Journal of Marine Science and Technology

Volume 30
Issue 5 *Review-Special Issue (Part 2)*

Article 19

Key to the species of Arietellidae Paramisophria occurring in the China Seas

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Recommended Citation

Shih, Chang-tai; Chen, Qing-Chao; Lan, Yang-Chi; Hsiao, Shih-Hui; and Weng, Chi-Yu (2022) "Key to the species of Arietellidae Paramisophria occurring in the China Seas," *Journal of Marine Science and Technology*: Vol. 30: Iss. 5, Article 19.
DOI: 10.51400/2709-6998.2610
Available at: https://jmstt.ntou.edu.tw/journal/vol30/iss5/19

REVIEW-TAXONOMIC INDEX

Key to the Species of Arietellidae *Paramisophria* Occurring in the China Seas

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Paramisophria japonica(2a/6a/f), koreana(4a/7a/f), platysoma(3a/6b/f), sinica(4b/f) (male unknown), *sinjinensis(f)* (female unknown)

1a	Female	2
1b	Male	5
2a/1a	Leg 5, exopod 2 segmented; endopod elongate, reaching proximal third of exopod segment 2, with 1 outer subterminal seta and 1 terminal seta	*Paramisophria japonica*
2b	Leg 5, exopod 1 segmented; endopod with different structures	3
3a/2b	Leg 5, endopod terminated with small pointed processes	*Paramisophria platysoma*
3b	Leg 5, endopod terminated with 1 or 2 long setae	4
4a/3b	Leg 5, endopod reaching proximal third of exopod, terminated with 1 long seta	*Paramisophria koreana*
4b	Leg 5, endopod reaching beyond midlength of exopod, terminated with 2 long setae	*Paramisophria sinica*
5a/1b	Left leg 5 with endopod	6
5b	Left leg 5 without endopod	7
6a/1b	Right leg 5, exopod 2-segmented, segment 2 significantly expanded medially; endopod of left leg finger-shaped	*Paramisophria japonica*
6b	Right leg 5, exopod 3-segmented, segment 2 moderately expanded medially; endopod of left leg globular	*Paramisophria platysoma*
7a/5b	Right leg 5 exopod segment 2 upper inner margin roundedly protruded	*Paramisophria koreana*
7b	Right leg 5 exopod segment 2 inner margin relatively flat	*Paramisophria sinjinensis*

Available online 14 November 2022

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https://doi.org/10.51400/2709-6998.2610

Paramisophria japonica Ohtsuka, Fosshagen & Go, 1991 (size: female: 1.85−2.08 mm; male: 1.41−1.64 mm)

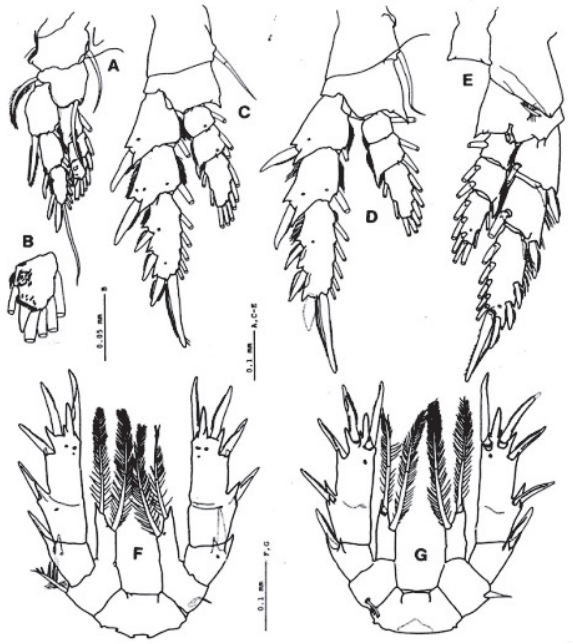


Fig. 3

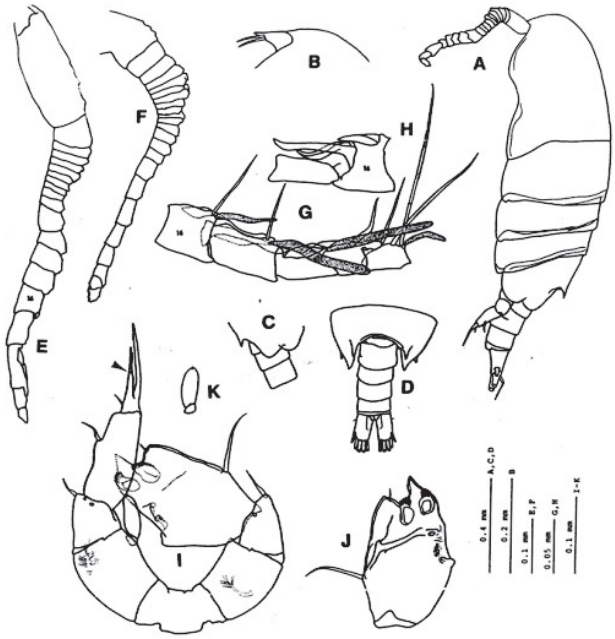


Fig. 4

Paramisophria japonica Ohtsuka, Fosshagen & Go, 1991

Ohtsuka, Fosshagen & Go, 1991. Fig. 3. *Paramisophria japonica* Ohtsuka, Fosshagen & Go, 1991, **Female**: A, leg 1 (anterior); B, terminal segment of leg 1 endopod (anterior); C/D, legs 2/3 (anterior); E, leg 4 (posterior); F/G, leg 5 (anterior/posterior). Holotype: A-F; paratype: G. Nota: A fusion line between the endopod and basipod 2 of leg 5 is not visible from both sides in the holotype, whereas it is clearly visible on the posterior surface in a paratype. Fig. 4. Male: A, habitus (lateral left side); B, forehead (lateral); C, pediger 5 and urosome (lateral right side); D, pediger 5 and urosome (dorsal); E, left antennule (all setae omitted); F, right antennule (all setae omitted); G, left antennule (segments 16−20); H, left antennule (segments 16−17, ventral view); I, leg 5 (anterior; short, thick spinule on outer process indicated by arrowhead); J, terminal segments of right leg 5 (posterior); K, endopod of left leg 5. Nota: Urosome 5-segmented, anal somite small. Left antennule geniculate, 21-segmented (segments 18 and 19 incompletely fused; segment 16 with cuticular ridge along anterior margin, and bearing large spine anteroterminally). Right antennule 22-segmented, shorter than left. In right leg 5, the outer lamellous projection on the terminal segment is triangular in one paratype and smoothly rounded in another paratype.

Adapted from Razouls C., de Bovée F., Kouwenberg J. and Desreumaux N., 2005−2020. Diversity and Geographic Distribution of Marine Planktonic Copepods. Sorbonne University, CNRS. Available at http://copepodes.obs-banyuls.fr/en [Accessed April 11, 2021].

Paramisophria koreana Lim & Min, 2014 (size: female: 1.63 mm; male: 1.45−1.49 mm)

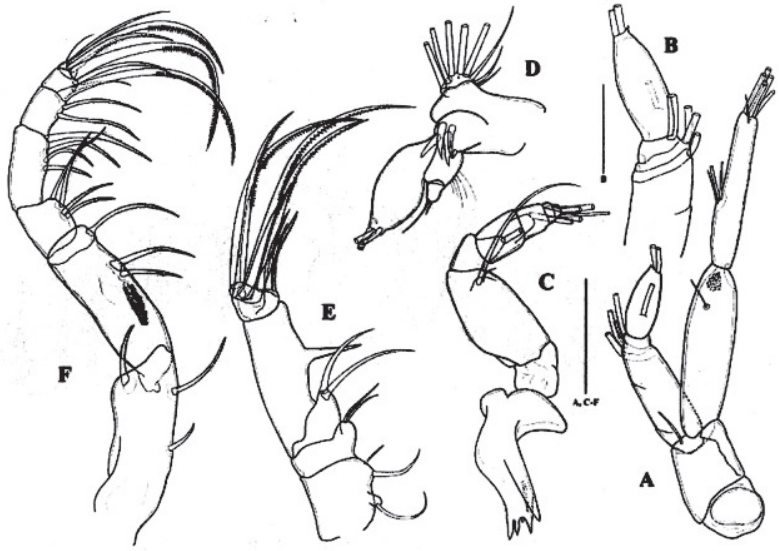


Fig. 8

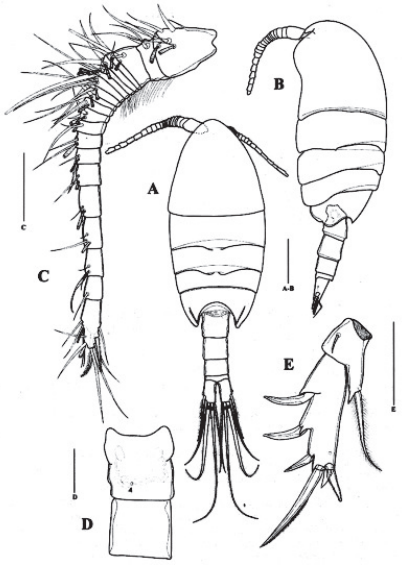


Fig. 11

Lim & Min, 2014. **Fig. 8. Male**: A, antenna; B, antenna endopod; C, mandible; D, maxillule; E, maxilla; F, maxilliped. Scale bars: 0.1 mm (A, C−F); 0.05 mm (B). Nota: A2: with unarmed coxa. Basis with 1 seta. Endopod elongated, 2-segmented, 1st segment with subdistal seta and fine spinules distally on the surface, 2nd segment with 3 medial and 6 distal setae. Exopod 7-segmented indistinctly, 1st to 3rd segments unarmed, 4th to 6th segments bearing 1, 2 and 1 setae, respectively, distal segment with 1 medial and 2 terminal setae. Mandible with 4 teeth plus rounded process between 2nd and 3rd teeth, and 2 rows of spinules on gnathobase. Basis with short setae along outer margin. Endopod reduced, with 2 unequal setae. Exopod 5-segmented, each segment having 1, 1, 1, 1 and 2 setae. Maxillule: praecoxal arthrite with 1 short and 4 long spines. Coxal epipodite with row of 8 outer setae. Basis without endites and with setae along outer margin. Endopod with 2 unequal setae distally. Exopod ovoid, with 3 distal setae. Maxilla stout. Praecoxa and coxa completely separated; 1st and 2nd endites of praecoxa with 1 and 2 setae, respectively. Each coxal endite with 2 setae. Basis with 1 stout naked spine on medial margin. Endopod with 4 stout and 4 short pectinate setae. Maxilliped developed. Praecoxa and coxa fused to form syncoxa, with 1 medial and 2 subdistal setae. Basis and endopod segment 1 partially fused to form allobasis, with 2 medial and 1 distal setae, and patch of spinules on medial margin. Endopod 5-segmented, each segment having 4, 4, 3, 3, and 4 setae. **Fig. 11. Female** (paratype): A/B, habitus (dorsal/lateral); C, right antennule (posterior); D, genital and 1st abdominal somites (ventral; arrow indicates copulatory pore); E, left leg 5. Scale bars: 0.25 mm (A, B); 0.1 mm (C-E).Nota: Rostrum with a pair of filaments. Urosome 4-segmented. Genital double-somite with a pair of ventrolateral gonopores; single copulatory pore ventrolaterally on right side. Caudal rami symmetrical, with 7 setae and setules on outer margin. Right A1 21-segmented; P5 symmetrical. Basis and endopod completely fused with 1 seta posterolaterally; endopod produced into acute process, with 1 plumose seta and rounded process; exopod 1-segmented with 3 short spines along outer margin, 1 distal, and 1 short subdistal spine; length of distal spine about 2.5 times as long as thazt of subdistal spine. Exopodal segment produced into acute process distally, positioned between distal spine and subdistal spine.

Adapted from Razouls C., de Bovée F., Kouwenberg J. and Desreumaux N., 2005−2020. Diversity and Geographic Distribution of Marine Planktonic Copepods. Sorbonne University, CNRS. Available at http://copepodes.obs-banyuls.fr/en [Accessed April 11, 2021].

Paramisophria platysoma Ohtsuka & Mitsuzumi, 1990 (Size: female: 1.08 mm; male: 1.03 mm)

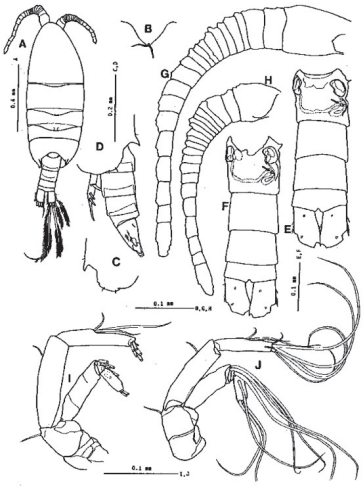


Fig. 1

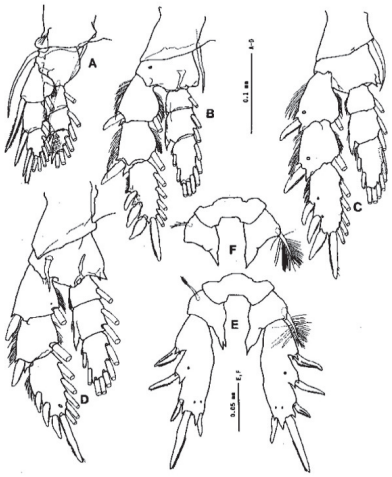


Fig. 3

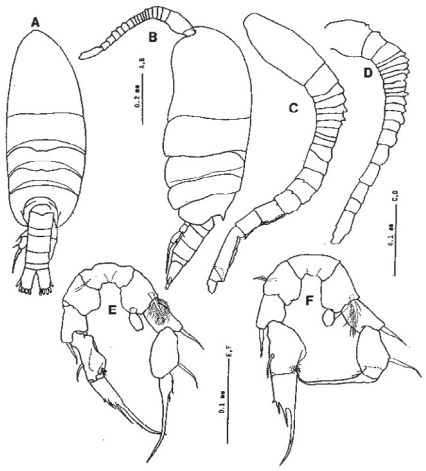


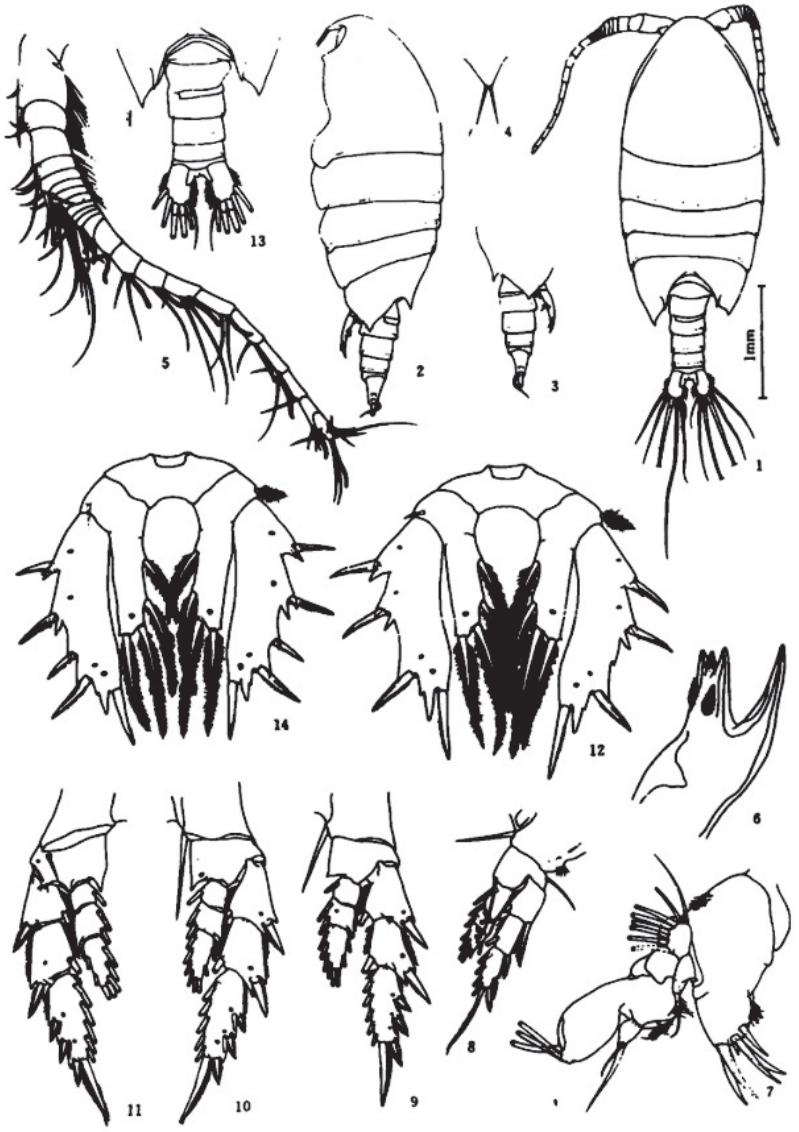
Fig. 4

Paramisophria platysoma Ohtsuka & Mitsuzumi, 1990

Ohtsuka & Mitsuzumi, 1990: **Fig. 1**. *Paramisophria platysoma* Ohtsuka & Mitsuzumi, 1990, **Female**. A. habitus (dorsal); B. rostrum (ventral); C. pediger 5 (lateral); D. pediger 5 & urosome (lateral); E/F. Urosome (ventral; copulatory pores indicated by arrows); G. left antennule (all elements omitted); H. right antennule (all elements omitted); I. right antenna; J. left antenna. Fig. 3. Female. A-D. legs 1−4 (posterior); E. leg 5 (anterior); F. leg 5,basis. **Fig. 4. Male.** A/B. habitus (dorsal/lateral); C/D. antennule (left and right, all elements omitted); E/F, leg 5 (anterior/posterior).

Adapted from Razouls C., de Bovée F., Kouwenberg J. and Desreumaux N., 2005−2020. Diversity and Geographic Distribution of Marine Planktonic Copepods. Sorbonne University, CNRS. Available at http://copepodes.obs-banyuls.fr/en[Accessed May 12, 2021].

Paramisophria sinica Lian & Qian, 1994 (Size: female: 3.12−3.44 mm; male: unknown)

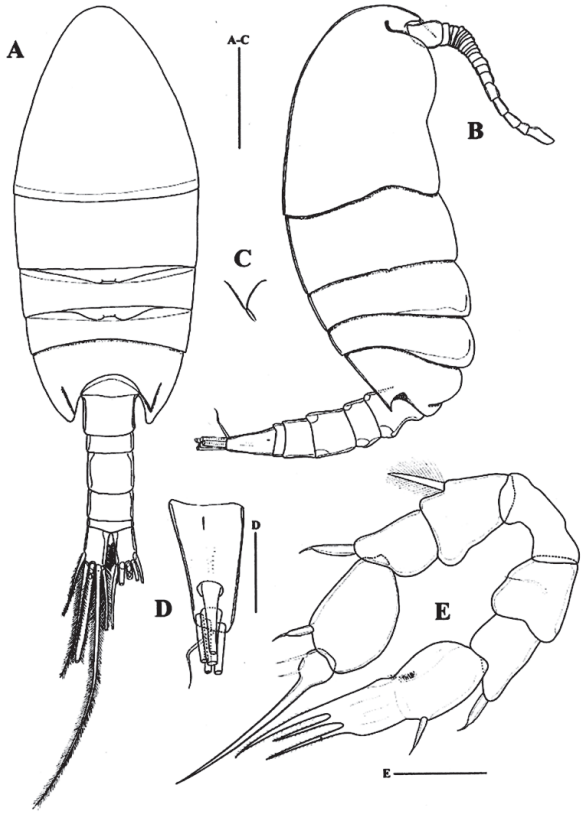


Paramisophria sinica Lian & Qian, 1994

Lian & Qian, 1994: Fig. 1. *Paramisophria sinica* Lian & Qian, 1994, **Female** (from South China Sea). 1/2. Habitus (dorsal/lateral); 3. Pediger 5 & urosome (lateral); 4. Rostrum with rostral filaments (frontal); 5. Left antennule (dorsal); 6. Left mandible cutting edge); 7. Left maxillule; 8. Left leg 1 (anterior); 9. Left leg 2 (anterior); 10. Left leg 3 (anterior); 11. Left leg 4 (posterior); 12. Leg 5 (anterior); 13. Pediger 5 & urosome (dorsal); 14. Leg 5 (anterior)

Adapted from Razouls C., de Bovée F., Kouwenberg J. and Desreumaux N., 2005−2020. Diversity and Geographic Distribution of Marine Planktonic Copepods. Sorbonne University, CNRS. Available at http://copepodes.obs-banyuls.fr/en [Accessed May 12, 2021].

Paramisophria sinjinensis Lim & Min, 2014 (Size: female: unknown; male: 1.41 mm)



Paramiso hria sinjinensis Lim & Min, 2014

Lim & Min, 2014: Fig. 2. *Paramisophria sinjinensis* Lim & Min, 2014, **Male** (from 36°40′N, 126°08′E). A/B. habitus (dorsal/lateral); C. rostrum (dorsal); D. right caudal ramus (lateral); E. leg 5 (posterior). Scale bars: 0.2 mm (A-C); 0.05 mm (D); 0.1 mm (E).

Adapted from Razouls C., de Bovée F., Kouwenberg J. and Desreumaux N., 2005−2020. Diversity and Geographic Distribution of Marine Planktonic Copepods. Sorbonne University, CNRS. Available at http://copepodes.obs-banyuls.fr/en [Accessed May 20, 2021].