8 spines on anterior ridge. Basal segment of antennule with 2 lateral and 2 terminal spines, inner terminal larger. Merus of 3rd maxilliped with 2 equal-sized mesial marginal and 1-3 small lateral marginal spines. Cheliped moderately spinose, setose especially in older male specimens. Epipods absent from pereopods. Color: Totally orange red. Rostrum deep red at basal and distal portions, otherwise whitish. Chelipeds with reddish spines and tubercles markedly on inner half. Posterior half of abdomen whitish. Material: Tosa Bay, 170-400 m, 4 ♂ (cl 33.1-49.0 mm), 4 ♀ (cl 17.3-37.4 mm).

Remarks: The arched, dorsoventrally toothed rostrum is one of the generic characters of *Cervimunida*. Two species are known in the genus. The other is the eastern Pacific *Cervimunida johni*; frozen and canned tails of this galatheid are sold as "langostinos" in the United States.¹⁷⁹⁾

Distribution: Japanese waters from off Kinkazan southward to Kyushu and again northward along west coast to off Yamagata Prefecture; in 76-452 m.^{26,134,210)} (K. Baba)

119 *Munida andamanica* Alcock, 1894

Carapace strongly rugose, transverse row of 6–12 epigastric spines; lateral protogastric spine on each side; postcervical and anterior branchial spines variably present or absent. Lateral margin with 7 spines. Rostrum spiniform, curving dorsad. Supraocular spines nearly horizontal, directed outward, terminating opposite midlength of rostrum. Second abdominal segment with 8 spines. Cornea dilated, eyelashes short. Terminal 2 spines of antennular basal segment subequal in size. Merus of 3rd maxilliped with 2 mesial marginal spines, distal smaller, sometimes rudimentary. Cheliped relatively short, spinous and very setose; setae plumose, partly coarse and iridescent; inner distal marginal spine of merus extraordinarily developed; movable finger lacking lateral spine near proximal end. Two pairs of male gonopods. Color: Body totally reddish, rostrum with deep red mark basally, abdomen whitish on posterior half, fingers of chelipeds and dactyli of 2nd to 4th pereopods distally reddish, proximally whitish. Material: Kyushu-Palau Ridge, 520 m, 2 ♀ (cl 18.2, 21.2 mm); Okinawa Trough, 3 ♂ (cl 18.7–27.7 mm), 2 ♀ (cl 25.9+, 32.7 mm); Tosa Bay, 200–450 m, 3 ♂ (cl 21.0–28.0 mm), 5 ovig. ♀ (cl 19.8–27.3 mm), 6 ♀ (cl 16.9–27.9 mm).

Remarks: A very close but unnamed relative with a strongly compressed, distally reddish rostrum has also been taken together in Tosa Bay as well as in the Philippines, which is being described in my report on galatheids collected by the U. S. "Albatross" 1907–10 survey to the Philippines.

Distribution: Previously known from the east coast of Africa eastward to the Philippines, and from Japan; in 141–1360 m.^{2,15,134,206} (K. Baba)

120 *Munida crassa* Baba, 1982

Carapace longer than broad, exclusive of rostrum. Four epigastric spines, median 2 directly behind supraoculars pronounced. No spine elsewhere on dorsal surface. Seven lateral marginal spines: 2 in front of cervical groove, 5 behind it. Rostrum horizontal, stoutly spiniform. Supraocular spines short and stout, directed outward. Second abdominal segment with 8 spines on anterior ridge. Eyes moderate-sized, cornea not strongly dilated. Inner terminal spine of antennular basal segment smaller than outer terminal. Second segment of antennal peduncle lacking inner median marginal spine. Merus of 3rd maxilliped with 2 mesial marginal spines, distal one smaller. Chelipeds thickly setose and spinose, setae plumose; inner distal marginal spines of merus and carpus unusually strong. Second to 4th pereopods relatively slender, posterior distal marginal spine of merus prolonged. Two pairs of male gonopods. Color: Not remain. Material: Okinawa Trough, 680–770 m, 1 ♂ (cl 17.3 mm), 3 ovig. ♀ (cl 17.0–26.0 mm).

Remarks: *Munida crassa* is closely related to *M. andamanica* in the general appearance of the carapace and chelipeds, from which it is distinguished by the indistinctly dilated cornea, the inner terminal spine of the antennular basal segment smaller than the outer terminal, and the 2nd segment of the antennal peduncle lacking a spine at the midlength of the inner margin.

Distribution: Previously known from the East China Sea west of the northern Ryukyu Islands, in 770–950 m.¹⁵⁾ (K. Baba)

121 *Munida incerta* Henderson, 1888

Carapace more or less flattish, strongly strigose, dorsally armed with 2 epigastric spines and longitudinal row of 3 spines on branchiocardiac boundary on each side, lateral margin armed with 6 spines, anterior 3rd spine located at end of cervical groove and somewhat ventral to level of remainder. No spine on posterior ridge. Rostrum slenderly spiniform, straight, horizontal. Supraocular spines subparallel and horizontal. Second through 4th abdominal segments with 4 spines on anterior ridge; 4th segment with median spine on posterior ridge. Inner terminal spine of antennular basal segment larger than outer terminal. Antennal peduncle with well developed anterior prolongation on 1st segment. Merus of 3rd maxilliped with midmesial marginal and distolateral marginal spines. All pereopods slender, squamate, anterior margins with fine plumose and coarse iridescent setae. Second to 4th pereopods depressed, dorsally flattish. Male gonopods absent from 1st abdominal segment. Color: Body yellowish red; posterior half of abdomen whitish. Pereopods with scales tinged with deep red. Material: Okinawa Trough, 325-440 m, 3 ♂ (cl 13.9-32.8 mm); Tosa Bay, 350 m, 1 ♂ (cl 26.5 mm).

Remarks: *Munida incerta* is related to *M. squamosa* which also occurs in Japanese waters in transitional depths;²⁰⁶⁾ however, it differs in having a greatly prolonged process on the 1st segment of the antennal peduncle and in lacking cardiac spines.

Distribution: East coast of Africa, Malay Archipelago, Okinawa Trough, between Tosa Bay and Sagami Bay; in 17-638 m.^{85,134)} (K. Baba)

122 *Munida japonica* Stimpson, 1858

Carapace strongly rugose, striae uninterrupted; 10-14 epigastric spines; 1 lateral protogastric, 1 anterior branchial and 1 postcervical spines on each side, latter 2 occasionally absent. Front margin slightly oblique. Rostrum spiniform, horizontal. Suraocular spines subparallel, about half or less than half as long as rostrum. Second abdominal segment spineless, rarely with few tubercles. Eyes dilated distally, eyelashes long, covering dorsal surface of cornea. Two terminal spines on basal segment of antennule subequal in size. Antennal peduncle with 1st segmental prolongation fully reaching midlength of penultimate peduncular segment, 2nd segment with 1 small inner marginal and 2 well-developed terminal spines. Merus of 3rd maxilliped with 2-3 mesial marginal spines, distal smaller, and 1 outer distal marginal spine. Sternum of 3rd thoracic somite nearly as wide as anterior margin of following sternum. Dactyli of 2nd to 4th pereopods relatively stout, bearing spinelets on posterior margin. Two pairs of male gonopods. Epipods absent from all pereopods. Color: Ground color light orange, posterior half of abdomen whitish, all scales and spines and carapacial striae tinged with red. Material: Tosa Bay, 150-190 m, 2 ♂ (cl 11.1, 15.8 mm), 1 ovig. ♀ (cl 11.1 mm).

Remarks: This species differs from *M. heteracantha* Ortmann also known from Japan, in the merus of the 3rd maxilliped distolaterally unarmed.

Distribution: Known from the Red Sea and east African coast eastward and northward to Japan and the Bonin Islands, southward to Western Australia; in 30-900 m.^{17,134,138,182)}

(K. Baba)

123 *Munida pilosimanus* Baba, 1969

Carapace numerous rugose, armed with 2 epigastrics, 2 lateral protogastrics, 2-3 spines on branchiocardiac boundary, and 2 spines on posterior transverse ridge. Lateral margin with 6 spines, 2 in front of cervical groove and 4 behind it. Rostrum relatively long, straightly spiniform, horizontal. Supraocular spines directed outward, less than half-as long as rostrum. Second through 4th abdominal segments with 4 spines on anterior ridge, lateral 2 of those on 4th segment rudimentary or absent. Inner terminal spine of antennular basal segment larger than outer terminal. Merus of 3rd maxilliped with mesial marginal spine at midlength. Chelipeds subcylindrical, squamate, moderately spinose, furnished with plumose setae on inner margin. Second to 4th pereopods slender, squamate, provided with plumose setae on anterior margin, propodi with several rudimentary spinelets on posterior margin. Male gonopods on 2nd abdominal segment only. Color: Not remain. Material: Kyushu-Palau Ridge, 520 m, 18 ♂ (cl 17.1-30.1 mm), 30 ovig. ♀ (cl 6.3-31.0 mm), 2 ♀ (cl 29.0-30.0 mm); Okinawa Trough, 295-385 m, 1 ovig. ♀ (cl 22.0 mm).

Remarks: *Munida pilosimanus* resembles *M. tenuipes* Miyake and Baba from Suruga Bay¹³⁷⁾ in the armature of the abdomen, from which it differs in having two or three spines on the branchiocardiac boundary and in lacking a distolateral spine on the merus of the 3rd maxilliped. This is the first record for the species since that of the type from Tosa Bay.

Distribution: Tosa Bay, Kyushu-Palau Ridge and Okinawa Trough, in 250-520 m.¹¹⁾

(K. Baba)

124 *Munida proxima* Henderson, 1885

Carapace without distinct transverse ridges covered with spinules; paired epigastric, 1 metagastric and 1 cardiac spines much pronounced; regions rather well circumscribed. Base of rostrum excavated, with median carina extended forward onto rostral spine. Rostrum widely triangular, distally spiniform, rostral spine relatively long, reaching end of eye; supraocular spine terminating opposite end of triangular basal portion of rostrum. Abdominal segments spinulose; 2nd and 3rd abdominal segments with 4 spines on anterior ridge, 2 spines on posterior ridge, but 4th segment with 4 spines on anterior ridge only. Basal segment of antennule elongate, inner terminal spine very tiny or absent, outer terminal distinct. Second segment of antennal peduncle with well developed inner terminal process exceeding beyond end of peduncle and overreaching opposite midlength of anterior prolongation of 1st segment. Chelipeds slender, subcylindrical, squamate; scales with tubercle-like spines markedly on merus and carpus. Second to 4th pereopods also very slender, depressed, propodus 11-13 times as long as wide, dactylus slender and curving. One pair of male gonopods. Color: Totally but unevenly reddish; gastric region deep red, anterior branchial region light colored; median gastric and median cardiac spines white. Pereopods with brilliant red bands as illustrated. Material: Kyushu-Palau Ridge, 320 m, 1 ♂ (cl 17.7 mm); off Amami-oshima, 400 m, 1 ♂ (cl 14.9 mm), 1 ovig. ♀ (cl 12.3 mm), 1 ♀ (cl 12.1+ mm).

Distribution: North of Papua, Kyushu-Palau Ridge, off Amami-oshima and Izu Islands; in 275-430 m.^{15,84,85,197)}

(K. Baba)

125 *Munida scabra* Henderson, 1885

Carapace without distinct transverse ridges covered with spinules; paired epigastric and 1 or 2 metagastric spines pronounced; 3 longitudinal rows of much stouter spines on midcardiac region and both branchiocardiac boundaries. Rostrum basally broad, distally spiniform, extremely short, upturned. Fourth abdominal segment with median spine on posterior ridge. Antennal peduncle with great anterior prolongation on 1st segment, inner terminal spine of 2nd segment overreaching end of peduncle, barely reaching midlength of 1st segmental process. Pereopods relatively stout, squamate, marginally provided with fine setae markedly on anterior margin. Propodus of 2nd pereopod shorter than those of following 2 legs. Color: Totally orange red, but posterior half of abdomen whitish. Scales and spines tinged with deep color. Pereopods with reddish bands on each segment. Material: Okinawa Trough, 295-550 m, 2 ♂ (cl 17.8, 19.5 mm), 1 ovig. ♀ (cl 11.9 mm); Tosa Bay, 150 m, 1 ♂ (cl 9.9 mm).

Remarks: The short, basally wide rostrum, the carapace without transverse ridges, and the 1st segment of the antenna with a great anterior prolongation, are characteristic of the *Munida scabra* group, in which five species are known, including *M. proxima*.¹³⁾ This species differs from *M. proxima* in having pronounced spines in three rows on the posterior half carapace and the 4th abdominal segment with a median spine on the posterior ridge.

Distribution: Kei Islands, East China Sea and Japan, in 70- 1630 m.^{84,85,134,138)}

(K. Baba)

126 *Munida* sp.

Carapace with 2 pairs of gastrics, 2 cardiacs, 2-4 spines including postcervical on branchiocardiac boundary, and 6-8 spines on posterior transverse ridge. Lateral margins moderately convex, with 6 spines, 2 in front of cervical groove and 4 behind it. Front margin transverse. Rostrum spiniform, straight but directed slightly upward, less than half as long as remaining carapace. Supraocular spines subparallel, considerably remote from rostrum. Second through 4th abdominal segments with 4 spines on anterior ridge, 4th segment additionally with median spine on posterior ridge. Eyes dilated, eyelashes short. Two terminal spines of antennular basal segment subequal-sized. Antennal peduncle with short inner terminal process on 1st segment. Merus of 3rd maxilliped with mesial marginal spine at midlength. Chelipeds slender, subcylindrical, 3 times as long as carapace, dorsally weakly squamate, moderately setose on inner margin; palm with 6 strong, equidistant inner marginal and 1 outer terminal spines; fingers not gaping, distally crossing, immovable finger bifid distally. Second to 4th pereopods also slender, depressed, dactyli depressed, proportionately wide, lower margin finely denticulate on median 1/3 of length. Color: Not remain. Material: Kyushu-Palau Ridge, 1 ♂ (cl 8.5 mm), 1 ♀ (cl 21.6 mm).

Remarks: This species is being described as a new species from specimens taken by the R/V *Soela* (C.S.I.R.O) from the North West Shelf of Australia.¹⁶⁾ It differs from *Munida normani* Henderson from the Fijis⁸⁴⁾ in the spinations of the carapace and chelipeds.

Distribution: Northwestern Australia and Kyushu-Palau Ridge in 502-550 m.¹⁶⁾

(K. Baba)

127 *Munidopsis cylindrophthalma* (Alcock, 1894)

Carapace longer than wide, totally spineless, medial and cardiac transverse grooves distinct, lateral margins subparallel, anterolateral angle rounded. Rostrum flattish or concave dorsally, triangular, comparatively wide and elongate, slightly upcurved distally. Abdomen spineless, 2 transverse ridges elevated on 2nd through 4th segments. Telson divided into 12 plates, pair of posterior plates relatively elongate, fringe of coarse setae present on midlateral plate in male, absent in female. Eyes movable, eyestalk without cornea very short, cornea long and cylindrical. Basal segment of antennular peduncle lacking spine on inner terminal margin. Antennal peduncle spineless. Sternal segments comparatively narrow, lateral margins of 3rd thoracic sternum posteriorly converging, anterior margin feebly concave. Chelipeds slender, subcylindrical, spineless, fully 3 times as long as carapace. Second to 4th pereopods unusually short, meri carinate along anterior margin, dactyli ending in sharp point, with prominent spines on posterior margin. Epipods absent from pereopods. Color: Totally light red or light orange except whitish tailfan, ventral surface whitish. Material: Tosa Bay, 200-350 m, 23 ♂ (cl 12.8-18.7 mm), 10 ovig. ♀ (cl 12.5-17.0 mm), 5 ♀ (cl 16.3-18.5 mm).

Remarks: This species has been known previously as *Munidopsis okadai* Yanagita.²⁰⁵⁾

Distribution: Arabian Sea, Maldives, Andaman Sea, off western Sumatra and Japan from off Kii Peninsula and Tosa Bay, in 200-743 m.^{2,5,196,205)} (K. Baba)

128 *Munidopsis debilis* (Henderson, 1885)

Carapace dorsally spineless, covered with fine setae, with feeble transverse ridges distinct on posterior half; gastric region convex, cardiac transverse ridge elevated. Front margin oblique in inner half, outer half transverse, depressed below level of inner half. Lateral margins subparallel, notched at end of cervical groove, anterolateral angle not produced. Rostrum barely half as long as remaining carapace, narrowly triangular, dorsally convex, curving upward distally. Abdominal segments spineless. Telson divided into 12 plates. Eyes ending in proximal 1/3 of rostral length, cornea elongate, feebly curving outward. Small spine ventral to front margin between eye and antennal peduncle. Merus of 3rd maxilliped with 2 mesial marginals, distal smaller, and 1 distolateral. Sternal segments comparatively wide. Chelipeds setose, fully twice as long as carapace, carpus and chela moderately depressed; merus with 4 terminal spines; palm 1.5 times as long as movable finger, spineless. Second to 4th pereopods also setose, meri depressed, anterior margin feebly cristate, posterior margin with tubercles. Color: Not remain. Material: Okinawa Trough, 815 m, 1 ♂ (cl 34.9 mm).

Remarks: This is the largest among the specimens ever reported; it differs from the previous descriptions in rather thickly setose body and appendages, but this may be due to its greater size.

Distribution: Gulf of Aden, Mindanao Sea and Okinawa Trough; in 686-1270 m.^{84,85,196)} (K. Baba)

129 *Munidopsis latimana* Miyake and Baba, 1966

Body and legs thickly covered with fine setae. Carapace lacking dorsal spines, lateral margins subparallel, armed with 5-9 small spines including anterolateral. Rostrum widely triangular, dorsally flattish, slightly deflexed. Outer orbital angle strongly produced. Abdominal segments spineless. Telson divided into 12 plates. Eyes with eyelashes, comparatively small, movable. Antennular basal segment with 2 outer terminal spines. Merus of 3rd maxilliped with 3 mesial marginal spines of subequal size. Chelipeds equal, stout, relatively short, depressed distally, merus and carpus with 4 terminal spines, palm fully 1.5 times as long as wide, fingers relatively wide, shorter than palm, outer margins of immovable finger serrate. Second to 4th pereopods short, relatively wide, 2nd pereopod reaching end of carpus of cheliped, merus anteriorly and posteroventrally spinose. Epipods absent from pereopods. Color (in formalin): Totally light yellowish orange in ground color. Carapace with 2 whitish stripes continued onto abdomen and pair of orange red small spots medially. Chelipeds orange red on distal end of each segment excepting fingers. Second to 4th pereopods orange red, but whitish on distal portions of meri and carpi and whole dactyli, propodi with 2 whitish bands. Material: Tosa Bay, 250-350 m, 8 ♂ (cl 15.5-21.5 mm), 5 ovig. ♀ (cl 15.3-21.5 mm), 1 ♀ (cl 17.8 mm).

Remarks: No specimens have been collected by the present investigation. The type material of *M. latimana* was here reexamined to include in this report.

Distribution: Tosa Bay, in 250-350 m.¹³⁶⁾

(K. Baba)

130 *Munidopsis trifida* Henderson 1885

Carapace feebly strigose on posterior half, median and cardiac transverse ridges elevated; thickly or very sparsely covered with fine setae; 2 epigastric spines present. Lateral margin with 4 acute spines on anterior half. Front margin oblique, antennal spine present or absent. Small spine ventral to front margin between eyestalk and antenna. Rostrum basally broad and horizontal, dorsally moderately carinate, ventrally flattish, distally spiniform and somewhat upturned; bearing paired lateral spines at distal end of horizontal portion. Abdominal segments spineless. Telson divided into 8 plates. Eyes lacking eyespine, movable. Antennular basal segment with 2 terminal spines, inner terminal spine absent. Merus of 3rd maxilliped with 2 mesial marginal and 1 small distolateral spines. Chelipeds relatively long, chela more or less depressed, spineless, occasionally with lateral marginal spines on palm. Second pereopod barely overreaching end of carpus of cheliped; merus and carpus spinose on dorsal margins. Epipods absent from pereopods. Color: Not remain. Material: Okinawa Trough, 545-770 m, 2 ovig. ♀ (cl 15.4, 26.2 mm).

Remarks: One of the two specimens here examined has the carapace barely setose. This fact supports Balss¹⁷⁾ that the eastern and western Pacific populations, subspecifically called *trifida* and *tomentosa* respectively, on the basis of setation, should be identical.

Distribution: Laccadive Sea, Andaman Sea, East China Sea, Okinawa Trough, Sagami Bay and Suruga Bay; in 280-1100 m.^{12,26,84,85)}

(K. Baba)

131 *Munidopsis plana*, Baba, new species (See p. 181)