

Zooplankton

Sheet 77

ISOPODA

SUB-ORDER: VALVIFERA

Family: Idoteidae

**GENERA: IDOTEA, SYNISOMA,
ZENOBIANA**

SUB-ORDER: ASELOTA

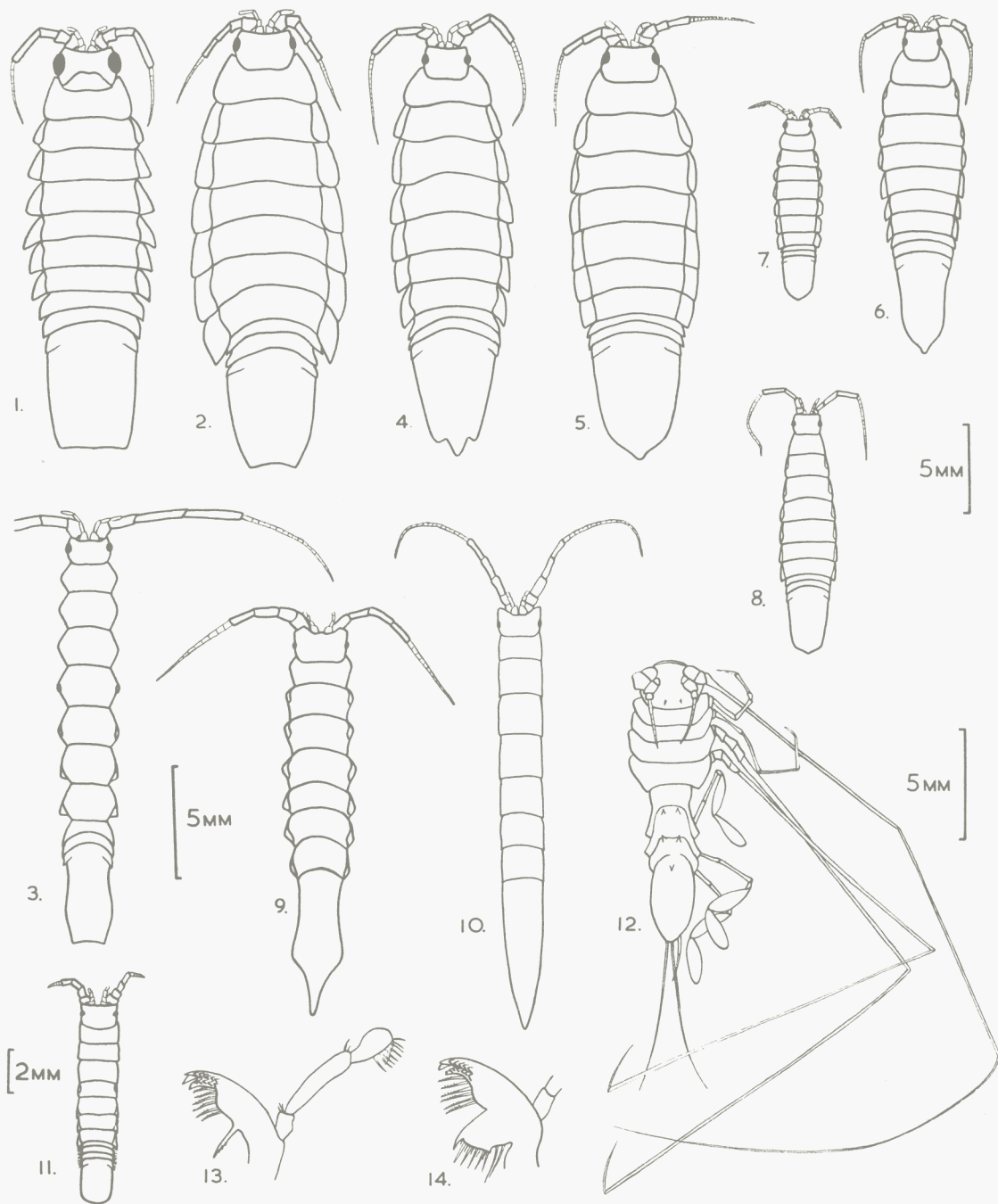
Family: Munnopsidae

GENUS: MUNNOPSIS

(By E. Naylor)

1957

Few isopods are strictly planktonic, but many are occasionally taken in tow-nets, often from amongst floating weed. The groups taken most frequently (excluding Epicaridea) are included in this sheet and Sheet 78.



1, *Idotea metallica*. 2, *I. emarginata*. 3, *I. linearis*. 4, *I. baltica*. 5, *I. neglecta*. 6, *I. granulosa*.
7, *I. pelagica*. 8, *I. chelipes*. 9, *Synisoma lancifer*. 10, *S. acuminatum*. 11, *Zenobiana prismatica*.
12, *Munnopsis typica*. 13, Mandible of *P. oceanica*. 14, Mandible of *E. murrayi*.

(1, 2, 3, 4, 5, 6, and 7 to same scale as 8; 10 to same scale as 9;
13 and 14 after Tattersall; others original.)

SUB-ORDER VALVIFERA

Uropods hinged laterally, folding medially to cover the pleopods.

Family IDOTEIDAE

Body generally flattened, thoracic segmentation more or less uniform.

Genus IDOTEA Fabricius

Abdomen of 3 segments, the last of which is fused to the telson.

1. *Idotea metallica* Bosc. Marked transverse sinuous cleft behind the eyes (not in any other British species). Telson sides and apical border straight. Coxal plates fairly large; 5—7 sharply angled. Length up to 30 mm. Offshore.
2. *I. emarginata* (Fabricius). Telson sides slightly convex; apical border emarginate. Coxal plates large; 5 and 6 not so sharply angled as 7. Length up to 30 mm. Inshore.
3. *I. linearis* (Pennant). Telson sides concave anteriorly, convex posteriorly; apical border emarginate. Body very slender. Coxal plates very small. Length up to nearly 30 mm. Inshore.
4. *I. baltica* (Pallas). Telson sides almost straight, tapering to a tridentate apical border. Coxal plates large. Length up to 30 mm. Mainly inshore.
5. *I. neglecta* G. O. Sars. Telson with obtusely rounded lateral shoulders and one median obtuse tooth. Coxal plates large. Length up to 30 mm. Inshore.
6. *I. ganulosa* Rathke. Telson sides slightly concave; apical border with obtusely rounded lateral shoulders and a long, acute, median tooth. Coxal plates small. Length up to 20 mm. Intertidal resident.
7. *I. pelagica* Leach. Telson apical border with broadly rounded lateral shoulders and a short median obtuse tooth. Length up to 12 mm. Intertidal resident.
8. *I. chelipes* (Pallas) (= *I. viridis* Slabber). Telson with sides sub-parallel, lateral corners obtuse and median tooth hardly acute. Coxal plates small. Length up to 15 mm. Brackish water.

Genus SYNISOMA Leach

Abdomen of one piece; three segments and the telson all fused.

9. *Synisoma lancifer* (Leach). Telson with concave lateral sides, broad lateral shoulders and a long median acute tooth. Inshore and intertidal.
10. *S. acuminatum* (Leach). Body extremely narrow. Telson without lateral shoulders, narrowing evenly to a median tooth. Inshore and intertidal.

Genus ZENOBIANA Stebbing

Abdomen with three distinct segments and a fourth which is fused to the telson.

11. *Zenobiana prismatica* (Risso). Telson broadly rounded. Abdomen with fine lateral hairs. Inshore and intertidal.

SUB-ORDER ASELLOTA

Abdominal segments all fused; uropods terminal, not covering the pleopods and not forming a tail fan.

Family MUNNOPSISIDAE

Three posterior pairs of legs modified for swimming.

Genus MUNNOPSIS M. Sars

Body less compact than other genera; anterior part broader than the posterior. Natatory legs without dactylus. Mandibles with no molar expansion.

12. *Munnopsis typica* M. Sars. Generic characters applicable. Offshore.
13. *Paramunnopsis oceanica* (Tattersall) and 14. *Eurycope murrayi* Walker (see Hansen, 1916) are bathypelagic forms included by Tattersall (1906, 1911) in the genus *Munnopsis*. *P. oceanica* has natatory legs without dactylus, but the mandible has the molar process replaced by a serrated spine (Fig. 13). *E. murrayi* has a more compact body, its natatory legs have a dactylus and the mandible has a broad molar process (Fig. 14); it is the only pelagic *Eurycope* (Wolff, 1956).

Further Information on Identification

1. *I. metallica*: Collinge, 1917, p. 746; Naylor, 1957, p. 599.
2. *I. emarginata*: Sars, 1897, p. 35, Pl. 35(2); Naylor, 1955a, p. 492.
3. *I. linearis*: Bate and Westwood, 1868, p. 388; Naylor, 1955a, p. 490.
4. *I. baltica*: Sars, 1897, p. 80, Pl. 32; Naylor, 1955a, p. 491.
5. *I. neglecta*: Sars, 1897, p. 84, Pl. 35(1); Naylor, 1955a, p. 491.
6. *I. granulosa*: Sars, 1897, p. 82, Pl. 34(1); Naylor, 1955a, p. 489.
7. *I. pelagica*: Sars, 1897, p. 81, Pl. 33; Naylor, 1955a, p. 487.
8. *I. chelipes*: Sars, 1897, p. 83, as *I. viridis*, Pl. 34(2), as *I. augusta*; Naylor, 1955a, p. 489, as *I. viridis*.
9. *S. lancifer*: Bate and Westwood, 1868, p. 396, as *Idotea appendiculata*; Collinge, 1917, p. 751.
10. *S. acuminatum*: Bate and Westwood, 1868, p. 394; Dollfus, 1894, p. 5.
11. *Z. prismatica*: Bate and Westwood, 1868, p. 391, as *Idotea parallela*.
12. *M. typica*: Sars, 1897, p. 133, Pl. 57 and 58.
13. *P. oceanica*: Tattersall, 1906, p. 23, Pl. 5(1-7), as *Munnopsis*.
14. *E. murrayi*: Walker, 1903, p. 227, Pl. 18(1-6), as *Munnopsis*; Tattersall, 1911, p. 190, Figs. 8-14, as *Munnopsis*.

Distribution	Species
Gulf of Bothnia	4, 6, 8
Gulf of Finland	4, 6, 8
Baltic proper	4, 6, 8
Belt Sea	4, 6, 8
Kattegat	2, 3, 4, 5, 6, 7, 8
Skagerak	2, 3, 4, 5, 6, 7, 8, 12
Northern North Sea	2, 3, 4, 5, 6, 7, 8
Southern North Sea	2, 3, 4, 5, 6, 7, 8
English Channel (E.)	2, 3, 4, 5, 6, 7, 8, 9, 10, 11
English Channel (W.)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Bristol Channel and Irish Sea ...	1, 2, 3, 4, 5, 6, 7, 8, 10
South and West Ireland and Atlantic	1, 2, 3, 4, 5, 6, 7, 8, 13, 14
Faroe-Shetland Area	1, 2, 3, 4, 5, 6, 7, 8, 14
Faroe-Iceland Area	1, 2, 4, 5, 6, 7, 8, 12
Norwegian Sea	2, 4, 5, 6, 7, 8, 12
Barents Sea	4, 5, 6, 7, 12

References to Work on Biology

(Numbers after references give species referred to)

- Howes (1939) 8. Kjennerud (1950) 5. Naylor (1955b) 2. Naylor (1955c) 2-8. Naylor (1957) 1. Nierstrasz & Steckhoven (1930) 2-8, 12. Tattersall (1911) 1-11, 13, 14.

References

- Bate, C. S., and Westwood, J. O. 1868. *A history of the British sessile-eyed crustacea*, 2, 536 pp.
- Collinge, W. E. 1917. *Trans. roy. Soc. Edinb.*, 51: 721-60.
- Dollfus, A. 1894. *Feuill. jeun. Nat.*, 279: 1-5; 290: 17-18; 291: 38-40; 292: 41-56.
- Howes, N. H. 1939. *J. mar. biol. Ass. U. K.*, 23: 279-310.
- Kjennerud, J. 1950. *Univ. Bergen. Årb. Naturv. R.*, 7: 1-47.
- Naylor, E. 1955a. *J. mar. biol. Ass. U. K.*, 34: 467-93.
- Naylor, E. 1955b. *J. Anim. Ecol.*, 24 (2): 270-81.
- Hansen, H. J. 1916. *Danish Ingolf Exp.*, 3 (5): 1-262, Copenhagen.
- Naylor, E. 1955c. *J. Anim. Ecol.*, 24 (2): 255-69.
- Naylor, E. 1957. *J. mar. biol. Ass. U. K.*, 36: 599-602.
- Nierstrasz, H. F., & Steckhoven, J. H., Jr. 1930. *Tierwelt N.- u. Ostsee*, 10, e2, (Lf. 18): 57-133, Leipzig.
- Sars, G. O. 1896-99. *An account of the crustacea of Norway*, 2, 270 pp.
- Tattersall, W. M. 1906. *Sci. Invest. Fish. Br. Ire.*, 1904, 2: 1-90.
- Tattersall, W. M. 1911. *Nord. Plankt.*, 6: 181-313.
- Walker, A. O. 1903. *Ann. Mag. nat. Hist.*, Ser. 7, 12 (68): 223-33.
- Wolff, T. 1956. *"Galathea" Rep.*, 2: 85-157.