

## A new deep water leucosiid genus (Crustacea, Decapoda, Brachyura)

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### ABSTRACT

A new genus, *Ancylodactyla* n. gen., is established for two deep water species excluded from *Praebebalia* Rathbun, 1911, *P. elongata* Zarenkov, 1969, and *P. elata* Zarenkov, 1994, and for *Randallia nana* Zarenkov, 1990, provisionally assigned to *Randallia* s.s. A study of the extensive collection of leucosiid crabs made by French expeditions to the Indo-Pacific Ocean has increased the known geographic and bathymetric ranges of these species. The new genus is distinguished from *Praebebalia* and from *Randallia* s.s. in having male abdominal somites 3-6 fused, and the second male pleopod longer than first pleopod. The species are redescribed, fully illustrated, synonymies are discussed, and a key for their identification is provided.

### KEY WORDS

Crustacea,  
Decapoda,  
Brachyura,  
Leucosiidae,  
Indo-Pacific Ocean,  
deep water,  
new genus.

### RÉSUMÉ

*Un nouveau genre de Leucosiidae d'eau profonde (Crustacea, Decapoda, Brachyura).*

Un genre nouveau, *Ancylodactyla* n. gen., est établi pour accueillir trois espèces d'eau profonde : *Praebebalia elongata* Zarenkov, 1969 et *P. elata* Zarenkov, 1994, exclues du genre *Praebebalia* Rathbun, 1911, et *Randallia nana* Zarenkov, 1990, assignée provisoirement au genre *Randallia* s.s. L'étude des collections extensives de Leucosiidae faites par les expéditions françaises dans l'Indo-Pacifique a permis d'étendre les répartitions bathymétrique et géographique. Le nouveau genre se distingue de *Praebebalia* et de *Randallia* s.s. par la fusion des segments abdominaux 3-6 et par un second pléopode plus long que le premier. Les espèces sont redécrites et illustrées, les synonymies sont discutées et une clé d'identification est proposée.

### MOTS CLÉS

Crustacea,  
Decapoda,  
Brachyura,  
Leucosiidae,  
océan Indo-Pacifique,  
eau profonde,  
nouveau genre.

## INTRODUCTION

In revising *Praebebalia* Rathbun, 1911, Galil (2001) excluded 10 of the dozen species assigned to that genus at the time the manuscript was submitted for publication, but was unable to refer the excluded species to existing genera due to the unsettled and confusing leucosiid systematics. Three additional species were described recently: *P. fujianensis* Chen & Fang, 2000, *P. nanhaiensis* Chen & Sun, 2002, and *P. bidentata* Chen & Sun, 2002. In revising *Randallia* Stimpson, 1857, Galil (2003) restricted the genus to its type species, *R. ornata* (Randall, 1839), and 12 other species, including *R. nana* Zarenkov, 1990, pending further revision.

A study of the extensive collections of the MNHN made possible the examination of long series of specimens from across the Indo-Pacific Ocean. A new genus is established for two deep water species excluded from *Praebebalia*: *P. elongata* Zarenkov, 1969, and *P. elata* Zarenkov, 1994; and for *Randallia nana* Zarenkov, 1990. Two additional species, *P. semblatae* Chen, 1989, and *P. bidentata* Chen & Sun, 2002, are synonymized with *P. elongata*.

All material examined is from the MNHN collections.

## ABBREVIATIONS

cl.	carapace length, measured along the vertical median line of the carapace;
coll.	collected by;
MNHN	Muséum national d'Histoire naturelle, Paris;
stn	station.

## SYSTEMATICS

Family LEUCOSIIDAE Samouelle, 1819

Genus *Ancylodactyla* n. gen.

TYPE SPECIES. — *Praebebalia elongata* Zarenkov, 1969, by present designation.

ETYMOLOGY. — From the Greek, *ankylos*, bent, crooked, and *dactylos*, finger, for the proximally arched cheliped dactyl.

## DIAGNOSIS

Carapace subhexagonal, globose, granulate; regions of carapace excluding hepatic region indistinct. Front produced, bilobed, uptilted. Postorbital region concave. Antennula folded diagonally into antennular fossa, basal antennular segment sealing lower portion of fossa. Antenna short, inserted into orbit, between antennular fossa and ventral orbital tooth. Orbital margin bifissured dorsally, V-shaped fossa ventrally, triangulate tooth proximally on ventral margin. Eyes retractible. Anterior margin of efferent branchial channel laminate, projecting, unifissured, visible in dorsal view. External maxillipeds concealing trapezoid buccal opening, granulose; exognath shorter, more slender than endognath; merus nearly as long as ischium.

Anterolateral margin of carapace sinuous, posterolateral margin rounded. Posterior margin prominent, transverse. Intestinal region tumescent.

Chelipeds very long, nearly equal, slender, subcylindrical; longer, more robust, in adult male than in female specimens. Cheliped merus bearing small knob proximally on posterior margin. Propodus somewhat thicker distally; fingers long, their cutting edge unevenly denticulate. Cheliped dactyl of adult male proximally arched. Pereiopods slender, short; dactyls longer than propodi, lanceolate.

Male abdominal sulcus deep, elongate, nearly reaching buccal cavity. Male abdomen with segments 3-6 fused, narrowing distally, basiolaterally inflated, bearing subdistal tooth, telson triangular; its lateral margin bearing medially vertical ridge fitting into suture between thoracic segments 4 and 5. Adult female abdomen with segments 3-6 fused, greatly enlarged, shield-like; telson lacinate. Shaft of male first pleopod flanged on interior margin, elongate, slender, tapering distally. Second male pleopod longer than first pleopod, filiform.

## REMARKS

*Ancylodactyla* n. gen. differs from *Praebebalia* emend. in having the male abdomen with segments 3-6, rather than 3-5, fused; lateral margins of carapace

rounded rather than medially tuberculate, male second pleopod filiform, longer than first pleopod, rather than short and distally scoop-like; and in lacking spines laterally on the posterior margin of the carapace (Galil 2001). *Ancylodactyla* n. gen. differs from *Randallia* s.s. in having the male abdominal somites 3-6 fused, antennular operculum sealing only the lower portion of the antennular aperture, the anterior margin of efferent branchial channel bilobate, and the second male pleopod longer than first pleopod (Galil 2003).

*Ancylodactyla elata* (Zarenkov, 1994) n. comb.  
(Figs 1A; 2A)

*Praebebalia elata* Zarenkov, 1994: 106, pls 7, 8.

**MATERIAL EXAMINED.** — **Indonesia.** Kai I., KARUBAR, stn DW 2, 05°47'S, 132°13'E, 209-240 m, 22.X.1991, 1 ♂ 5.5 mm cl. — Kai I., KARUBAR, stn DW 18, 05°18'S, 133°01'E, 205-212 m, 24.X.1991, 1 ♂ 3.8 mm cl.; 4 ♀♀ 4.3-5.2 mm cl. — Tanimbar I., KARUBAR, stn DW 49, 08°00'S, 132°59'E, 210-206 m, 29.X.1991, 3 ♂♂ 3.4-3.7 mm cl.; 10 ♀♀ 3.5-3.6 mm cl.

**New Caledonia.** BATHUS 1, stn CP 687, 20°34.62'S, 165°07.30'E, 408-440 m, 16.III.1993, 5 ♂♂ 3.7-4.1 mm cl.; 10 ♀♀ 3.3-3.8 mm cl. — BATHUS 1, stn CP 694, 20°35.88'S, 164°58.28'E, 400-500 m, 17.III.1993, 1 ♀ 5.0 mm cl. — BATHUS 1, stn CP 695, 20°34.59'S, 164°57.88'E, 410-430 m, 17.III.1993, 48 ♂♂ 4.7-5.1 mm cl.; 13 ♀♀ 3.7-4.7 mm cl. — BATHUS 1, stn CP 698, 20°34.18'S, 164°57.32'E, 491-533 m, 17.III.1993, 3 ♂♂ 4.3-4.8 mm cl. — BATHUS 1, stn CP 705, 21°02.25'S, 165°37.87'E, 350-400 m, 18.III.1993, 2 ♂♂ 3.4, 4.3 mm cl.; 7 ♀♀ 3.4-3.9 mm cl. — BATHUS 4, stn CP 946, 20°33.81'S, 164°58.35'E, 386-430 m, 10.VIII.1994, 2 ♂♂ 4.6, 4.7 mm cl. — BATHUS 4, stn CP 947, 20°33.72'S, 164°57.72'E, 470-490 m, 10.VIII.1994, 26 ♂♂ 4.6-5.4 mm cl.; 6 ♀♀ 4.4-4.8 mm cl.

**Loyalty Islands.** MUSORSTOM 6, stn DW 461, 21°06'S, 167°26.20'E, 240 m, 21.II.1989, 1 ♀ 4.8 mm cl.

**DISTRIBUTION.** — Mozambique, Indonesia, New Caledonia, Loyalty Islands; 206-533 m depth.

**DESCRIPTION**

Dorsal surface of carapace uniformly paved with minute rounded granules. Frontal lobes subtruncate, slightly sinuous. Hepatic region slightly tumid.

Anterolateral margins medially constricted. Epi-branchial lobe convex, prominent; margin prominently lamellate. Intestinal region inflated, prominent, laterally demarcated by shallow grooves. Posterior margin lamellar. Anterior margin of efferent branchial channel narrowly slit medially. Third maxilliped minutely granulate. Chelipeds minutely granulate; merus in adult male about 1.5 as long as carapace; fingers about half as long as propodus. Lower margin of propodus of first pereopod granulate. Abdominal sternites, somites closely set with minute granules. Subdistal denticle on fused male abdominal segment prominent, medially sulcate. Male first pleopod slightly curved, distally with few marginal setae; second pleopod sinuous, distally curved.

**REMARKS**

Zarenkov's (1994) description and illustrations of *Praebebalia elata* emphasize the lamellate lateral margins of the carapace, as well as the prominent intestinal region, the keeled pterygostomial margin, the basio-lateral protuberances on fused male abdominal segment, and the shape of the first and second male pleopods. These findings greatly increase the known range of the species.

*Ancylodactyla elongata* (Zarenkov, 1969) n. comb.  
(Figs 1B; 2B)

*Praebebalia elongata* Zarenkov, 1969: 19, figs 1.3, 4. — Chen 1989: 192.

*Praebebalia semblatae* Chen, 1989: 192, fig. 31e, pl. 5.1. — Tan 1996: 1023.

*Praebebalia bidentata* Chen & Sun, 2002: 268, fig. 116.

**MATERIAL EXAMINED.** — **Philippines.** MUSORSTOM 3, stn DR 126, 11°49'N, 121°22'E, 266 m, 4.VI.1985, 1 ♀ 4.6 mm cl. (MNHN B17975), holotype of *Praebebalia semblatae* Chen, 1989.

**Indonesia.** Tanimbar I., KARUBAR, stn DW 50, 07°59'S, 133°02'E, 184-186 m, 29.X.1991, 1 ♂ 4.9 mm cl.; 1 ♀ 4.7 mm cl.

**New Caledonia.** BATHUS 2, stn DW 717, 22°44.02'S, 167°16.58'E, 350-393 m, 11.V.1993, 3 ♂♂ 4.2-5.2 mm cl.; 3 ♀♀ 4.3-4.8 mm cl. — BATHUS 2, stn DW 724, 22°47.85'S, 167°25.77'E, 344-358 m, 11.V.1993, coll. Richer de Forges, 1 ♂

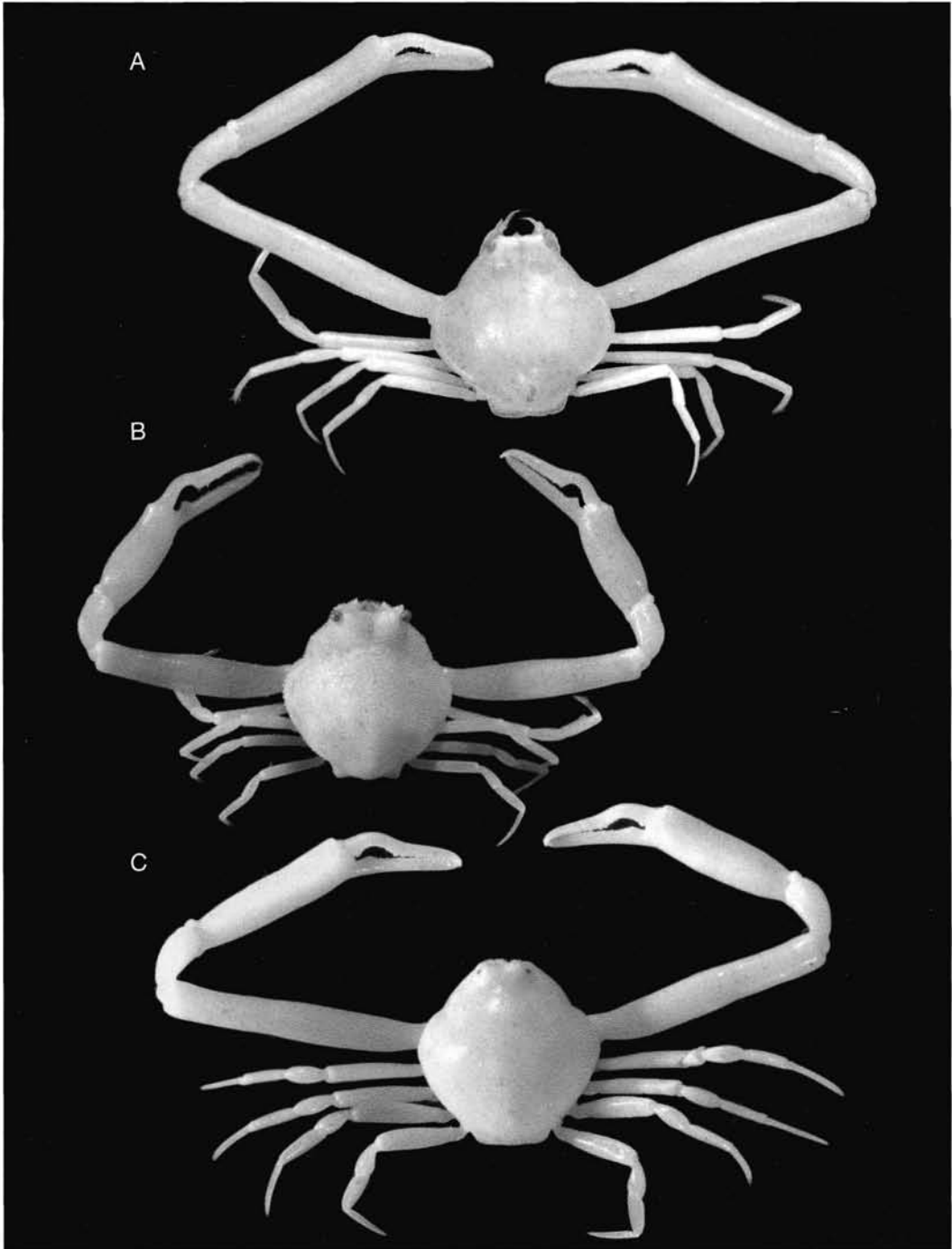


FIG. 1. — **A**, *Ancylodactyla elata* (Zarenkov, 1994) n. comb., ♂ 4.7 mm cl., New Caledonia, BATHUS 1, stn CP 695, 20°34.59'S, 164°57.88'E, 410-430 m, 17.III.1993 (MNHN), dorsal view; **B**, *A. elongata* (Zarenkov, 1969) n. comb., ♂ 5.1 mm cl., New Caledonia, BATHUS 4, stn DW 942, 19°04.26'S, 163°27.36'E, 270-264 m, 8.VIII.1994 (MNHN), dorsal view; **C**, *A. nana* (Zarenkov, 1990) n. comb., ♂ 9.3 mm cl., New Caledonia, BATHUS 2, stn DW 737, 23°03.42'S, 166°39.97'E, 350-400 m, 13.V.1993 (MNHN), dorsal view.

5.4 mm cl. — BATHUS 4, stn DW 941, 19°02.03'S, 163°26.93'E, 270 m, 8.VIII.1994, coll. Richer de Forges, 1 ♂ 4.3 mm cl. — BATHUS 4, stn DW 942, 19°04.26'S, 163°27.36'E, 270-264 m, 8.VIII.1994, coll. Richer de Forges, 5 ♂♂ 4.6-5.1 mm cl.; 19 ♀♀ 4.0-4.9 mm cl. — BATHUS 4, stn DW 902, 19°00.84'S, 163°14.83'E, 341-351 m, 4.VIII.1994, coll. Richer de Forges, 1 ♀ 5.6 mm cl.

**Loyalty Islands.** MUSORSTOM 6, stn DW 399, 21°41.80'S, 167°00.20'E, 282 m, 14.II.1989, 1 ♀ 5.1 mm cl. — MUSORSTOM 6, stn DW 453, 21°00.50'S, 167°26.90'E, 250 m, 20.II.1989, 1 ♀ 4.8 mm cl. — BATHUS 2, stn DW 730, 23°02.56'S, 166°58.30'E, 397-400 m, 12.V.1993, 1 ♂ 3.6 mm cl.

**Tonga.** Tongatapu, BORDAU 2, stn CP 1509, 21°05'S, 175°22'W, 456-510 m, 31.V.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♀ 4.8 mm cl. — Eua I., BORDAU 2, stn CP 1525, 21°17'S, 174°59'W, 349-351 m, 2.VI.2000, coll. Bouchet, Warén & Richer de Forges, 3 ♂♂ 3.7-5.6 mm cl. — BORDAU 2, stn CP 1538, 21°39'S, 175°19'W, 471-508 m, 4.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♂ 5.6 mm cl.; 1 ♀ 5.5 mm cl. — BORDAU 2, stn CP 1541, 21°15'S, 175°14'W, 319-333 m, 5.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♀ 5.0 mm cl. — BORDAU 2, stn CP 1543, 21°16'S, 175°18'W, 427-436 m, 5.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♂ 5.0 mm cl. — Tongatapu, BORDAU 2, stn CP 1547, 21°24'S, 175°18'W, 488-491 m, 5.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♀ 5.3 mm cl. — BORDAU 2, stn CP 1602, 20°49'S, 174°57'W, 263-320 m, 15.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♂ 5.3 mm cl. — BORDAU 2, stn CP 1617, 23°03'S, 175°53'W, 483-531 m, 17.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♂ 4.7 mm cl. — Tongatapu, BORDAU 2, stn CP 1638, 21°05'S, 175°23'W, 469-520 m, 21.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♀ 5.4 mm cl.

**DISTRIBUTION.** — South China Sea, Philippines, Indonesia, New Ireland, New Caledonia, Loyalty Islands, Tonga; 156-531 m depth.

#### DESCRIPTION

Dorsal surface of carapace uniformly paved with minute rounded granules. Frontal lobes subtruncate, slightly concave. Hepatic region slightly tumid. Anterolateral margins medially constricted. Epibranchial lobe convex, prominent; margin prominently granulate. Intestinal region inflated, laterally demarcated by shallow grooves. Posterior margin lamellar. Anterior margin of efferent branchial channel narrowly slit medially. Third maxilliped minutely granulate. Chelipeds minutely granulate; merus in adult male about 1.6 as long

as carapace; fingers 0.7 as long as propodus. Lower margin of propodus of first and second pereopods in adult males bearing triangular carina medially. Abdominal sternites, somites closely set with minute granules. Subdistal denticle on fused male abdominal segment prominent, medially sulcate. Male first pleopod slightly curved, distally with few marginal setae; second pleopod sinuous, distally curved.

#### REMARKS

Zarenkov's (1969) description and illustrations of *Praebebalia elongata* emphasize the bidentate subdistal denticle on the fused male abdominal segment. The detailed illustrations of *P. bidentata* (Chen & Sun 2002) depict the bidentate denticle on the male abdomen, as well as the granulate carapace and cheliped, the keeled lower margin of first pereopod, and the shape of first and second male pleopods. Examination of Chen's (1989) single female type specimen of *P. semblata* (MNHN B17975) left no doubt that it is identical with *A. elongata* n. comb. These findings greatly increase the known range of the species.

#### *Ancylodactyla nana* (Zarenkov, 1990) n. comb. (Figs 1C; 2C)

*Randallia nana* Zarenkov, 1990: 220, pl. 3.

**MATERIAL EXAMINED.** — **New Caledonia.** CHALCAL, *Coriolis*, stn CP 11, 20°04.40'S, 158°47.41'E, 300 m, 22.VII.1984, 4 ♂♂ 5.9-6.9 mm cl.; 1 ♀ 6.9 mm cl. (MNHN B18429). — BIOCAL, stn DW 38, 23°00'S, 167°15'E, 360 m, 30.VIII.1985, 1 ♀ 7.5 mm cl. (MNHN B18413). — BIOCAL, stn CP 42, 23°46'S, 167°13'E, 380 m, 30.VIII.1985, 10 ♂♂ 6.2-8.3 mm cl.; 7 ♀♀ 5.6-8.3 mm cl.; 2 juvs (MNHN B18397). — MUSORSTOM 4, stn 171, 18°57.8'S, 163°14.0'E, 425 m, 17.IX.1985, 14 ♂♂ 6.3-7.7 mm cl.; 9 ♀♀ 6.0-8.7 mm cl.; 4 juvs (MNHN B18395). — MUSORSTOM 4, stn 174, 19°00.3'S, 163°18.5'E, 365 m, 17.IX.1985, 4 ♀♀ 6.6-8.1 mm cl. (MNHN B19179). — MUSORSTOM 5, stn 305, 22°09.27'S, 159°24.42'E, 430-440 m, 12.X.1986, 1 ♀ 5.5 mm cl. (MNHN B18462). — MUSORSTOM 5, stn 329, 20°22.9'S, 158°46.50'E, 320 m, 15.X.1986, 3 ♂♂ 5.2-6.8 mm cl.; 6 ♀♀ 5.1-7.1 mm cl. (MNHN B18447). — MUSORSTOM 5, stn 334, 20°06.27'S, 158°47.62'E, 315-320 m, 15.X.1986, 3 ♂♂ 5.4-7.5 mm cl.; 8 ♀♀ 5.2-6.8 mm cl. (MNHN B18445). —

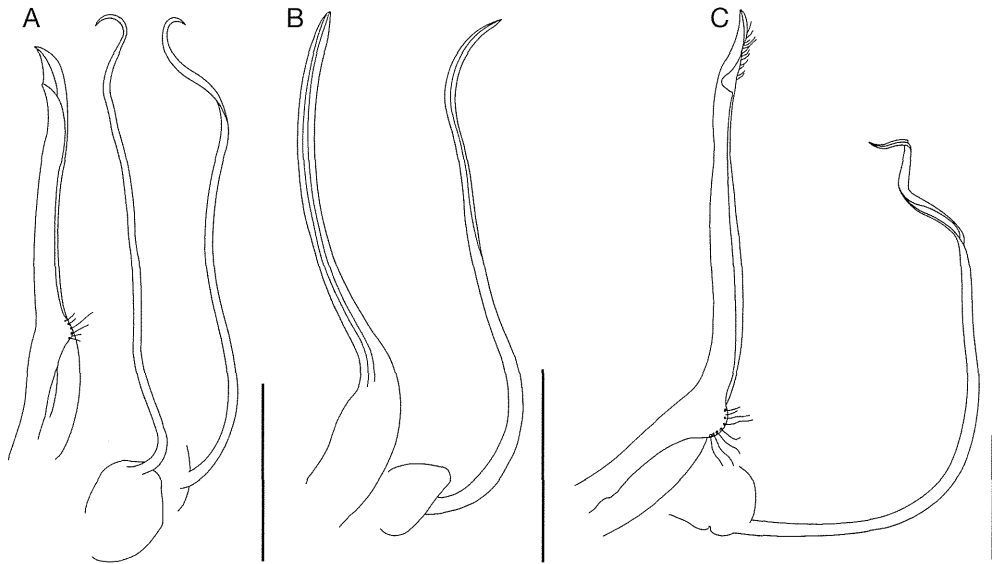


FIG. 2. — **A**, *Ancylodactyla elata* (Zarenkov, 1994) n. comb., ♂ 4.7 mm cl., New Caledonia, BATHUS 4, stn CP 946, 20°33.81'S, 164°58.35'E, 386-430 m, 10.VIII.1994 (MNHN), first and second pleopods; **B**, *A. elongata* (Zarenkov, 1969) n. comb., ♂ 5.1 mm cl., New Caledonia, BATHUS 4, stn DW 942, 19°04.26'S, 163°27.36'E, 270-264 m, 8.VIII.1994 (MNHN), first and second pleopods; **C**, *A. nana* (Zarenkov, 1990) n. comb., ♂ 9.3 mm cl., New Caledonia, BATHUS 2, stn DW 737, 23°03.42'S, 166°39.97'E, 350-400 m, 13.V.1993 (MNHN), first and second pleopods. Scale bars: 1 mm.

MUSORSTOM 5, stn 352, 19°31.40'S, 158°37.70'E, 310-337 m, 17.X.1986, 1 ♂ 8.1 mm cl. (MNHN B18393). — MUSORSTOM 5, stn 353, 19°26.50'S, 158°40.40'E, 290 m, 18.X.1986, 1 ♂ 5.5 mm cl.; 1 ♀ 6.2 mm cl. (MNHN B18391). — MUSORSTOM 5, stn 354, 19°31.06'S, 158°42.56'E, 420-450 m, 18.X.1986, 1 ♀ 6.6 mm cl. (MNHN B18392). — MUSORSTOM 5, stn 378, 19°53.74'S, 158°38.30'E, 355 m, 20.X.1986, 2 ♂ ♂ 6.3, 6.9 mm cl.; 1 ♀ 7.3 mm cl. (MNHN B18390). — SMIB 3, stn DW 23, 22°58'S, 167°20'E, 530 m, 24.V.1987, 1 ♂ 7.1 mm cl. — VOLSMAR, stn DW 16, 22°25.1'S, 171°40.7'E, 500 m, 3.VI.1989, 1 ♀ 5.3 mm cl. — SMIB 6, Grande Passage, stn DW 137, 19°00.3'S, 163°18.3'E, 305-330 m, 3.III.1990, 1 ♀ 7.4 mm cl. — BATHUS 2, stn DW 724, 22°47.85'S, 167°25.77'E, 344-358 m, 11.V.1993, 3 ♂ ♂ 5.5-7.3 mm cl. — BATHUS 2, stn DW 730, 23°02.56'S, 166°58.30'E, 397-400 m, 12.V.1993, 20 ♂ ♂ 5.6-8.4 mm cl.; 18 ♀ ♀ 6.5-8.0 mm cl. — BATHUS 2, stn DW 737, 23°03.42'S, 166°39.97'E, 350-400 m, 13.V.1993, 2 ♂ ♂ 9.3, 8.2 mm cl.; 1 ♀ ovigerous 7.9 mm cl. — BATHUS 3, Norfolk ridge, stn DW 829, 23°21'S, 166°02'E, 386-390 m, 29.XI.1993, 1 ♀ 5.8 mm cl. — BATHUS 3, Norfolk ridge, stn DW 836, 23°02'S, 166°59'E, 295-306 m, 30.XI.1993, 3 ♀ ♀ 8.0-7.7 mm cl. — BATHUS 3, Norfolk ridge, stn DW 838, 23°01'S,

166°56'E, 400-402 m, 30.XI.1993, 4 ♂ ♂ 5.4-8.2 mm cl.; 2 ♀ ♀ 5.5, 7.8 mm cl. — HALIPRO 1, stn CH 879, 23°03'S, 167°02'E, 350 m, 3.III.1994, 1 ♂ 8.5 mm cl. — BATHUS 4, stn DW 903, 18°59.93'S, 163°13.55'E, 386-400 m, 4.VIII.1994, 5 ♂ ♂ 8.0-8.8 mm cl.; 14 ♀ ♀ 6.5-7.9 mm cl.

Fiji. BORDAU 1, stn CP 1478, 20°59'S, 178°44'E, 386-396 m, 9.III.1999, 34 ♂ ♂ 6.6-8.4 mm cl.; 28 ♀ ♀ 6.6-8.3 mm cl.

Coral Sea. CHALCAL, stn CP 4, Chesterfield-Bellona Plateau, 19°33.90'S, 158°37.90'E, 350-370 m, 1984, 2 ♂ ♂ 7.1, 8.6 mm cl. (MNHN B19236).

Tonga. BORDAU 2, stn CP 1545, 21°17'S, 175°17'W, 444-447 m, 5.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♂ 7.5 mm cl. — BORDAU 2, stn CP 1590, 19°12'S, 174°13'W, 353-386 m, 4.VI.2000, coll. Bouchet, Warén & Richer de Forges, 2 ♂ ♂ 7.3, 7.5 mm cl. — BORDAU 2, Ha'apai group, stn CP 1593, 19°06'S, 174°18'W, 436-442 m, 14.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♂ 7.3 mm cl. — BORDAU 2, stn CP 1606, 22°16'S, 175°20'W, 313-316 m, 16.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♂ 6.5 mm cl. — BORDAU 2, stn CP 1609, 22°11'S, 175°27'W, 385-405 m, 16.VI.2000, coll. Bouchet, Warén & Richer de Forges, 3 ♂ ♂ 5.5-7.4 mm cl.; 1 ♀ 6.1 mm cl. — BORDAU 2, stn CP

1613, 23°03'S, 175°47'W, 331-352 m, 17.VI.2000, coll. Bouchet, Warén & Richer de Forges, 2 ♂♂ 5.9, 8.0 mm cl. — BORDAU 2, stn CP 1628, 23°22'S, 176°18'W, 400-416 m, 19.VI.2000, coll. Bouchet, Warén & Richer de Forges, 10 ♂♂ 5.4-8.4 mm cl.; 12 ♀♀ 5.4-7.0 mm cl.; 5 juvs. — BORDAU 2, stn CP 1632, 22°01'S, 175°42'W, 613-618 m, 20.VI.2000, coll. Bouchet, Warén & Richer de Forges, 1 ♂ 6.3 mm cl. — BORDAU 2, stn CP 1643, 21°05'S, 175°22'W, 487 m, 22.VI.2000, coll. Bouchet, Warén & Richer de Forges, 2 ♂♂ 5.6, 7.1 mm cl.

DISTRIBUTION. — New Caledonia, Fiji, Coral Sea, Tonga, Sala-y-Gomez and Nazca ridges; 218-618 m depth.

#### DESCRIPTION

Dorsal surface of carapace uniformly paved with minute flattened granules. Frontal lobes subtruncate, slightly concave. Hepatic region slightly tumid. Anterolateral margins medially constricted. Epibranchial lobe convex, prominent; margin carinate, beaded. Intestinal region slightly inflated, laterally demarcated by shallow grooves. Posterior margin lamellar. Anterior margin of efferent branchial channel narrowly slit medially. Third maxilliped minutely granulate. Chelipeds minutely granulate; merus in adult male about

1.5 as long as carapace; fingers 0.7 as long as propodus. Lower margin of propodus of first pereopod smooth. Abdominal sternites, somites closely set with minute granules. Subdistal denticle on fused male abdominal segment lozenge-shaped. Male first pleopod distally angled distad, margin of proximal lobe setose; second pleopod curved, distally coiled.

#### REMARKS

The description and the illustrations of the specimens identified by Zarenkov (1990) as *Randallia nana* differ from *Randallia* s.s. (Galil 2003) in having the antennular operculum sealing only the lower part of the antennular aperture, the anterior margin of efferent branchial channel bilobate rather than trilobate, and the segments 3-6 of the male abdomen fused, rather than segments 3-5. *Ancylodactyla nana* n. comb. differs from *A. elongata* n. comb. in its finer granulation on the carapace, lozenge-shaped rather than bidentate subdistal denticle on fused male abdominal segment, and distally coiled second male pleopod. It differs from *A. elata* n. comb. in lacking lamellate epibranchial margins. These findings greatly increase the known range of the species.

#### KEY TO SPECIES OF *ANCYLODACTYLA* N. GEN.

1. Lateral margin of carapace lamellar, intestinal region prominent, prominent basiolateral protuberances on fused male abdominal segment ..... *A. elata* n. comb.  
— Lateral margin of carapace rounded, intestinal region somewhat inflated, basiolateral regions of fused male abdominal segment slightly inflated ..... 2
2. Dorsal surface of carapace closely set with rounded granules, subdistal denticle on fused male abdominal segment medially sulcate, lower margin of first and second pereopods in male bearing a denticle, second pleopod sinuous, distally curved ..... *A. elongata* n. comb.  
— Dorsal surface of carapace closely set with fine, flattened granules, subdistal denticle on fused male abdominal segment lozenge-shaped, lower margin of first and second pereopods in male lacking denticle, second pleopod sinuous, distally coiled ..... *A. nana* n. comb.

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