



Journal of Marine Science and Technology



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

Article 8

Key to the species of Aetideidae Chiridius occurring in the China Seas

Chang-tai Shih

National Taiwan Ocean University, ctshih@mail.ntou.edu.tw

Qing-Chao Chen

South China Sea Institute of Oceanology

Yang-Chi Lan

Fisheries Research Institute

Shih-Hui Hsiao

National Taipei University of Education

Chi-Yu Weng

Institute of Oceanography, National Taiwan University/Ocean Data Bank of the Ministry of National Science and Technology Council, Taiwan

Follow this and additional works at: <https://jmstt.ntou.edu.tw/journal>



Part of the Fresh Water Studies Commons, Marine Biology Commons, Ocean Engineering Commons, Oceanography Commons, and the Other Oceanography and Atmospheric Sciences and Meteorology Commons

Recommended Citation

Shih, Chang-tai; Chen, Qing-Chao; Lan, Yang-Chi; Hsiao, Shih-Hui; and Weng, Chi-Yu (2022) "Key to the species of Aetideidae Chiridius occurring in the China Seas," *Journal of Marine Science and Technology*: Vol. 30: Iss. 5, Article 8. DOI: 10.51400/2709-6998.2599

Available at: <https://jmstt.ntou.edu.tw/journal/vol30/iss5/8>

This Review-Taxonomic Index is brought to you for free and open access by Journal of Marine Science and Technology. It has been accepted for inclusion in Journal of Marine Science and Technology by an authorized editor of Journal of Marine Science and Technology.

REVIEW-TAXONOMIC INDEX

Key to the Species of Aetideidae *Chiridius* Occurring in the China Seas

Chang-tai Shih ^{a,*}, Qing-Chao Chen ^b, Yang-Chi Lan ^c, Shih-Hui Hsiao ^d, Chi-Yu Weng ^e

^a National Taiwan Ocean University, Taiwan

^b South China Sea Institute of Oceanology, China

^c Fisheries Research Institute, Taiwan

^d National Taipei University of Education, Taiwan

^e Institute of Oceanography, National Taiwan University/Ocean Data Bank of the Ministry of National Science and Technology Council, Taiwan

Chiridius gracilis(4b/7b/f), *molestus*(3a/7a/f), *pacificus*(2a/5a/f), *poppei*(4a/6a/f)

1a	Female	2
1b	Male	5
2a/1a	Maxillule endopod with 9 setae	<i>Chiridius pacificus</i>
2b	Maxillule endopod with 8 setae.	3
3a/2b	Leg 2 (often also leg 3) exopod segment 3 with bulge near base of third outer spine and excavation near base of second outer spine. Mandible endopod segment 2 usually with 8 setae	<i>Chiridius molestus</i>
3b	Leg 2 exopod segment 3 without bulge and excavation between second and third outer spines. Mandible endopod segment 2 usually with 9 setae.	4
4a/3b	Total size 1.59–2.45 mm. Prosome 2.7–3.2 times longer than urosome. Leg 1 exopod segments 1–3, outer spines not reaching base of next spine. Leg 2 endopod 1-segmented, reaching beyond distal margin of exopod segment 2	<i>Chiridius poppei</i>
4b	Total size 2.08–3.50 mm. Prosome 3.2–4.2 times longer than urosome. Leg 1 exopod segments 1–3, outer spines reaching or exceeding base of next outer spine. Leg 2 exopod segment 3 outer spines reaching base of next outer spine. Leg 2 endopod 2-segmented (sometimes segmentation is obscure), mostly not reaching distal margin of exopod segment 2	<i>Chiridius gracilis</i>
5a/1b	Posterolateral corners of prosome exceeding posterior margin of genital somite	<i>Chiridius pacificus</i>
5b	Posterolateral corners of prosome not reaching posterior margin of genital somite	6
6a/5b	Right leg 5 nearly as long as left leg 5. Leg 1: exopod segments 1 & 2, outer spines very short, not reaching middle of next segment	<i>Chiridius poppei</i>
6b	Right leg 5 longer than left leg 5. Leg 1: outer spines of exopod segments 1 & 2 reaching or beyond midlength of next segment	7
7a/6b	Posterior points of posterior corners of prosome hardly reaching midlength of urosomite 1. Maxilliped: endopod segment 1 with 1 medial seta. Terminal segment of left leg 5: length 2.5 times width and 5 times as long as terminal spine. Right leg 5: distal segment with triangular protuberance at proximal 40% of inner margin	<i>Chiridius molestus</i>
7b	Posterior points of posterior corners of prosome usually reaching posterior margin of urosomite 1. Maxilliped: endopod segment 1 with 3 medial setae. Terminal segment of left leg 5: length 3 times width and 2 times as long as terminal spine. Right leg 5 distal segment with smooth inner margin	<i>Chiridius gracilis</i>

Available online 14 November 2022

* Corresponding author.

E-mail address: ctshih@mail.ntou.edu.tw (C.-t. Shih).



Chiridius gracilis Farran, 1908 (Size: female 2.08–3.50 mm; male, 1.96–2.65 mm)

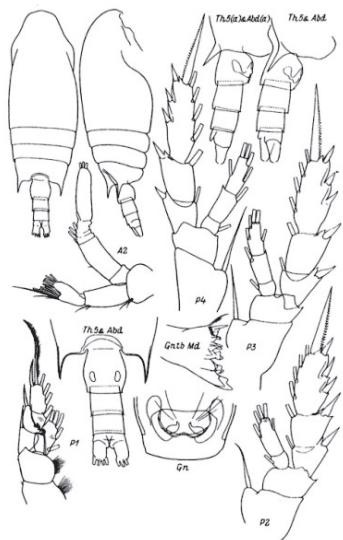


Fig. 83

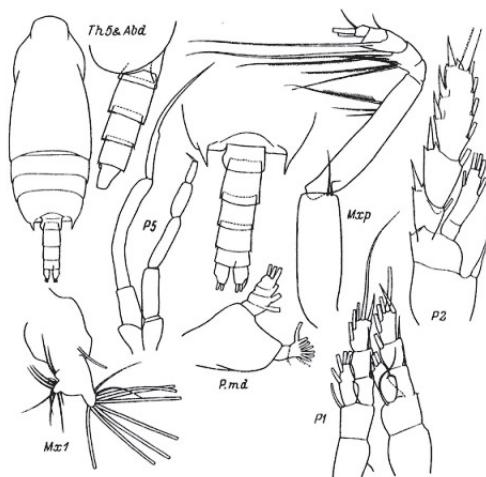
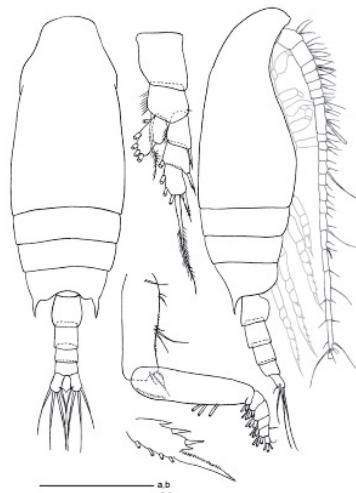


Fig. 84



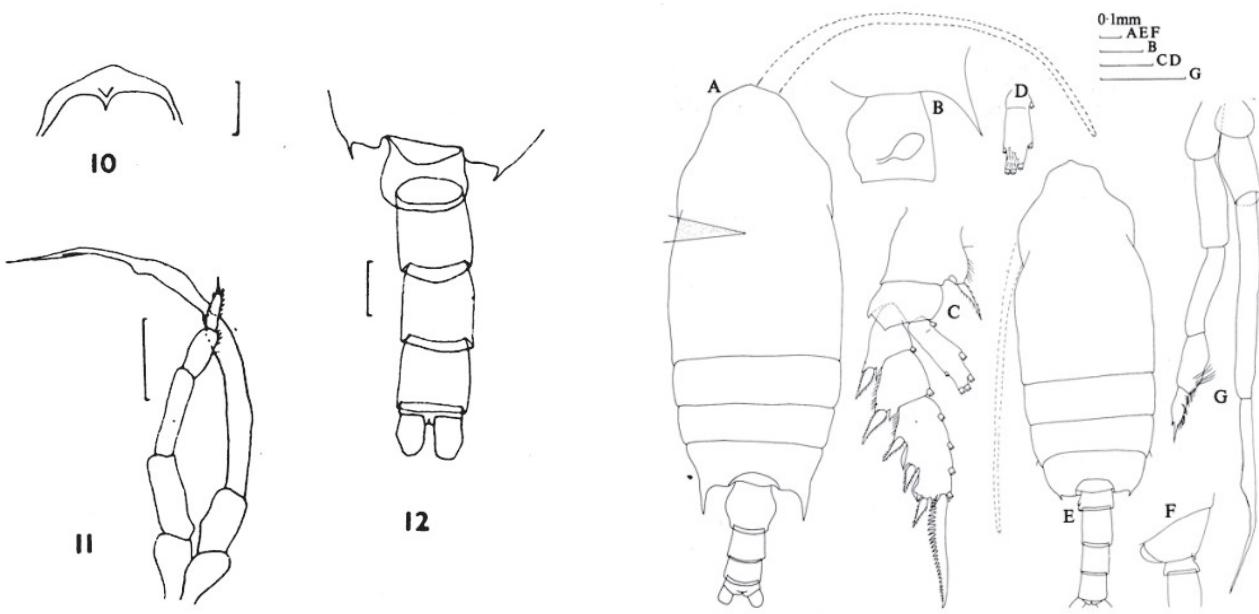
Original

Markhaseva, 1996: Fig. 83. Female. figures from specimens from different stations. Gn: genital field (ventral); Gntb Md: gnathobase of mandible (partial). Fig. 84. Male (from different specimens, SE Pacif.). habitus (dorsal); Th5 & Abd, pediger 5 & urosome (dorsal/lateral) P.md: mandibular palp; Mx1, maxillule; Mxp, maxilliped; P1, 2, 5, legs 1, 2, 5.

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 14 2021].

Original. Female, 3.25 mm, from Gulf of St. Lawrence. Habitus (dorsal/lateral), maxilliped, leg 1.

Chiridius molestus Tanaka, 1957 (Size: female 2.10–2.72 mm; male, 1.80–2.16 mm)



Bradford, 1970

Bradford & Jillett, 1980

Bradford, 1970: Figs 10–12. As *Chiridius gracilis*. Male (off Kaikoura, New Zealand): 10, forehead (ventral view); 11, leg 5; 12, urosome (dorsal). Scale bars represent 0.1 mm.

Bradford & Jillett, 1980: p.24, Fig. 12. As *Chiridius gracilis*. Female: A, habitus (dorsal); B, genital segment (lateral left side); C, leg 2; D, endopod of leg 2 (anterior surface). Male: E, habitus (dorsal); F, pediger 5 and 1st urosomal segment (lateral left side); G, leg 5.

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 October 28 2020].

Chiridius pacificus Brodsky, 1950 (Size: female 2.08–3.52 mm; male, 2.36–2.65 mm)

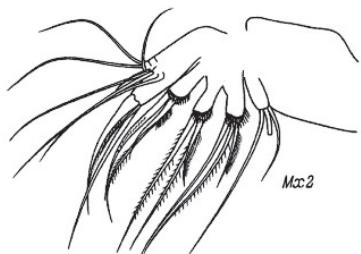
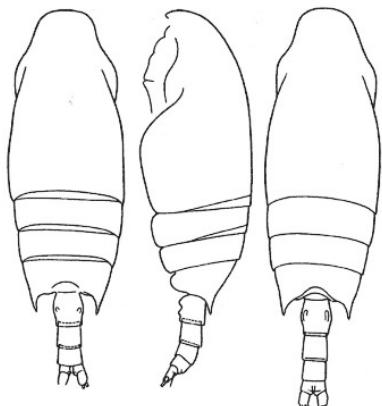


Fig. 91

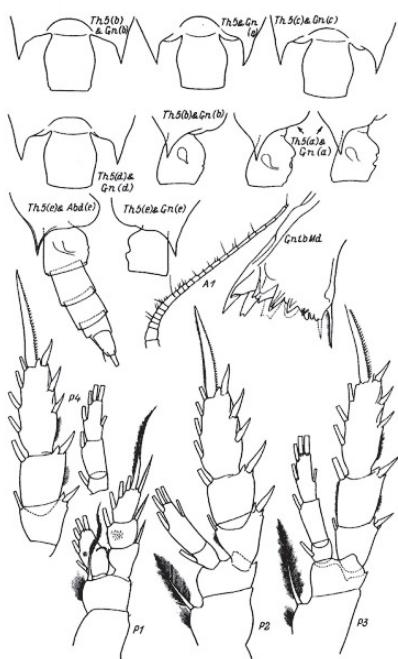


Fig. 92

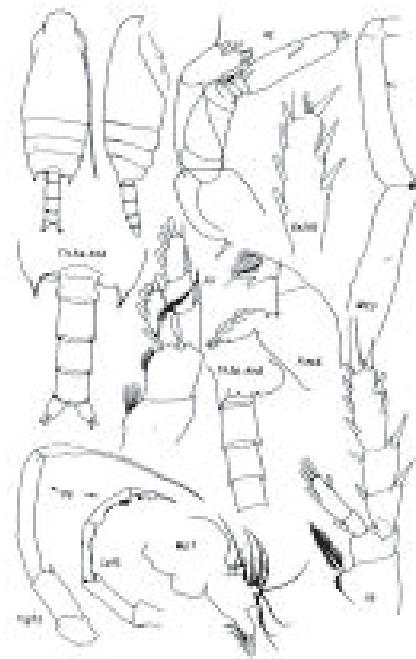
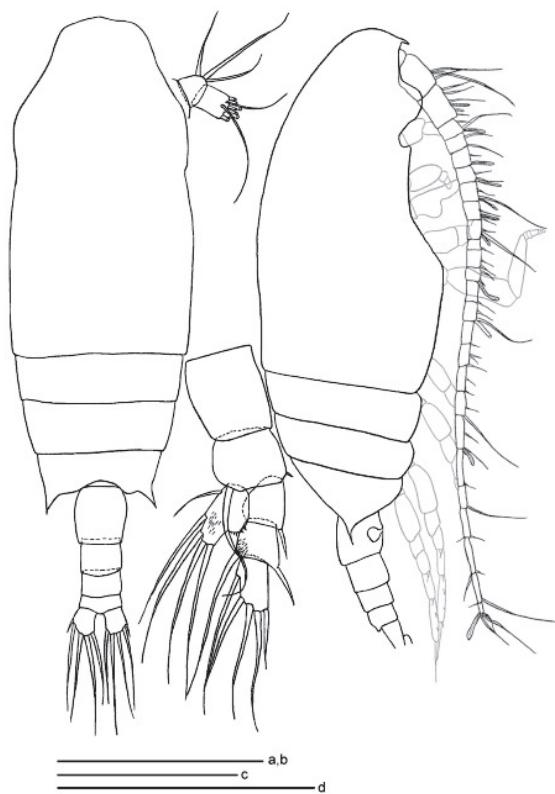


Fig. 93

E.L.Markhaseva 1996: Fig. 91. Female. habitus & maxilla. Fig. 92. Female. A1, antennule; GntbMd, gnathobase of Mandible, Th5 & Gn, pedoger 5 & genital double somite; Th5 & Abd A1, pediger 5 & abdomen; antennule; P1-4, legs 1–4. Fig. 93. Male. Re. exopod; P.md. mandibular palp; Abd urosome.

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 a4 2021].

Chiridius pacificus Brodsky, 1950

Original

Original. *Chiridius pacificus* Brodsky, 1950. Female, 2.96 mm, east of Taiwan (east of Turtle Island, 25°15'N, 121°55'E). habitus (dorsal/lateral); mandible endopod; leg 1.

Chiridius poppei Giesbrecht, 1892 (Size: female 1.59–2.45 mm; male, 1.50–2.13 mm)

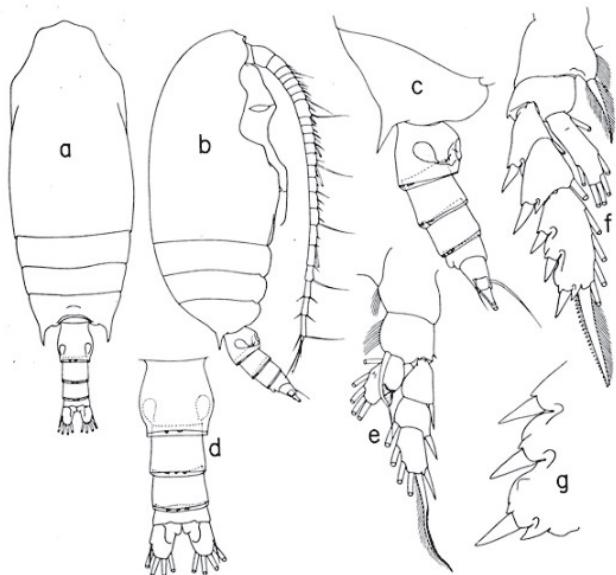


Fig. 5

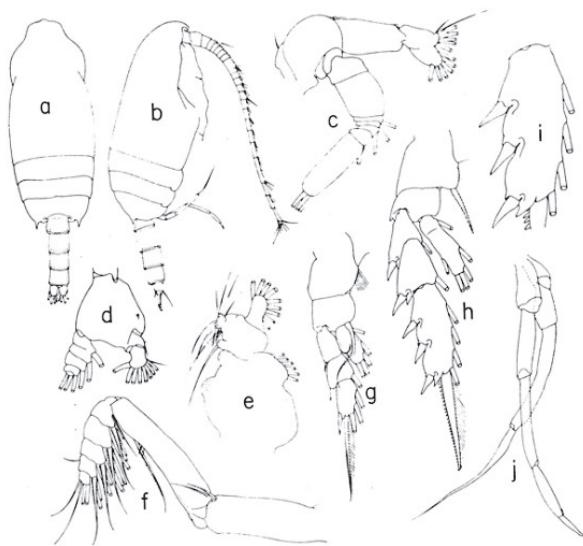


Fig. 6

T. Park, 1975. **Fig. 5.** Female (from Gulf of Mexico): a/b, habitus (dorsal/lateral); c, posterior prosome and urosome (right side); d, urosome (dorsal); e, leg 1; f, leg 2; g, lateral portion of exopod segment 3 of leg 2 (anterior). **Fig. 6.** Male (from Gulf of Mexico): a/b, habitus (dorsal/lateral); c, antenna; d, mandibular palp; e, maxillule; f, maxilliped; g/h, legs 1/2 (anterior); i, leg 2 exopod segment 3 (anterior); j, leg 5 (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 April 14 2021].