

The Description of Two New Genera and Four New Species of the Terrestrial Talitridae (Crustacea, Amphipoda) from the Ogasawara and Daito Islands, Southern Japan

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Abstract Two new genera of the Talitridae, *Miyamotoia* (with two new species, *M. spinolabrum* and *M. daitoensis*) and *Leptorchestia* (with a new species, *L. biseta*), and a new species, *Morinoia chichijimaensis*, are described from terrestrial habitats of the Ogasawara and Daito Islands, the oceanic islands in southern Japan. Taxonomic comments on *Morinoia* and *Morinoia japonica* are given. *Miyamotoia spinolabrum* displays a peculiar character, robust setae on the upper lips. Keys to talitrid species from the Ogasawara and Daito Islands are given.

Key words: Terrestrial Talitridae, *Miyamotoia*, *Leptorchestia*, *Morinoia*, new genus, new species, Ogasawara Islands, Daito Islands, Japan

Introduction

The Ogasawara (Bonin) Islands, located about 1000 km south of Tokyo (middle of Honshu), are oceanic islands which are composed of three island groups: the Mukojima, Chichijima, and Hahajima Island groups (Figs. 1–2). Morino (1991) reported four species of the Talitridae from these islands: *Platorchestia platensis* (Krøyer, 1845) (possibly *P. pacifica* Miyamoto and Morino, 2004) from supralittoral zones, *P. japonica* (Tattersall, 1922) (now in *Morinoia*) mainly from riparian habitats, and two undescribed species, *Platorchestia* sp. and *Paciforchestia* sp. mostly from forest litter. Morino and Miyamoto (2015a) recorded the occurrence of *Nipponorchestia curvatus* Morino and Miyamoto, 2015, from coastal to inland terrestrial habitats of Chichijima and Hahajima Island groups. Among the above-mentioned undescribed species, *Paciforchestia* sp. was described

under the name of *Pyatakoveestia boninensis* Morino and Miyamoto, 2015b. Close examination of specimens allocated to *Platorchestia* sp. in Morino (1991) confirmed two new genera with three new species. In addition, studies on *Platorchestia japonica* in Morino (1991) revealed two species belonging to *Morinoia*, one of which is new to science.

The



Fig. 1. Map of Japan, the Ogasawara Islands and the Daitojima Islands.

Materials and Methods

Materials studied were collected by the author or forwarded from many colleagues. The general methodology follows Morino (2014). The specimens were dissected under stereomicroscopes and appendages were illustrated under light microscopes using a drawing tube. The appendages were fixed on permanent slides or deposited in tubes. The body length was measured from the tip of head to the tip of telson along the straightened dorsal margin. The specimens are housed in the collection of the National Museum of Nature

and Science, Tsukuba (NSMT-Cr).

Taxonomy

Family Talitridae Rafinesque, 1815

Miyamotoia gen. nov.

[New Japanese name:

Miyamoto-okatobimushi zoku]

Type species. *Miyamotoia spinolabrum* sp. nov.

Additional species. *M. daitoensis* sp. nov.

Diagnosis. Body size medium to large. Eyes medium. Antenna 1 not reaching end of peduncu-

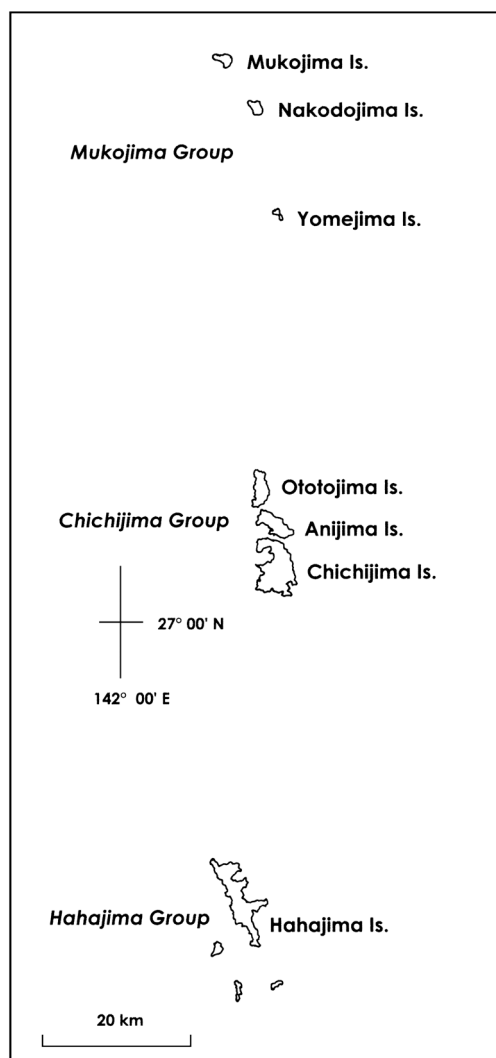


Fig. 2. Map of the Ogasawara Islands.

lar article 4 of antenna 2; peduncle longer than flagellum. Antenna 2 slender in both sexes, flagellum subequal to or longer than peduncle. Upper lip with robust setae or not. Maxilliped, outer margin of precoxa not stepped, palp article 2 mediodistally lobate, article 3 slender or broad, article 4 reduced, masked by apical robust setae.

Gnathopod 1 in male deeply subchelate, carpus and propodus with pellucid lobe; in female shallowly subchelate, lacking pellucid lobe. Gnathopod 2 in male, propodus powerfully subchelate, dactylus attenuated apically; in female, basis expanded anteriorly, propodus mitten-shaped.

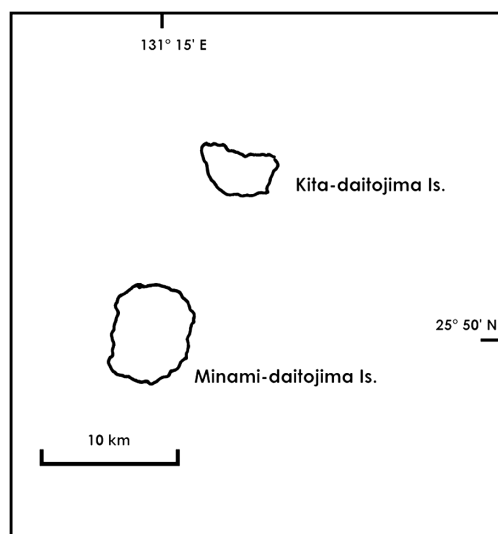


Fig. 3. Map of the Daitojima Islands. (Oki-Daitojima Island is not shown)

Pereopods 3–7 bi-cuspidactylate, propodus locking robust setae developed. Pereopod 4, coxa wider

4 of antenna 2), the left mandible (5-dentate lacinia), the gnathopod 1 (deeply subchelate in male, shallowly subchelate in female), the maxilliped (mediodistally lobed palp article 2, reduced palp article 4), the mascupod gnathopod 2, bicuspidactylate pereopods 3–7, and the uropod 1 (short distolateral robust seta, marginally bare outer ramus). The slender propodus of pereopod 7 of the new genus indicates a closer relationship with *Laniporchestia* than with *Morinoia*. However, the distally truncate telson and its setae arrangement (elongate robust setae on dorsolateral and short apical robust setae) are peculiar to *Laniporchestia*, by which this genus is distin-

guished from *Miyamotoia*. The telson of the latter genus is distally narrowed, and its lobe is with dorsolateral, lateral and apical robust setae. *Morinoia* is distinguished from the new genus by the broader propodus on pereopod 6–7 (5.5–6 times as long as wide vs. 6–9 times as long as wide), as well as by fewer numbers of flagellar articles on the antenna 1 (3–4 vs. 4–6) and the antenna 2 (13–16 vs. 14–21).

Etymology. The genus name is dedicated to the late H. Miyamoto, who was an excellent morphologist and contributed much to clarify the fauna of the Talitridae in Taiwan and Japan.

Key to species of *Miyamotoia*

1. Upper lip with robust setae on lateral margins; pleopod rami *ca.* 0.5 times as long as peduncle
.....*M. spinolabrum* n. sp.
- Upper lip lacking robust setae; pleopod rami *ca.* 0.3 times as long as peduncles
.....*M. daitoensis*

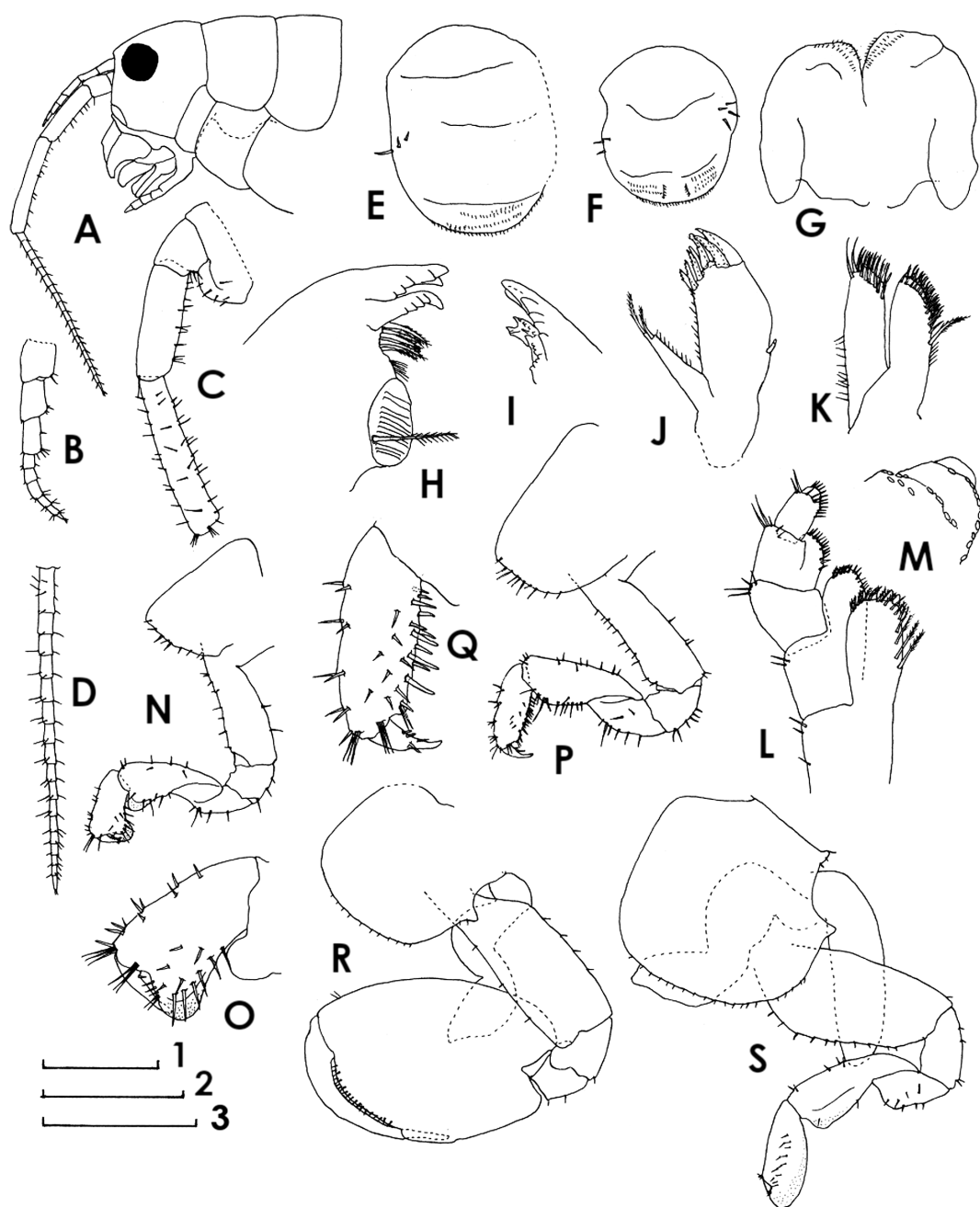


Fig. 4. *Miyamotoia spinolabrum* sp. nov. Female 12.0 mm (holotype), A–E, G–M, P, Q, S; male 8.8 mm (paratype), F, N, O, R. A, head; B, antenna 1; C, antenna 2 (peduncle); D, antenna 2 (flagellum); E, F, upper lip; G, lower lip; H, left mandible; I, right mandible (distal part); J, maxilla 1; K, maxilla 2; L, maxilliped; M, maxilliped (palp articles 3 and 4, setae omitted); N, P, gnathopod 1; O, Q, gnathopod 1 (propodus and dactylus); R, S, gnathopod 2. Scale 1: 0.35 mm for E–G; scale 2: 2.0 mm for A, 1.0 mm for B–D, 0.35 mm for H–L, O, Q, 0.1 mm for M; scale 3: 1.0 mm for N, P, R, S.

26778); data as holotype. 1 female 10.6 mm (NSMT-Cr 26781), Mt. Chibusayama, Hahajima Is., Ogasawara, Tokyo; Feb. 1997; T. Kishimoto coll. 1 male 8.3 mm, 1 female (NSMT-Cr 26777), 1 male 8.5 mm (NSMT-Cr 26782), 1 female, 1 juvenile 7.2 mm (NSMT-Cr 26786); Minamizaki; Hahajima Is., Ogasawara, Tokyo; Feb. 1997; T. Kishimoto coll. 1 female (NSMT-Cr 26783), locality as the previous one; Feb. 1997; K. Murata coll. 8 males, 6 females, 1 juvenile (NSMT-Cr 26788), trail of Mt. Kuwanokiyama (200 m alt., Trunk-Window-Trap at 1.5 m height), Hahajima Is., Ogasawara, Tokyo; 9–17 Jun. 2012; J. Aoki coll. 1 male (NSMT-Cr 26789), Mt. Kokensakiyama (ca. 100 m alt., Flight-Intersept-Trap); 8–10 Jun. 2012; J. Aoki coll.

Description of female (holotype 12.0 mm). Body size medium to large. Eyes (Fig. 4A) ca. 0.4 times as long as head length. Antenna 1 (Fig. 4A, B) not reaching end of peduncular article 4 of antenna 2, peduncular articles 1–3 subequal in length; flagellum shorter than peduncle, with 6 articles. Antenna 2 (Fig. 4A, C, D) slender, peduncular article 5 subequal to articles 3 and 4 combined, flagellum subequal to peduncle in length, with 19 articles, basal articles 1–3 fused. Upper lip (Fig. 4E) with 3 robust setae on right lateral margin (left margin damaged). Left mandible (Fig. 4H), lacinia mobilis 5-dentate. Maxilliped (Fig. 4A, L, M), outer margin of precoxa not stepped, palp article 2 produced mediodistally, palp article 3 slender, palp article 4 reduced. Right mandible (Fig. 4I), lower lip (Fig. 4G), maxilla

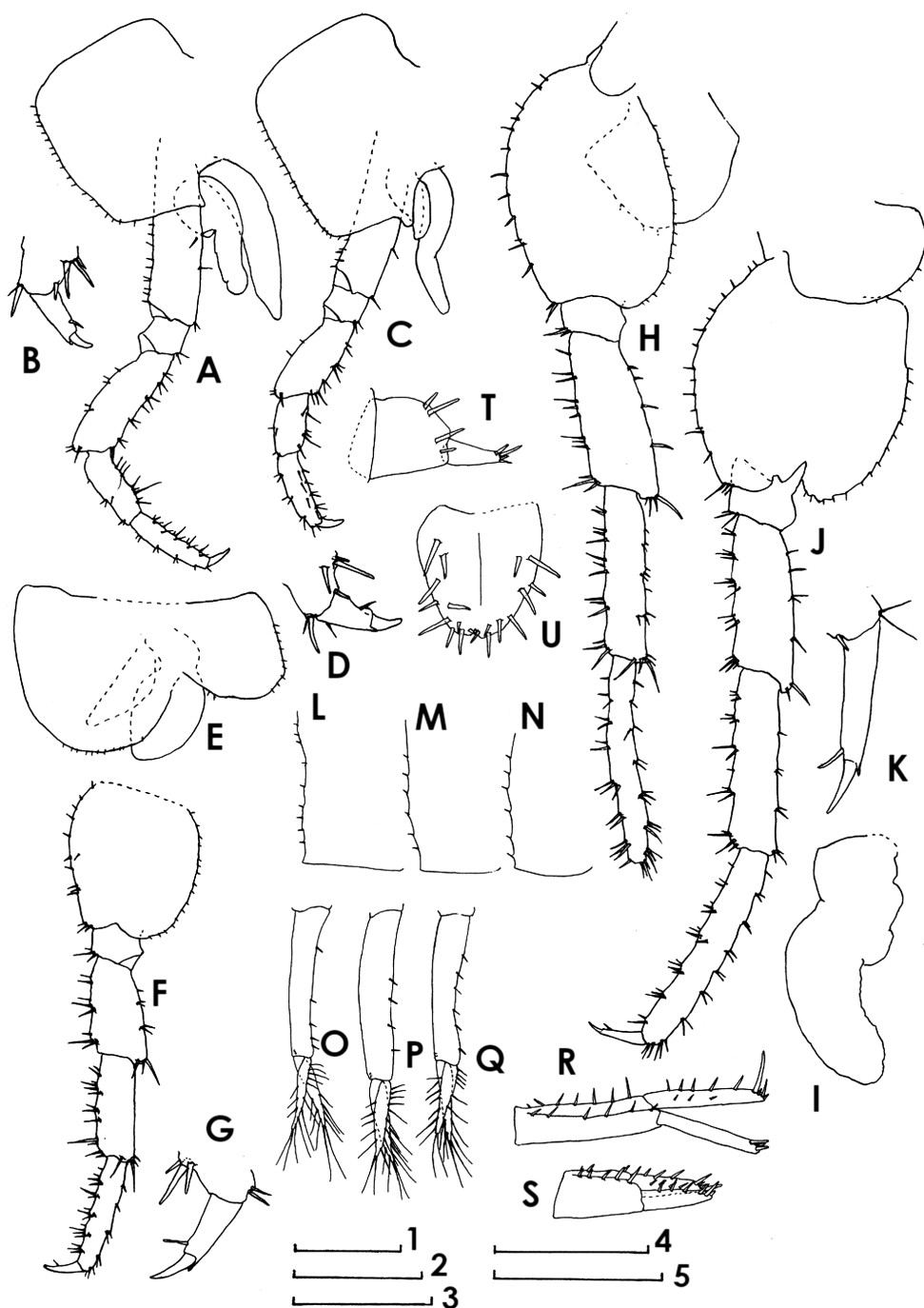


Fig. 5. *Miyamotoia spinolabrum* sp. nov. Female 12.0 mm (holotype). A, C, H, J, pereopods 3, 4, 6, 7; E, pereopod 5 (coxa); F, pereopod 5 (basis-dactylus); B, D, G, K, dactyli of pereopods 3-5, 7; I, coxal gill of pereopod 6; L-N, pleonite side plates 3-1 (right side); O-Q, pleopods 1-3; R-T, uropods 1-3; U, telson. Scale 1: 0.35 mm for T, U; scale 2: 1.0 mm for R, S; scale 3: 1.0 mm for A, C, E, F, H-J, L-N; scale 4: 0.35 mm for B, D, G, K; scale 5: 1.0 mm for O-Q.

Variation. Among five specimens with body length 8.8–13.0 mm, the following variations are confirmed: number of flagellar articles of antenna 1, 5–6; number of flagellar articles of antenna 2, 17–20; number of lateral robust setae on upper lip, 1–4 (5–7 when account on both sides); length ratio of rami to peduncle in pleopods, 0.49–0.52 (means of three pleopods); number of robust setae per telson lobe, 5–10. The values tend to increase with the body length except the number of articles on antenna 1 flagellum and the relative length of pleopod rami.

Etymology. The specific name of this species refers to the robust setose upper lip.

Distribution. This species occurs in terrestrial habitats, including coastal and mountain forests, on Mukojima, Anijima, Chichijima and Hahajima Islands. It is noteworthy that some specimens of this species were collected with the means of Trunk Window Traps at 1.5 m height of trees in Hahajima Island, which indicates the possibility of the occurrence on trunks.

Remarks. This species bears the robust setose upper lip. Within the talitrid genera and species, three sand-hoppers in the southern Hemisphere are known to have robust setae on their upper lips: *Bellorchestia richardsoni* Serejo and Lowry, 2008, *Capeorchestia capensis* (Dana, 1853) (Lowry and Baldanzi, 2016), and *Hermesorchestia alastairi* Hughes and Lowry, 2017. It is apparent that this character distribution is due to convergent evolution, since the robust setae on these sand-hoppers are found on their epistomes and not on the lateral side of the upper lip itself, as in the present species.

***Miyamotoia daitoensis* sp. nov.**

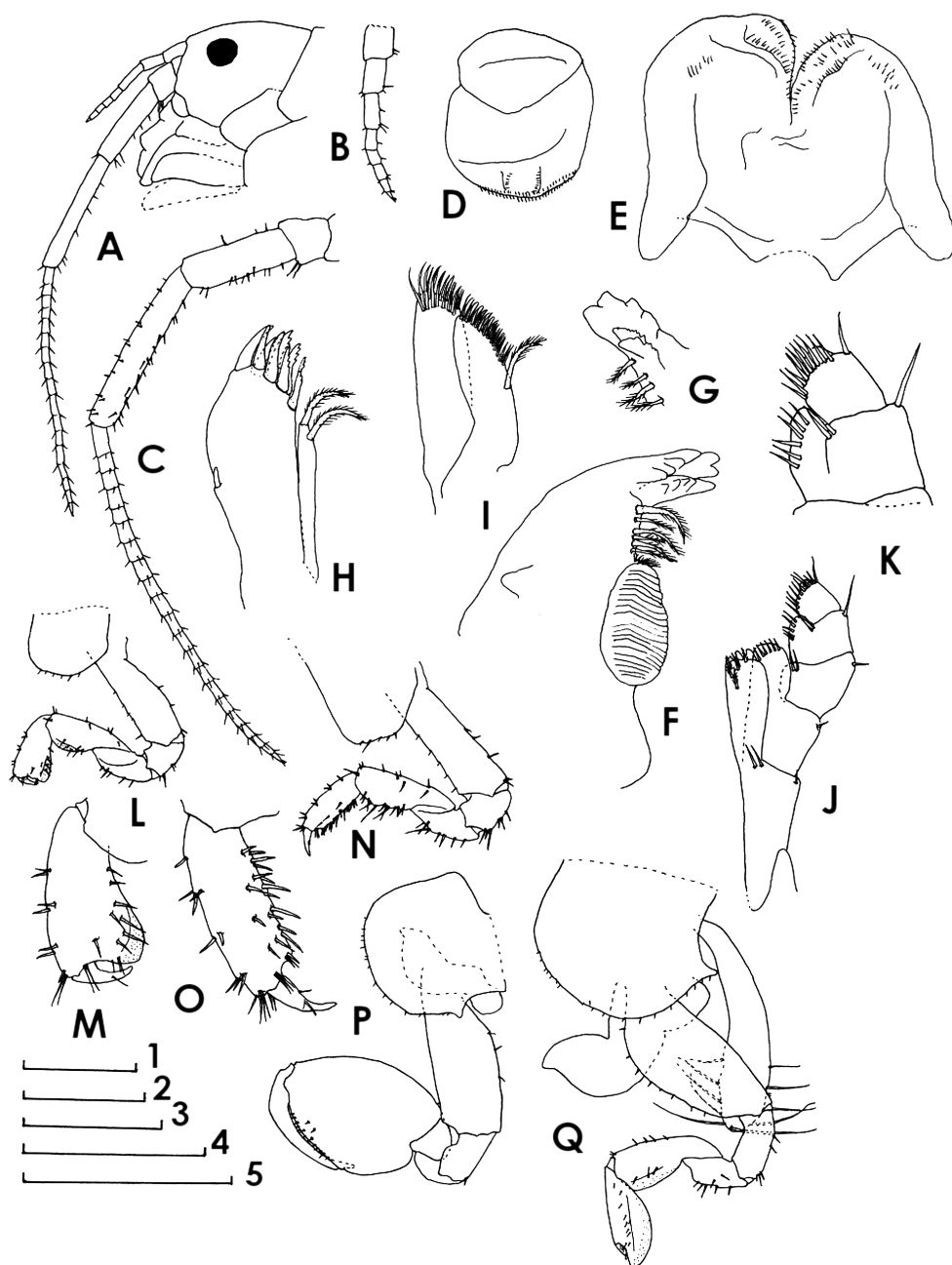


Fig. 6. *Miyamotoia daitoensis* sp. nov. Ovigerous female 11.0 mm (holotype), B–I, N, O, Q; male 7.6 mm (paratype, NSMT-Cr 26793), L, M, P; female 9.2 mm (paratype, NSMT-Cr 26794), A; male 7.6 mm (paratype, NSMT-Cr 26795), J, K. A, head; B, antenna 1; C, antenna 2; D, upper lip; E, lower lip; F, left mandible; G, right mandible (distal part); H, maxilla 1; I, maxilla

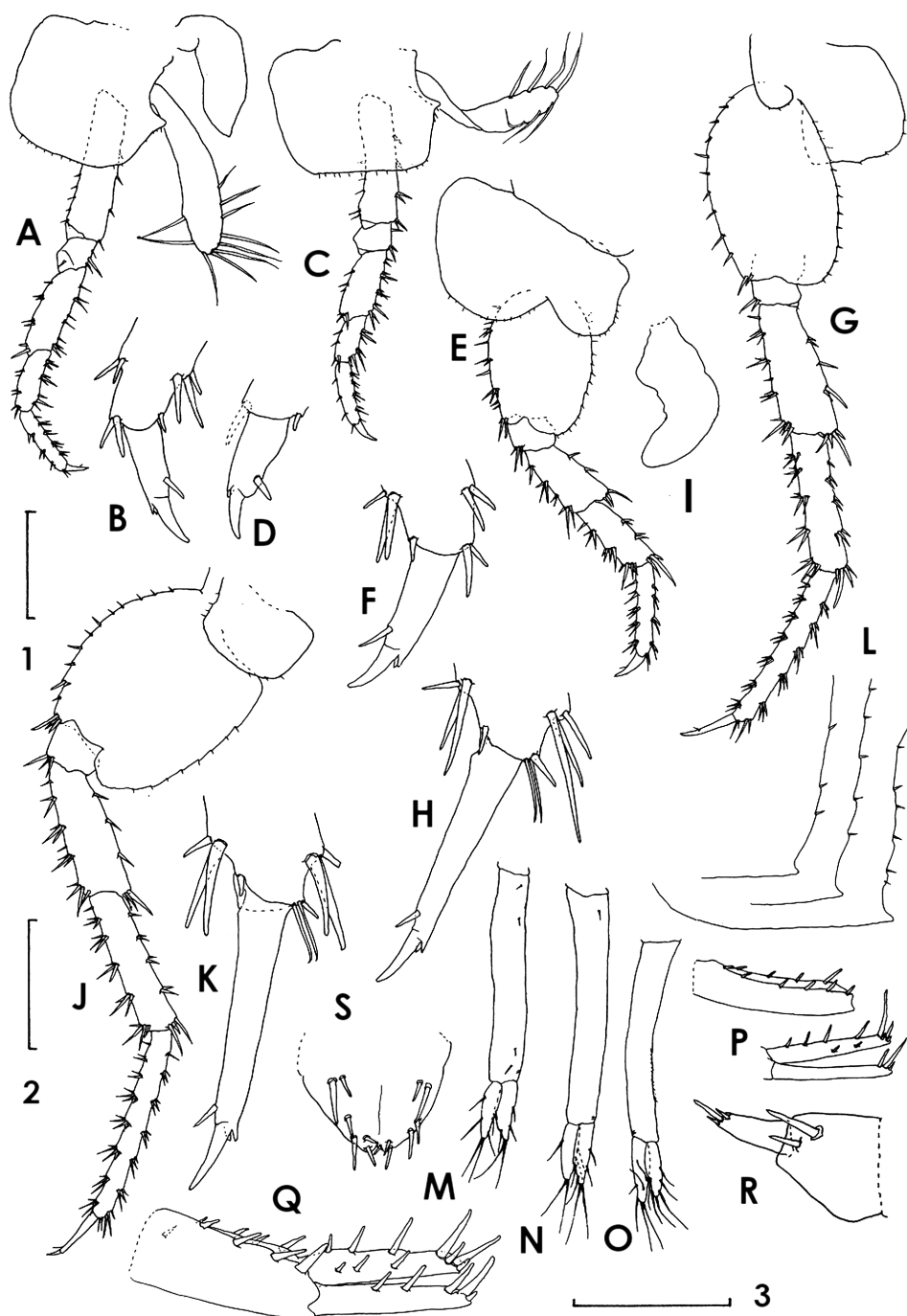


Fig. 7. *Miyamotoia daitoensis* sp. nov. Ovigerous female 11.0 mm (holotype). A, C, E, G, J, pereopods 3–7; B, D, F, H, K, dactyli of pereopods 3–7; I, coxal gill of pereopod 6; L, pleonite side plates 1–3; M–O, pleopods 1–3; P, uropod 1 (peduncle and rami); Q, uropod 2; R, uropod 3; S, telson. Scale 1: 0.5 mm for L–O, Q, 0.35 mm for S; scale 2: 1.0 mm for A, C, E, G, I, J, P, 0.2 mm for B, D, F, H, K; scale 3: 0.35 mm for R.

2 marginal robust setae. Uropod 3 (Fig. 7R), peduncle with 2 robust setae subapically, ramus short, 0.56 times as long as peduncle, marginally bare. Telson (Fig. 7S) narrowed distally with dorsal suture line, with dorsolateral, lateral, and apical robust setae, 6–7 setae per lobe.

Description of male (paratype NMST-Cr 26793 7.6 mm, maxilliped for paratype NMST-Cr 26795 7.6 mm). Antenna 1, flagellum with 4 articles. Antenna 2 slender, with 14 articles. Maxilliped (Fig. 6J, K), palp article 3 broad, article 4 reduced, masked by robust setae. Gnathopod 1 (Fig. 6L, M), pellucid lobe of carpus shallow, propodus with deep pellucid lobe, palm longer than dactylus, propodus 0.78 times as long as carpus, dactylus cusp not clear. Gnathopod 2 (Fig. 6P), dactylus attenuated distally. Pleopod 1, ramus *ca.* 0.25 times as long as peduncle, Telson with 5 robust setae per lobe.

Variation. Among five specimens with body length 7.6–11.0 mm, the following variations were recognized: number of flagellar articles of antenna 2, 14–21, length ratio of rami to peduncle in pleopods 0.25–0.30 (mean of three pleopods); number of robust setae per telson lobe 5–7. The values for the antenna 2 and the telson tend to correlate with the body length.

Etymology. The species name refers to the type locality, the Daitojima Islands.

Distribution. So far known only from terrestrial habitats on Minami-Daito and Kita-Daitojima Islands, Okinawa.

terized by having: 1) the slender antenna 2, slender maxilliped palp article 3, slender pereopods 6 and 7; 2) the male gnathopod 1 with lobed merus; 3) slightly reduced pleopods; and 4) marginally robust-setose outer ramus of uropod 1. The new genus is close to *Cryptorchestia* Lowry and Fanini, 2013, and *Traskorchestia* Bousfield, 1982. However, *Cryptorchestia* is separated from *Leptorchestia* by having a 4-dentate lacinia mobilis on the left mandible and well-developed pleopods (vs. 5-dentate lacinia and slightly reduced pleopods), and *Traskorchestia* is distinguished by having well-developed pleopods and curl-tipped oostegite setae (vs. slightly reduced pleopods and simple-tipped setae). This new genus also shows similarity to *Kaalorchestia* Lowry and Myers, 2019, which, however, is separable from *Leptorchestia* by the non-lobed merus on male gnathopod 1 and the well-developed pleopods. *Miyamotoia* and *Morinoia* have similarity with *Leptorchestia*, which is different from the former two genera in the lobed merus in male gnathopod 1 and the robust setose outer ramus of the uropod 1.

Leptorchestia biseta sp. nov.

[New Japanese name: Hoso-okatobimushi]
(Figs. 8–9)

Platorchestia sp. Morino, 1991: 232 (part)

Type material. Holotype (NSMT-Cr 26806) male 9.8mm; Ran-no-sawa, Ototojima Is., Ogasawara, Tokyo; 9 Jul. 1997; T. Kishimoto coll

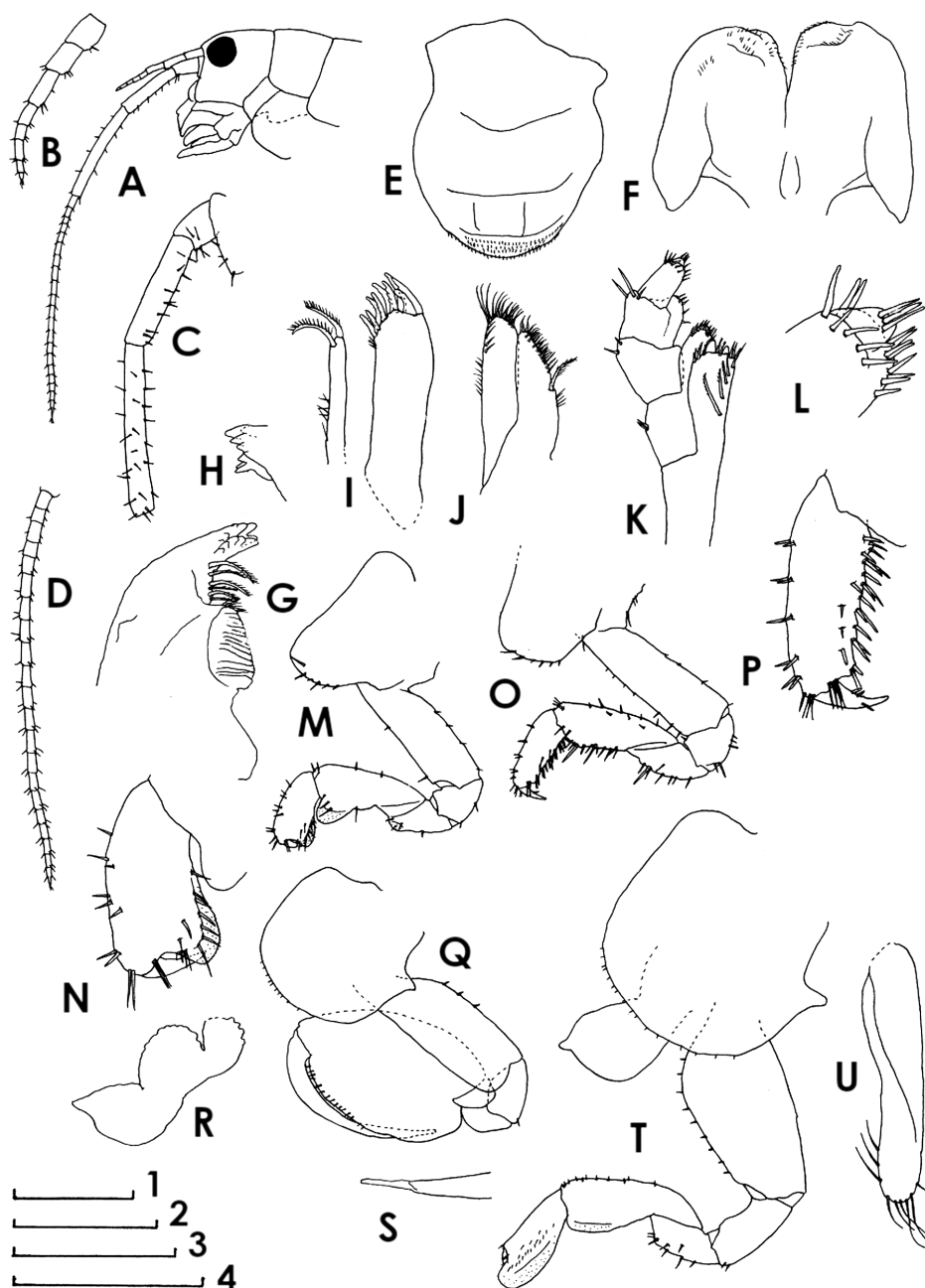


Fig. 8. *Leptorchestia biseta* sp. nov. Male 9.8 mm (holotype), A–N, Q, R, S; female 16.0 mm (paratype), O, P, T, U. A, head; B, antenna 1; C, antenna 2 (peduncle); D, antenna 2 (flagellum); E, upper lip; F, lower lip; G, left mandible; H, right mandible (distal part); I, maxilla 1 (inner plate of NSMT-Cr 26805); J, maxilla 2; K, maxilliped; L, maxilliped (palp article 4); M, O, gnathopod 1; N, P, gnathopod 1 (propodus and dactylus); Q, T, gnathopod 2; R, coxal gill of male gnathopod 2; S, dactylus of male gnathopod 2 (distal part); U, oostegite of gnathopod 2. Scale 1: 0.35 mm for P,

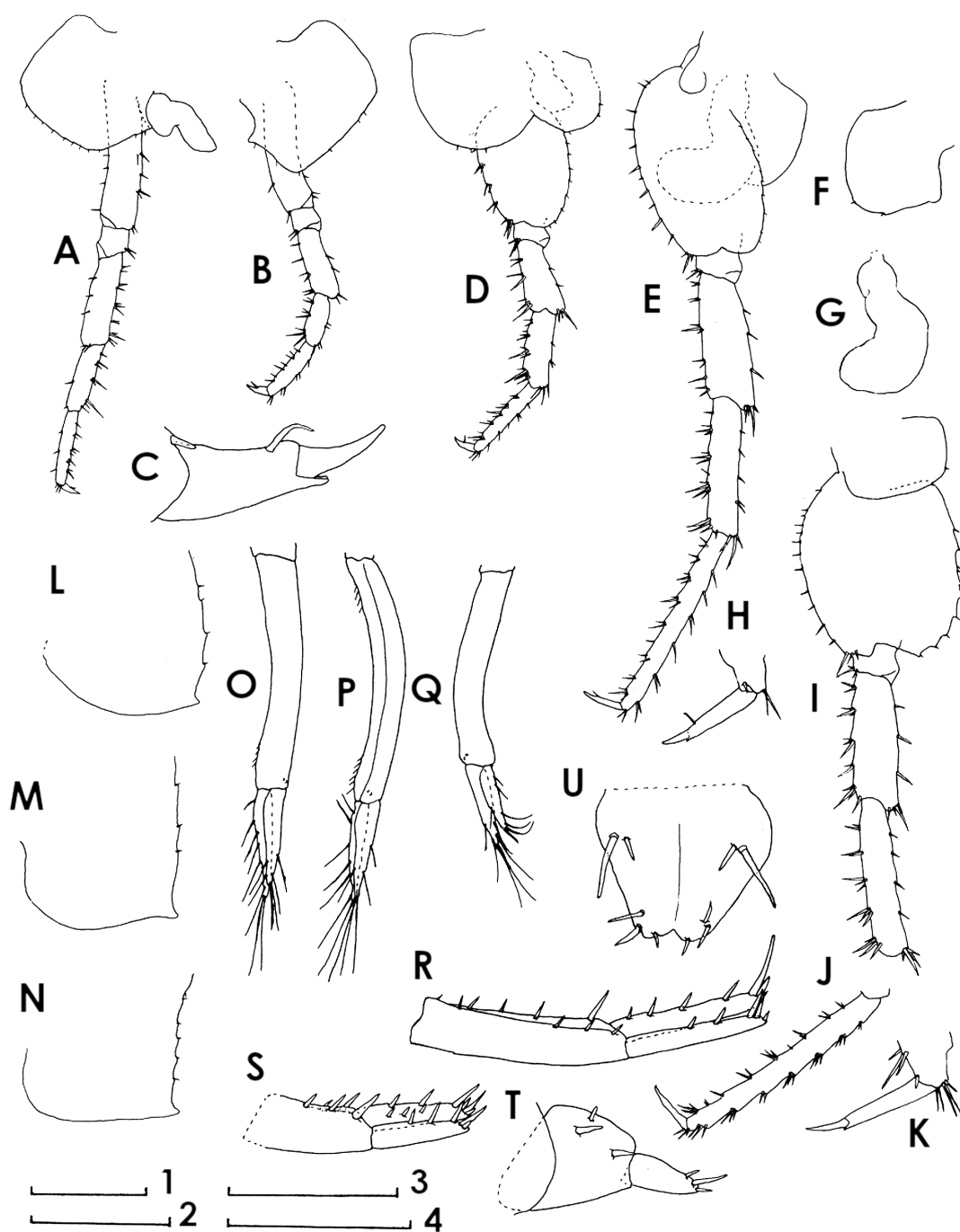


Fig. 9. *Leptorchestia biseta* sp. nov. Male 9.8 mm (holotype). A, B, D, E, pereopods 3–6; C, pereopod 4 (dactylus); F, pereopod 6 (coxa, medial view); G, pereopod 6 (coxal gill); H, pereopod 6 (dactylus); I, pereopod 7 (coxa–carpus); J, pereopod 7 (propodus, dactylus); K, pereopod 7 (dactylus); L–N, pleonite side plates 1–3; O–Q, pleopods 1–3; R–T, uropods 1–3; U, telson. Scale 1: 0.35 mm for H, K; scale 2: 1.0 mm for A, B, D, E–G, I, J, 0.5 mm for O–Q, 0.1 mm for C; scale 3: 1.0 mm for T, U; scale 4: 1.0 mm for L–N, R, S.

Pleonite side plates 1–3 (Fig. 9L–N) weakly acuminate posteriorly, posterior margin with 3–5 setae. Pleopods 1–3 (Fig. 9O–Q), peduncle marginally weakly setose, rami moderately reduced, 0.47, 0.42, 0.42 times as long as respective peduncles. Uropod 1 (Fig. 9R), peduncle with 5 and 3 robust setae on inner and outer margins, respectively, outer ramus with 2 marginal robust setae, inner ramus with 4 dorsal marginal robust setae. Uropod 2 (Fig. 9S), peduncle with 2 + inner, 2 outer marginal robust setae; inner ramus with 2 dorsal, 3 lateral marginal robust setae; outer ramus slightly shorter than outer ramus, with 2 marginal robust setae. Uropod 3 (Fig. 9T), peduncle deep, with 2 dorsal, 1 distal robust seta; ramus 0.59 times as long as peduncle, marginally bare. Telson (Fig. 9U) wider than long, narrowed distally, with dorsal suture line, 2 dorsolateral, and 3 apical robust setae for each lobe.

Description of female (paratype 16.0 mm). Antenna 1, flagellum with 7 articles. Antenna 2, flagellum with 23 articles. Maxilla 1, palp distinct. Gnathopod 1 (Fig. 8O, P), propodus 0.66 times as long as carpus, slightly narrowed distally, palm short *ca.* 0.3 times as long as dactylus. Gnathopod 2 (Fig. 8T), basis weakly expanded anteriorly, merus lacking lobe. Oostegite of gnathopod 2 (Fig. 8U) slender with 9 simple-tipped setae on distal margin. Telson with dorsolateral, lateral and apical robust setae, 7 setae on left lobe.

Variation. In the holotype male, the palp of maxilla 1 is not distinct. However, the paratype female and a male (NSMT-Cr 26803, 10.0 mm) have a distinct palp. Among four specimens with body length 9.8–16.0 mm, the following variations are confirmed: number of flagellar articles of antenna 1,

chichijimaensis, and character variations of *M. japonica* and its distribution in the Ogasawara Islands are noted.

***Morinoia chichijimaensis* sp. nov.**

[New Japanese name: Chichijima-okatobimushi]
(Figs. 10–12)

Type material. Holotype (NSMT-Cr 26853) male 7.6 mm; Mt. Asahi-yama (stream side), Chichijima Is., Ogasawara, Tokyo; 14 Aug. 1989; H. Morino coll. Paratypes, 1 female 10.5 mm (NSMT-Cr 26852), 1 female 9.0 mm (NSMT-Cr 26854); data as holotype.

Additional materials examined. 1 female, 6 juveniles (NSMT-Cr 26831); data as holotype. 1 female (NSMT-Cr 26855); Tatsumi road, Chichijima Is., Ogasawara, Tokyo; Feb. 1997; T. Kishimoto coll.

Description of male (holotype 7.6 mm; head of a paratype female NSMT-Cr 26854 9.0 mm). Body size medium. Eyes (Fig. 10A) *ca.* 0.4 times as long as head length. Antenna 1 (Fig. 10A, B) not reaching end of peduncular article 4 of antenna 2, peduncular article 3 slightly shorter than article 1 and 2 each, flagellum shorter than peduncle, with 3 articles. Antenna 2 (Fig. 10A, C) slender, flagellum subequal to peduncle in length, with 13 articles, basal 2 articles fused. Upper lip (Fig. 10D) lacking robust setae. Left mandible (Fig. 10H), lacinia mobilis 5-dentate. Maxilla 1 (Fig.

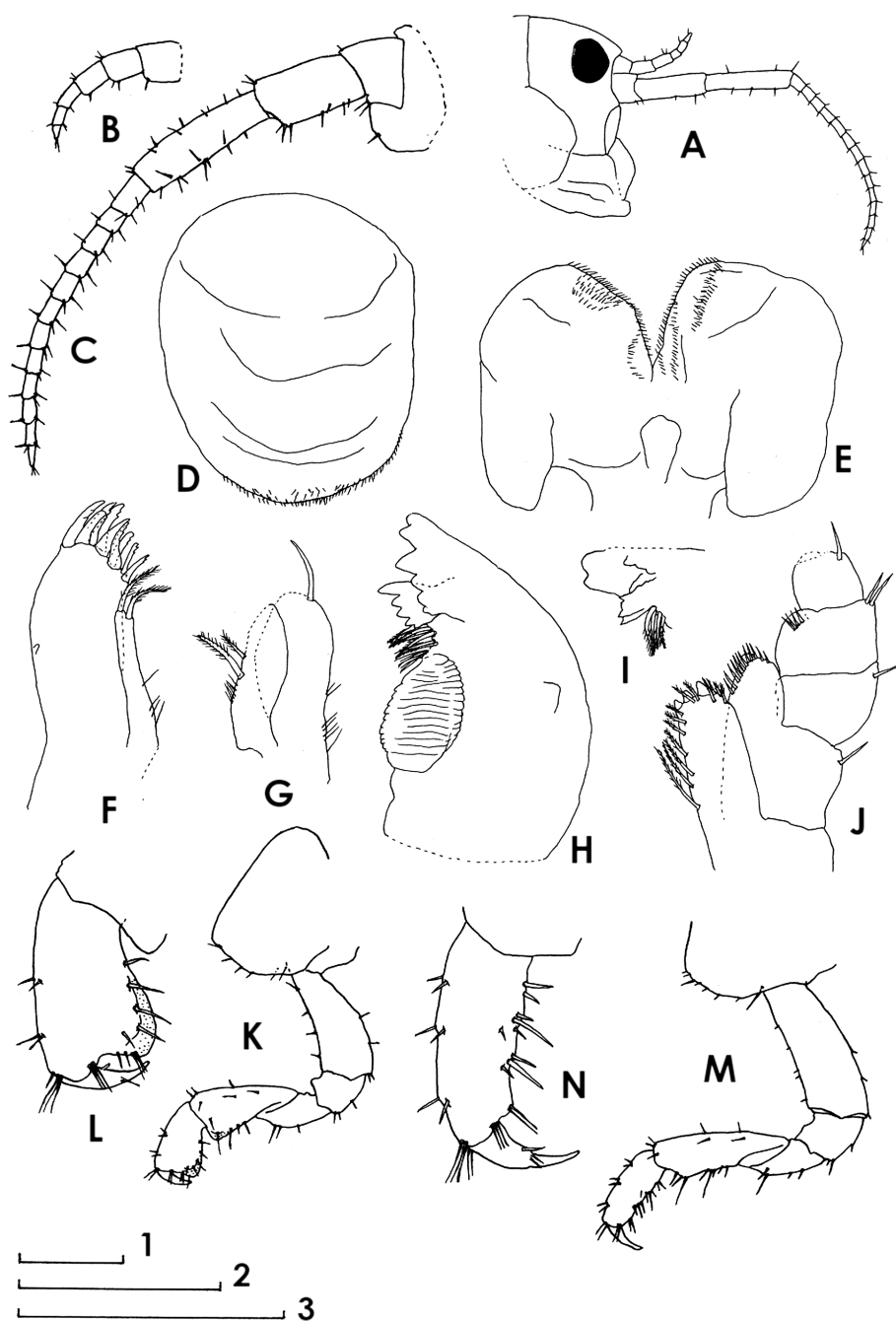


Fig. 10. *Morinoia chichijimaensis* sp. nov. Male 7.6 mm (holotype), B, C, K, L; female 9.0 mm (paratype, NSMT-Cr 26854), A, M and N; female 10.5 mm (paratype, NSMT-Cr 26852), D–J. A, head; B, antenna 1; C, antenna 2; D, upper lip; E, lower lip; F, maxilla 1; G, maxilla 2 (marginal part infested by epibionts); H, left mandible; I, right mandible (distal part); J, maxilliped (distal part infested by epibionts); K, M, gnathopod 1; L, N, gnathopod 1 (propodus and dactylus). Scale 1: 1 mm for A; scale 2: 1 mm for B, C, K, M, 0.4 mm for D–J; scale 3: 0.5 mm for L, N.

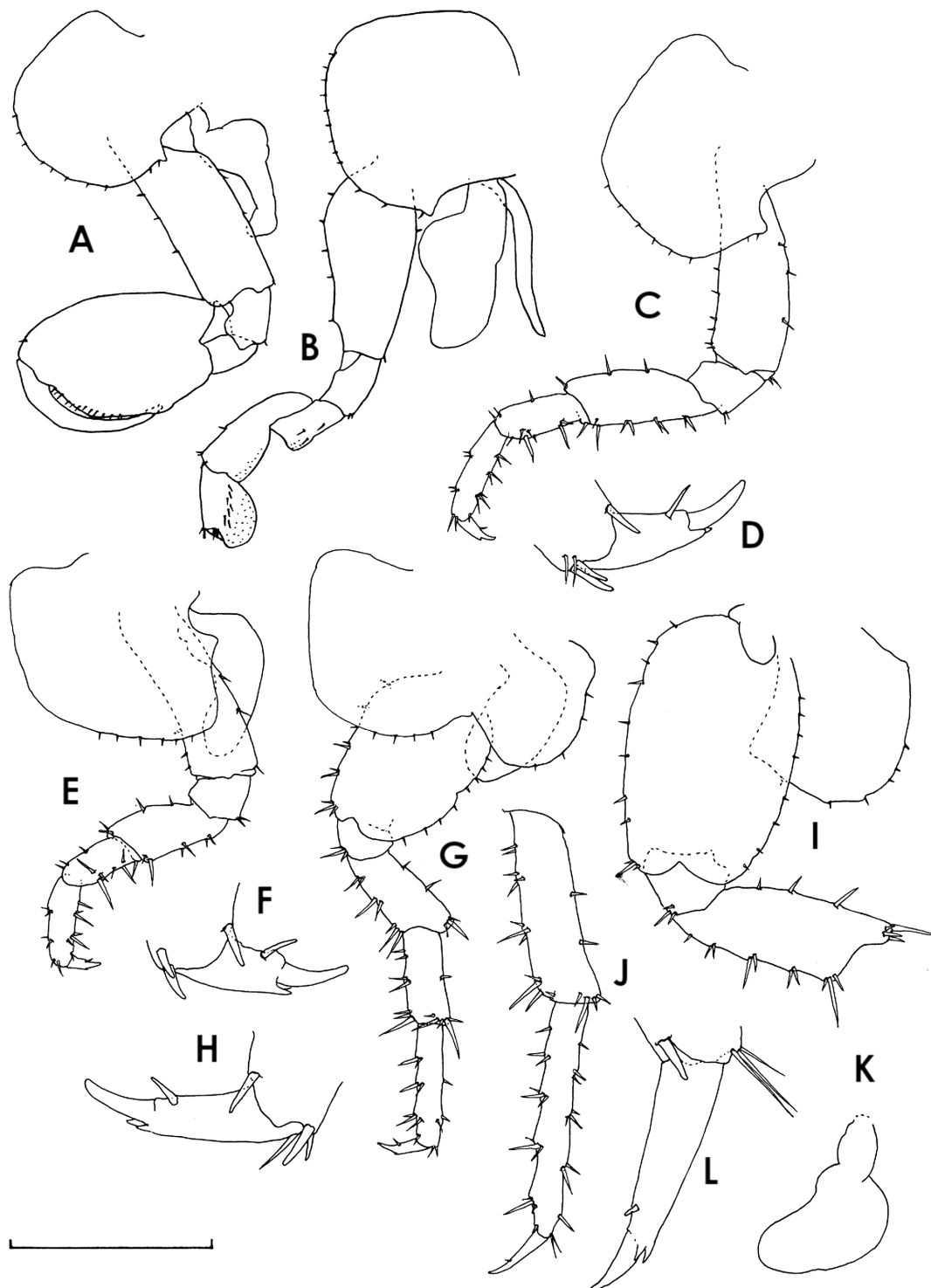


Fig. 11. *Morinoia chichijimaensis* sp. nov. Male 7.6 mm (holotype), A, C–L; female 9.0 mm (paratype, NSMT-Cr 26854), B. A, B, gnathopod 2; C, E, G, I, pereopods 3–6; D, F, H, L, dactyli of pereopods 3–6; J, pereopod 6 (carpus–dactylus); K, coxal gill of pereopod 6. Scale: 1 mm for A, B, 0.8 mm for C, E, G, I–K, 0.2 mm for D, F, H, L.

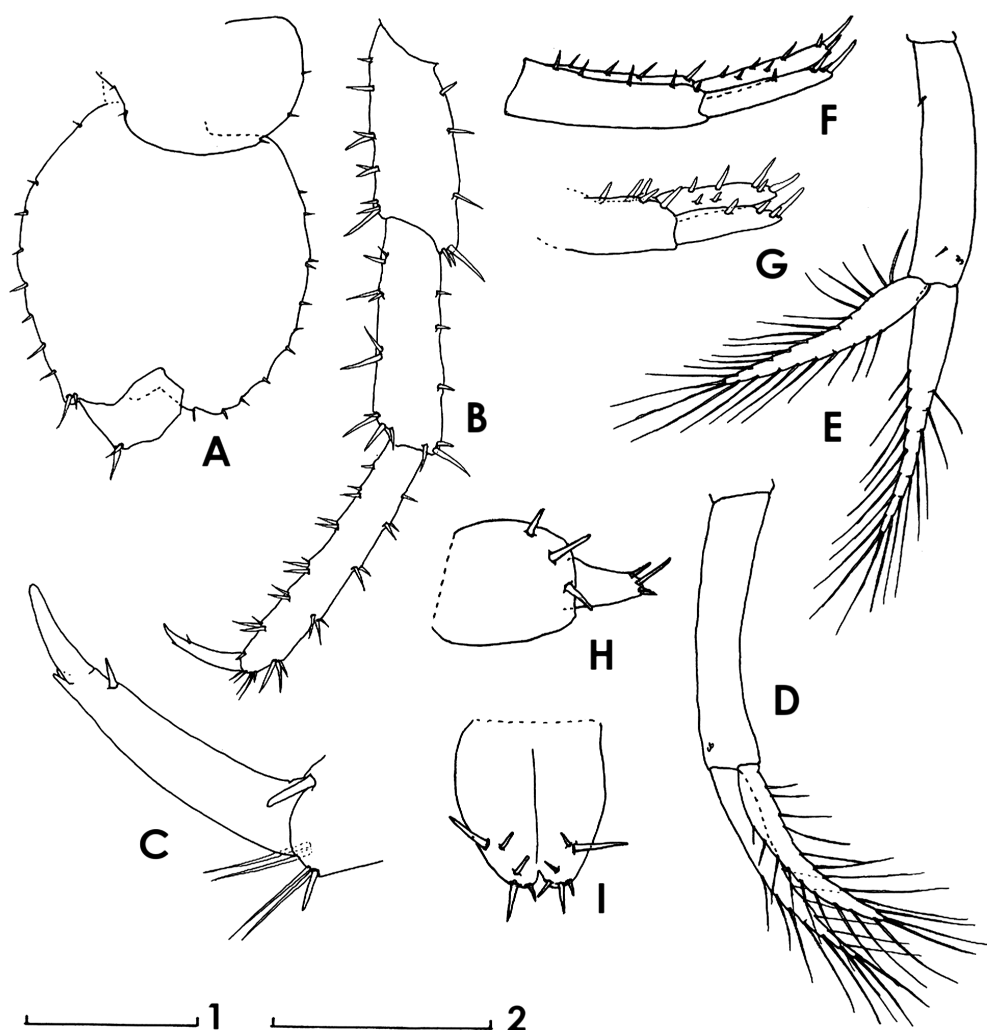


Fig. 12. *Morinoia chichijimaensis* sp. nov. Male 7.6 mm (holotype). A, pereopod 7 (coxa-ischium); B, pereopod 7 (merus-dactylus); C, pereopod 7 (dactylus); D, E, pleopods 1, 3; F-H

***Morinoia japonica* (Tattersall, 1922)**

[Japanese name: Nihon-okatobimushi]

Talorchestia japonica Tattersall, 1922, 452–453, Pl. 21, figs. 1–10.

Platorchestia japonica: Bousfield, 1982, 27; Morino and Dai, 1990, 21–26, figs. 9–11; Hou and Li, 2003, 2442–2448, figs. 1–4; Kim and Min, 2010, 93–98, figs. 1–4.

Morinoia japonica: Lowry and Myers, 2019, 61.

Material examined. **Anijima Island:** 1 male 7.5 mm (NSMT-Cr 26821), 1 female 8.3 mm (NSMT-Cr 26822), 14 juveniles (NSMT-Cr 26820); Takino-ura (waterfall basin), Anijima Is., Ogasawara, Tokyo; 13 Aug. 1989; H. Morino coll. **Hahajima Island:** 1 male 8.5 mm (NSMT-Cr 26811), 1 female 10.5 mm (NSMT-Cr 26812), 1 female (NSMT-Cr 26813), 2 males, 4 females, 1 unsexed (NSMT-Cr 26814); Mt. Kuwanokiyama (damp ground), Hahajima Is., Ogasawara, Tokyo; 13 Apr. 1973; T. Ito coll. 4 males, 6 females, 8 juveniles (NSMT-Cr 26815); near the mouth of Inokumadani Tunnel (freshwater pond), Hahajima Is., Ogasaw

Table 1. Talitrid species from the Ogasawara and Daitojima Islands. Asterisks: endemic to these Islands.

Species	eco-type	Ogasawara Islands						Daito Islands		Source
		Mukojima	Ototojima	Anijima	Chichijima	Hahajima	Kita-daito.	Minami-daito.		
<i>Platorchestia pacifica</i>	beach-hoppers				○	○			Hamabe (2017), Morino (unpublished)	
<i>Morinoia japonica</i>	riparian-hoppers			○		○			present study	
<i>M. chichijimaensis</i> *	riparian-hoppers				○				present study	
<i>Nipponorchestia curvatus</i>	field-hoppers		○		○	○			Morino and Miyamoto (2015a)	
<i>Miyamotoia spinolabrum</i> *	forest-hoppers	○		○	○	○			present study	
<i>M. daitoensis</i> *	field-hoppers</									

Key to species of the Talitridae from the Ogasawara and Daito Islands

1. Eyes lacking; male gnathopod 2 mitten-shaped.....*Minamitalitrus zoltani*.
- Eyes present; male gnathopod 2 enlarged.....2.
2. Merus of male gnathopod 1 with lobe; female gnathopod 1 deeply subchelate; uropod 1, distolateral robust seta large.....3.
- Merus of male gnathopod 1 lacking lobe (or with small lobe); female gnathopod 1 shallowly subchelate; uropod 1, distolateral robust seta small.....4.
3. Maxilliped, outer margin of precoxa stepped; pleopod rami 0.3–0.4 times as long as peduncle.....*Pyatakoveestia boninensis*.
- Maxilliped, outer margin of precoxa not stepped; pleopod rami 0.5–0.6 times as long as peduncle.....*Nipponorchestia curvatus*.
4. Antenna 1 reaching end of peduncular article 4 of antenna 2; merus of male gnathopod 1 with small lobe; uropod 1, outer ramus with 2 marginal robust setae.....*Leptorchestia biseta*.
- Antenna 1 not reaching end of peduncular article 4 of antenna 2; merus of male gnathopod 1 lacking lobe; uropod 1, outer ramus marginally bare or with 1 robust seta.....5.
5. Antenna 2 and pereopod 7 in male incrassate; palm of male gnathopod 2 with 2 tubercles.....*Platorchestia pacifica*.
- Antenna 2 and pereopod 7 not incrassate in male; palm of male gnathopod 2 smoothly convexed.....6.
6. Uropod 1, outer ramus with 1 marginal robust seta; pleopod rami 0.9–1.0 times as long as peduncle.....*Morinoia chichijimaensis*.
- Uropod 1, outer ramus marginally bare.....7.
7. Upper lip with robust setae.....*Miyamotoia spinolabrum*

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