



## Key to the species of Subeucalanidae Subeucalanus occurring in the China Seas

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## REVIEW-TAXONOMIC INDEX

# Key to the Species of Subeucalanidae *Subeucalanus* Occurring in the China Seas

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*Subeucalanus crassus* (4b/11a/f), *longiceps* (2a/f) (male unknown), *monachus* (4a/12a/f), *mucronatus* (6a/9b/f), *pileatus* (7b/12a/f), *subcrassus* (5a/10a/f), *subtenuis* (7a/9a/f)

|         |                                                                                                                    |                                |
|---------|--------------------------------------------------------------------------------------------------------------------|--------------------------------|
| 1a      | Female .....                                                                                                       | 2                              |
| 1b      | Male .....                                                                                                         | 8                              |
| 2a      | Head triangular, height and width subequal.....                                                                    | <i>Subeucalanus longiceps</i>  |
| 2b      | Head structure different.....                                                                                      | 3                              |
| 3a/2b   | Head front more or less rounded.....                                                                               | 4                              |
| 3b      | Head front more or less pointed.....                                                                               | 5                              |
| 4a/3b   | Prosoma length 2.5 times width .....                                                                               | <i>Subeucalanus monachus</i>   |
| 4b      | Prosoma length 1.3 times width .....                                                                               | <i>Subeucalanus crassus</i>    |
| 5a/3b   | Head front, width > height.....                                                                                    | <i>Subeucalanus subcrassus</i> |
| 5b      | Head front, width equal to or less than height.....                                                                | 6                              |
| 6a/5b   | Head front pointed.....                                                                                            | <i>Subeucalanus mucronatus</i> |
| 6b      | Head front slightly rounded.....                                                                                   | 7                              |
| 7a/6b   | Sides of head front straight .....                                                                                 | <i>Subeucalanus subtenuis</i>  |
| 7b      | Sides of head front concave.....                                                                                   | <i>Subeucalanus pileatus</i>   |
| 8a/1b   | Leg 5: length ratio of segment 2 to segment 1 > 1.5.....                                                           | 9                              |
| 8b      | Leg 5: length ratio of segment 2 to 1 about 1 or less.....                                                         | 10                             |
| 9a/8a   | Antenna: basis with 3 inner setae; endopod segment 1 with 2 inner setae.....                                       | <i>Subeucalanus subtenuis</i>  |
| 9b      | Antenna: basis without inner seta; endopod segment 1 with 1 inner seta.....                                        | <i>Subeucalanus mucronatus</i> |
| 10a/8b  | Leg 5: segment 4 longer than segment 3, with several patches of spinules near distal and lateral margins.....      | <i>Subeucalanus subcrassus</i> |
| 10b     | Leg 5: segment 4 shorter than or equal to segment 3 in length, without patches of spinules near distal margin..... | 11                             |
| 11a/10b | Leg 5: surface of leg 4 naked. Body length usually longer than 2.5 mm .....                                        | <i>Subeucalanus crassus</i>    |
| 11b     | Leg 5: surface of leg 4 covered with short spinules. Body length usually shorter than 2.5 mm .....                 | 12                             |
| 12a/11b | Length ratio of prosoma to urosome >5.0.....                                                                       | <i>Subeucalanus pileatus</i>   |
| 12b     | Length ratio of prosoma to urosome <4.5.....                                                                       | <i>Subeucalanus monachus</i>   |

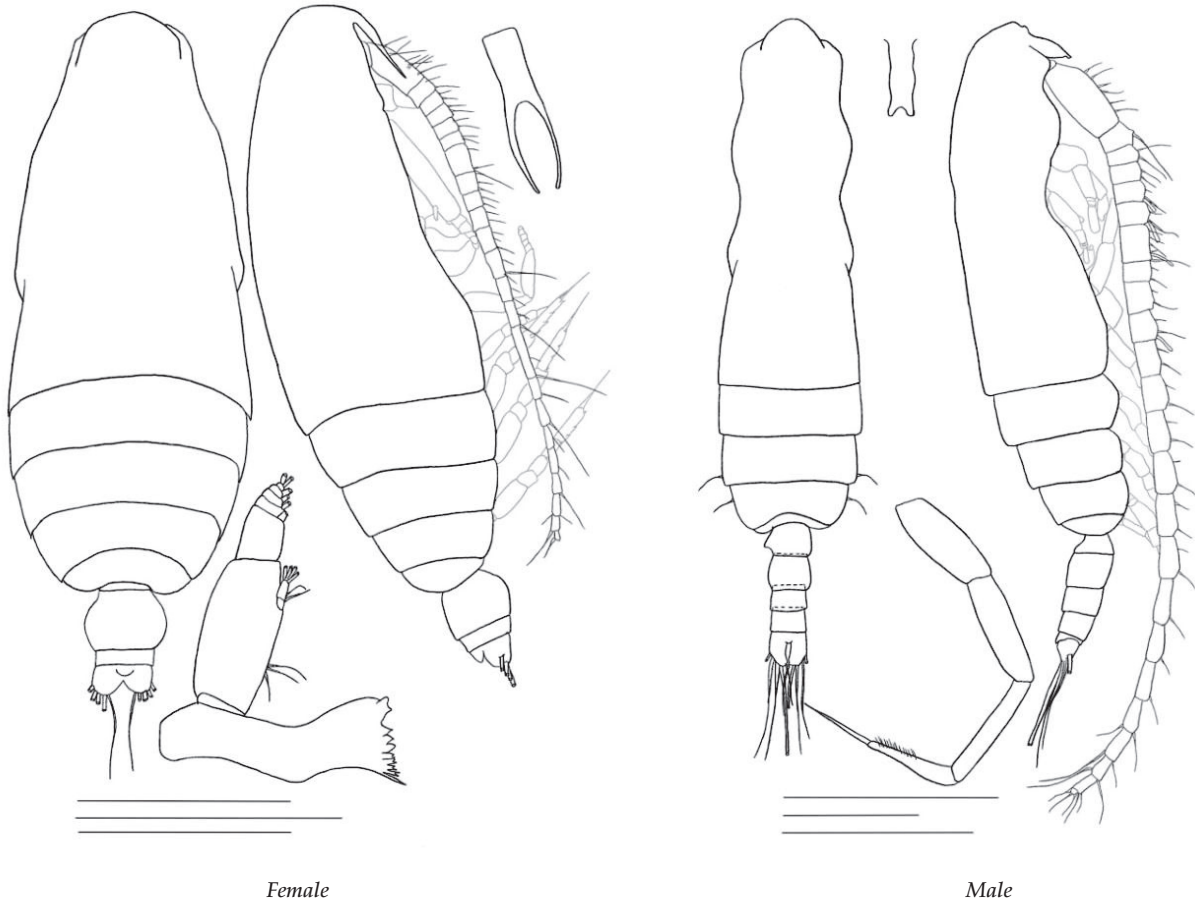
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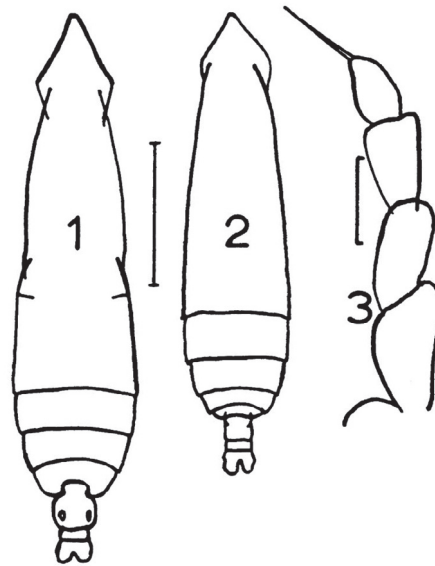
*Subeucalanus crassus* (Giesbrecht, 1888) (Size: female, 2.10–4.60 mm; male, 2.40–3.50 mm)



*Subeucalanus crassus* (Giesbrecht, 1888)

Original. *Subeucalanus crassus* (Giesbrecht, 1888), Female, 3.22 mm, east of Taiwan (K1): a/b. habitus (dorsal/lateral); c. rostrum (ventral); d. right mandible (anterior). Scales: a, b = 1 mm; c = 0.25 mm; d = 0.5 mm. Male, 2.96 mm, Taiwan Strait (24°18'N, 121°46'E): a/b. habitus (dorsal/lateral); c. Rostrum (ventral); d. left leg 5. Scale: a, b = 1 mm; c = 0.5 mm, d = 0.5 mm.

*Subeucalanus longiceps* Matthews, 1925 (Size: female, 3.89–5.10 mm; male, unknown)

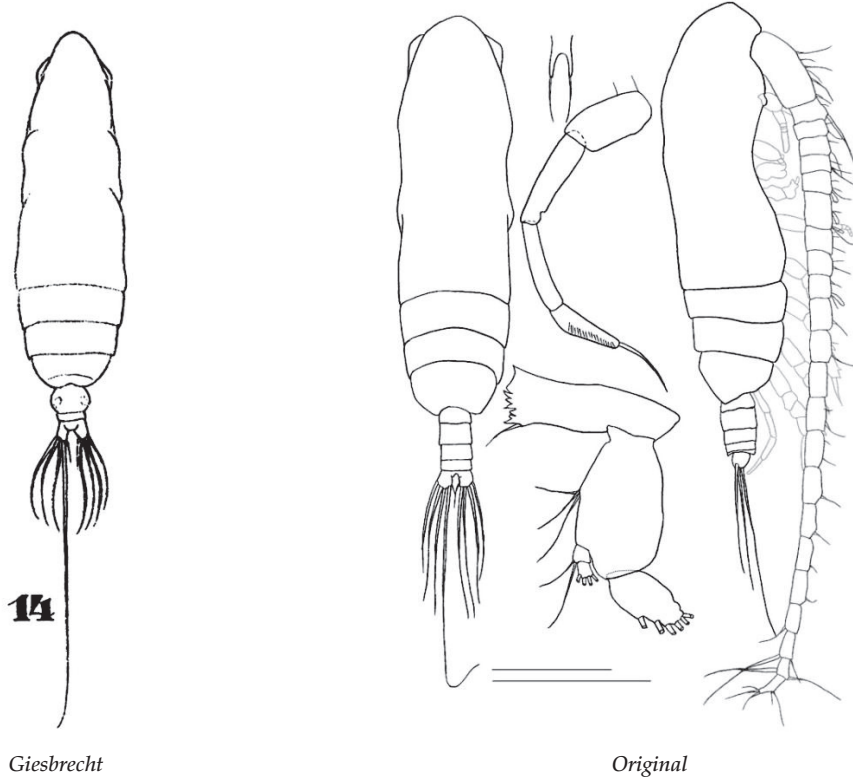


*Subeucalanus longiceps* Matthews, 1925

Bradford, 1972: Fig. 5. *Subeucalanus dentatus* (A. Scott, 1909), Female. 1. habitus (dorsal). Male. 2. habitus (dorsal); 3. leg 5. Scale bars: 1 mm (1, 2); 0.1 mm (3).

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 29 2021].

*Subeucalanus monachus* (Giesbrecht, 1888) (Size: female, 1.81–2.84 mm; male, 1.86–2.60 mm)



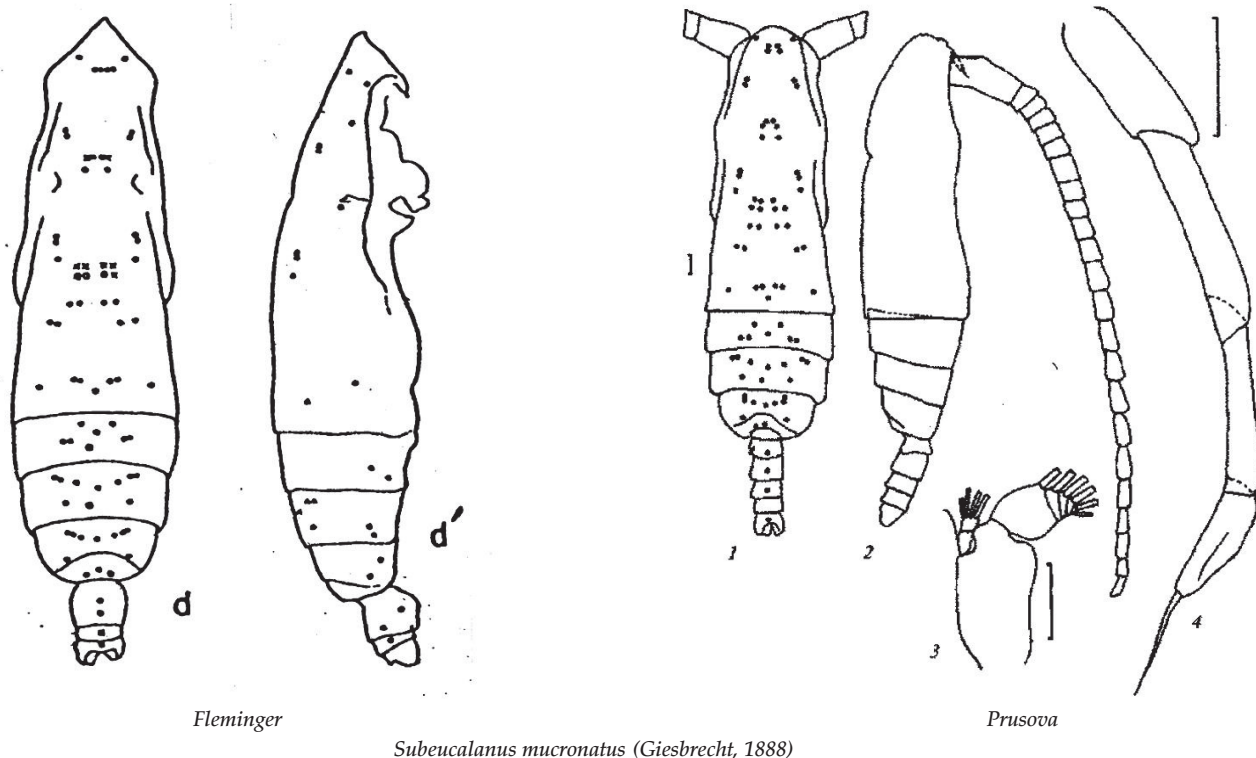
*Subeucalanus monachus* (Giesbrecht, 1888)

Giesbrecht, 1888: pl. 35. *Subeucalanus monachus* (Giesbrecht, 1888), Female. 14. Habitus (dorsal).

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 20 2020].

Original. *Subeucalanus monachus* (Giesbrecht, 1888), Male, 1.98 mm, South China Sea (8°33'N, 115°41'E, 1000 m). a/b. habitus (dorsal/lateral); c. Rostrum; d. Mandible; e. Leg 5.

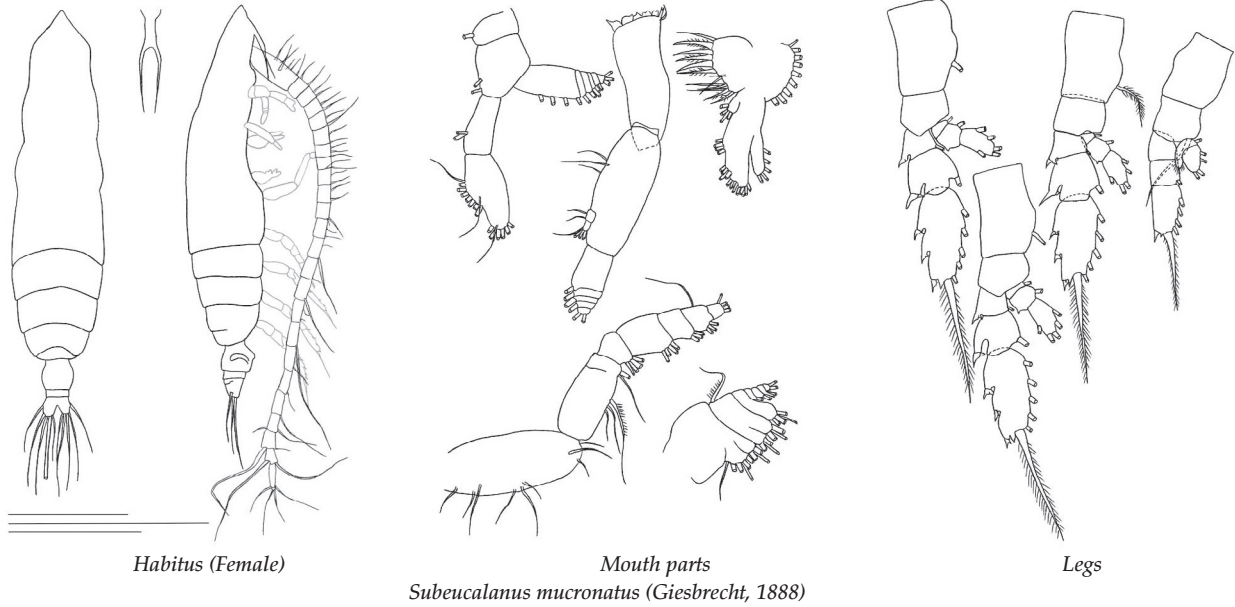
*Subeucalanus mucronatus* (Giesbrecht, 1888) (Size: female, 2.80–3.49 mm; male, 2.50–3.30 mm)



Fleminger, 1973: Fig. 9. *Subeucalanus mucronatus* (Giesbrecht, 1888), Female. d/d'. habitus (dorsal/lateral).

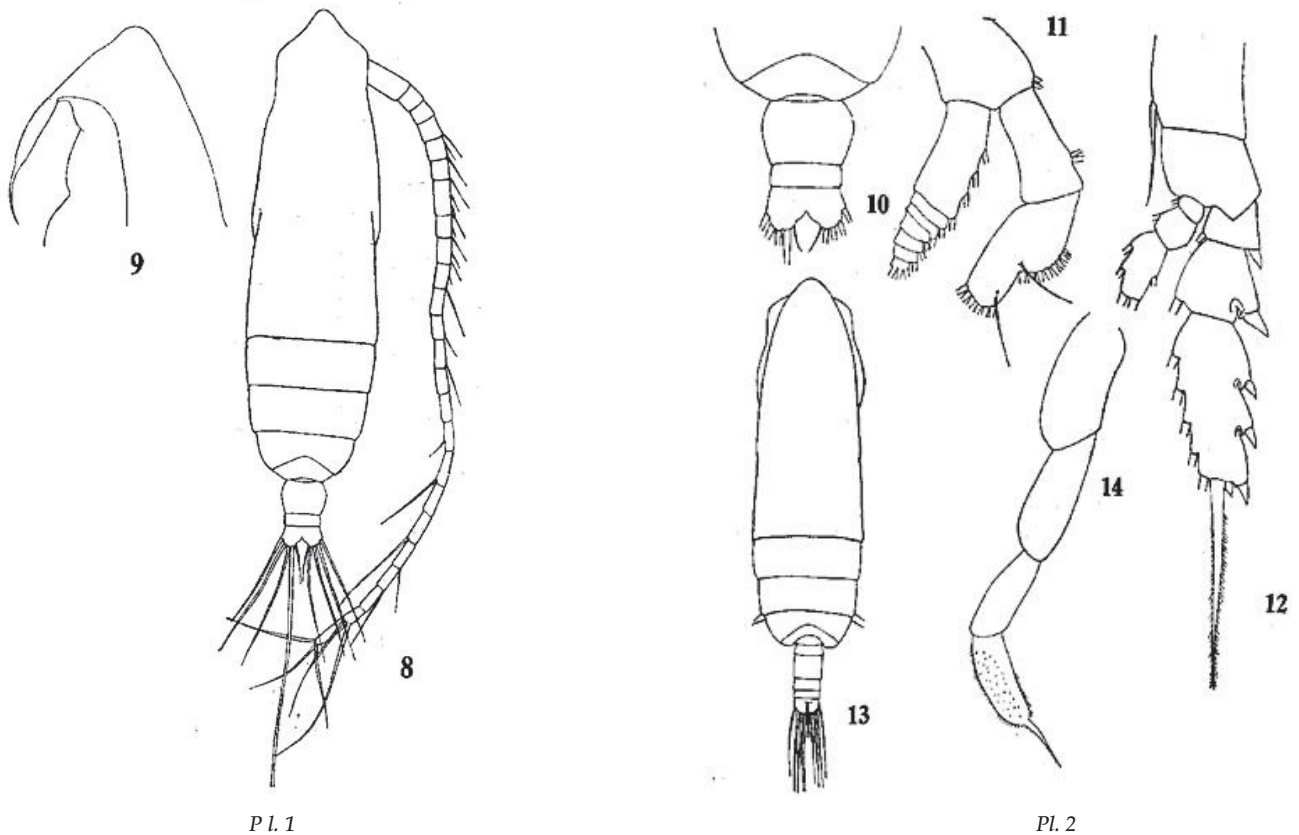
Prusova, 2003: Fig. 2. *Subeucalanus mucronatus* (Giesbrecht, 1888), Male. 1/2. habitus (dorsal/lateral); 3. mandibular palp; 4. leg 5. Scale bar: 0.1 mm.

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 10 2021].

*Subeucalanus mucronatus* (Giesbrecht, 1888)

Original. *Subeucalanus mucronatus* (Giesbrecht, 1888), Female, 3.34 mm, Taiwan Strait (24°47'N, 120°53'W), a/b. habitus (dorsal/lateral); Mouth parts. c. right antenna (posterior); d. right mandible (posterior); e. right maxillule (posterior); f. right maxilla (posterior); g. right maxilliped (posterior); h-k. right legs 1–4 (posterior); l. rostrum.

*Subeucalanus pileatus* (Giesbrecht, 1888) (Size: female, 1.80–2.50; male, 1.80–2.25 mm),



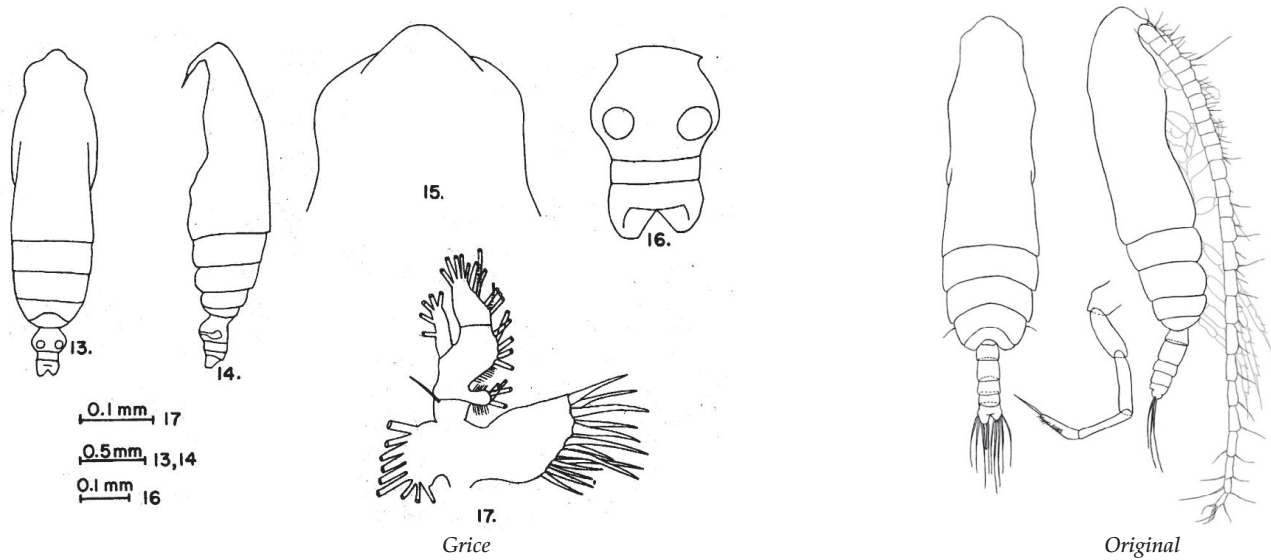
*Subeucalanus pileatus* (Giesbrecht, 1888)

Chen & Zhang, 1974: pl. 1. *Subeucalanus pileatus* (Giesbrecht, 1888), Female. 8. habitus (dorsal); 9. forehead (lateral). Pl. 2. Female. 10. urosome (dorsal); 11. antenna. Male. 13. habitus (dorsal); 14. 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 May 15 2021].



*Subeucalanus subcrassus* (Giesbrecht, 1888) (Size: female, 1.84–2.92 mm; male, 1.67–2.74 mm)



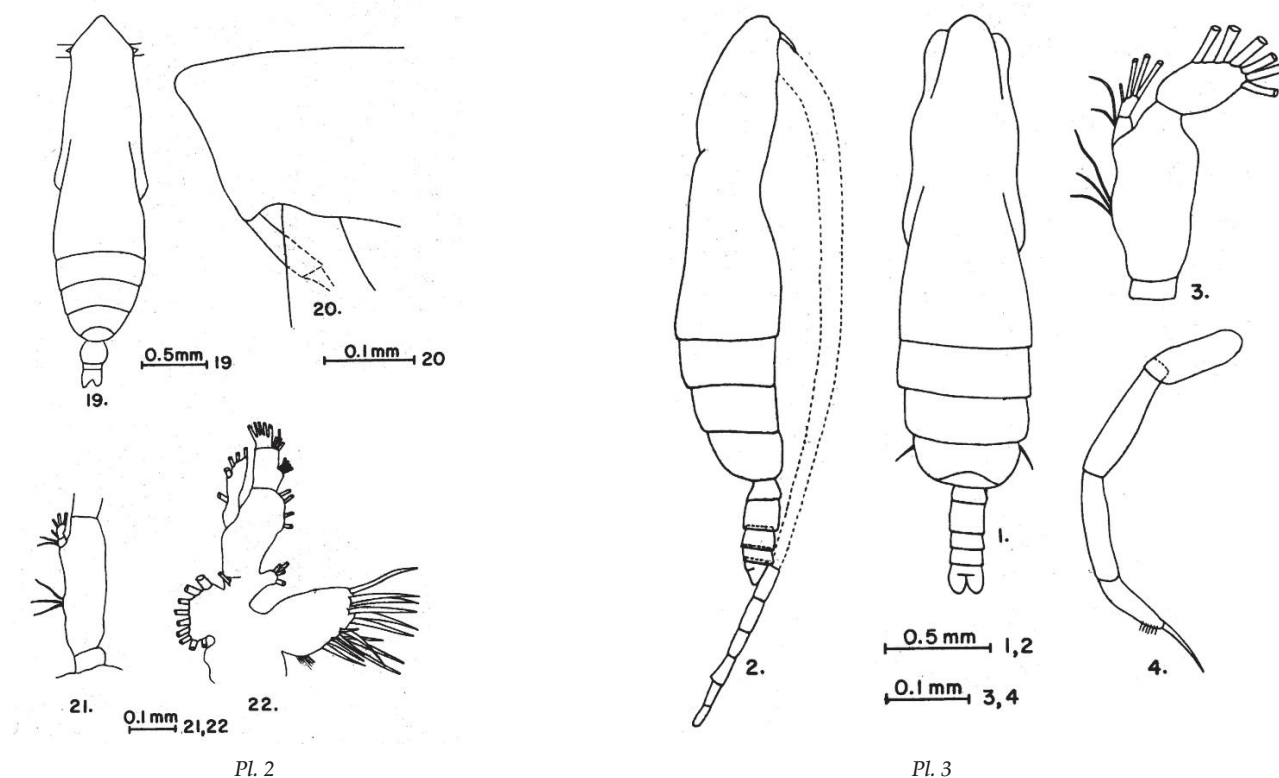
*Subeucalanus subcrassus* (Giesbrecht, 1888)

Grice, 1962: pl.3. *Subeucalanus subcrassus* (Giesbrecht, 1888), Female (from equatorial Pacific): 13/14. habitus (dorsal/lateral); 15. forehead (dorsal); 16. urosome (dorsal); 17. maxillule.

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 10 2021].

Original. *Subeucalanus subcrassus* (Giesbrecht, 1888), Male, 2.74 mm, NE.

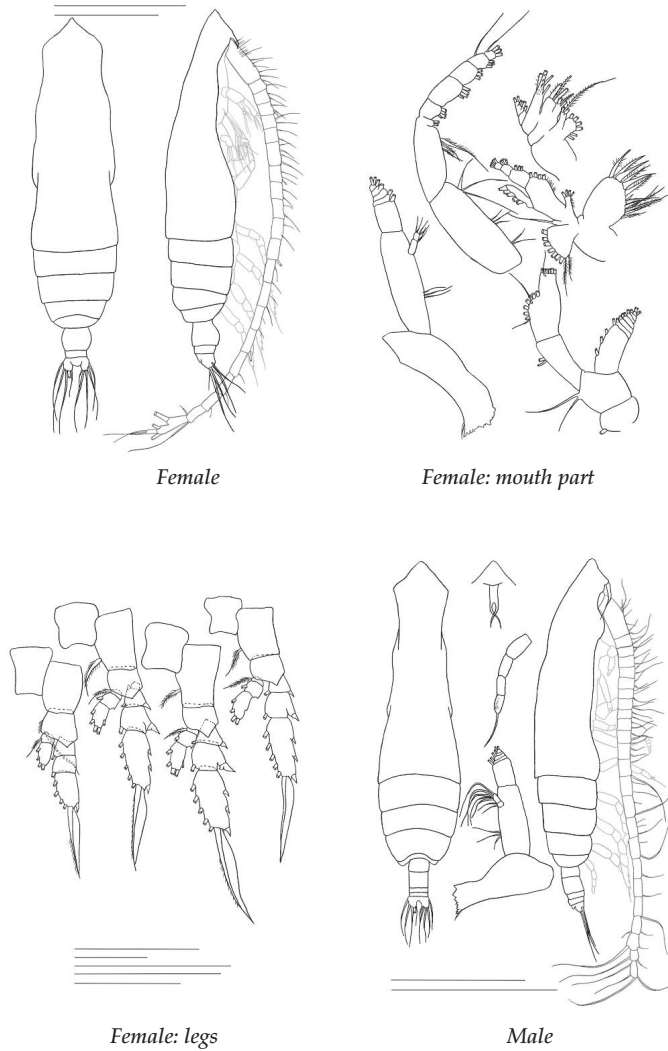
*Subeucalanus subtenuis* (Giesbrecht, 1888) (Size: female, 1.80–3.53 mm; male, 2.48–3.08 mm)



*Subeucalanus subtenuis* (Giesbrecht, 1888)

Grice, 1962: pl. 2. *Subeucalanus subtenuis* (Giesbrecht, 1888), female. 19. habitus (dorsal); 20. forehead (lateral); 21. mandible, basis and endopod; 22. maxillule. Pl. 3. Male. 1/2. habitus (dorsal/lateral); 3. mandibular palp; 4. 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 May 10 2021].

*Subeucalanus subtenuis* (Giesbrecht, 1888)*Subeucalanus subtenuis* (Giesbrecht, 1888)

Original. *Subeucalanus subtenuis* (Giesbrecht, 1888), Female, 2.74 mm, Taiwan Strait (25°03'N, 121°03'E): a/b. habitus (dorsal/lateral); Female: mouth part. c. right antenna (posterior); d. right mandible (posterior); e. right maxillule (posterior); f. right maxilla (posterior); g. right maxilliped (posterior); Female: legs, h-k. right legs 1–4 (posterior). Male, 2.48 mm, Taiwan Strait (25°03'N, 121°03'E): l/m. habitus (dorsal/lateral); n. rostrum (ventral); o. mandible (anterior); p. leg 5 (anterior).