

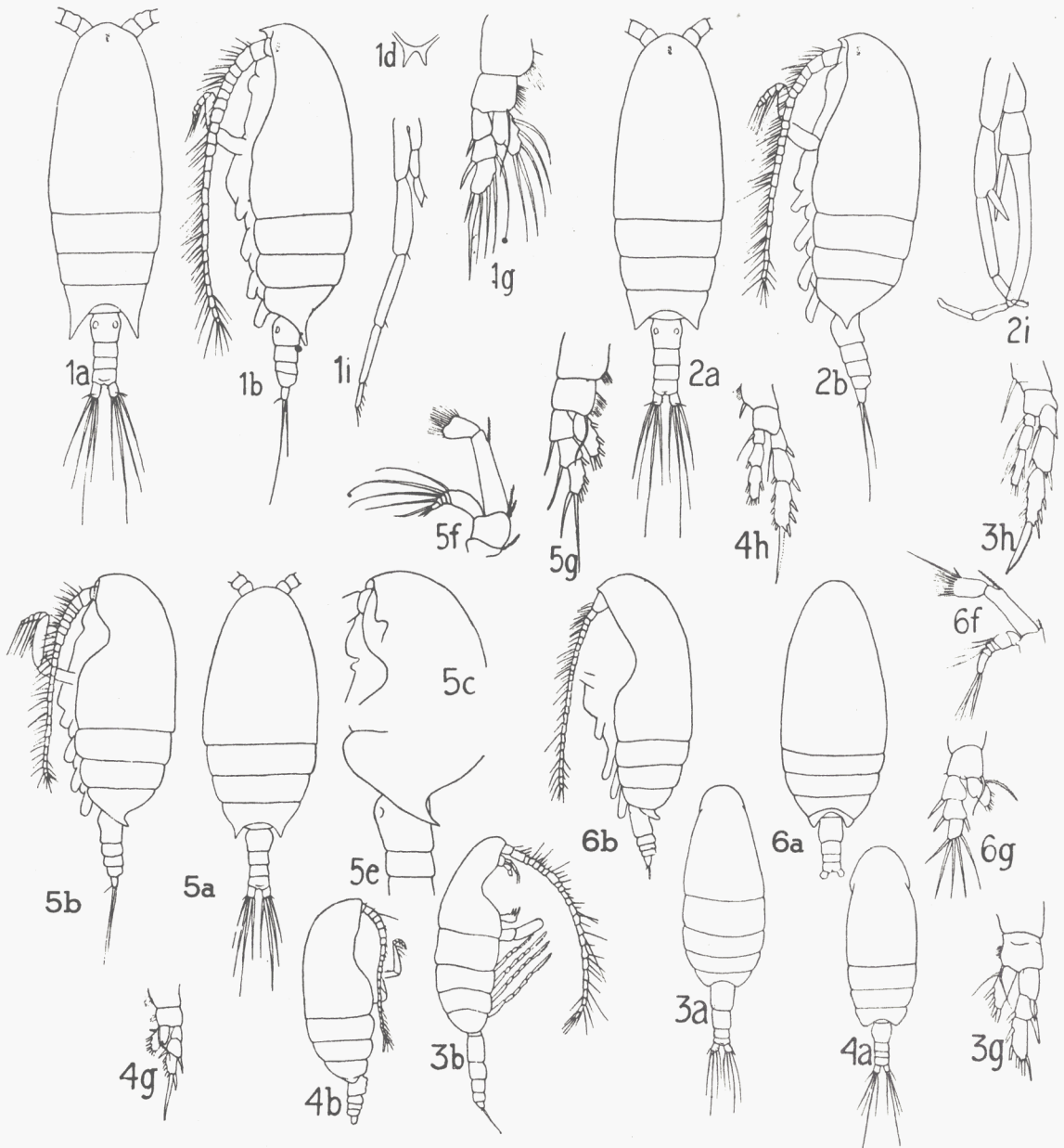
Zooplankton.
Sheet 48.

COPEPODA
SUB-ORDER: CALANOIDA

Family: Aetideidae
GENERA: BRADYIDIUS
BRADYETES
BRYAXIS

(By W. Vervoort)

1952



1, *Bradyidius armatus*. 2, *Bradyidius similis*. 3, *Bradyetes inermis*. 4, *Bradyetes brevis*. 5, *Bryaxis brevicornis*. 6, *Bryaxis minor*.
a, ♀, dorsal view; b, ♀, lateral view; c, ♀, head, lateral view; d, ♀, rostrum, ventral view;
e, ♀, post. part cephalothorax and genital somite, lateral view; f, 2nd antenna; g, 1st foot; h, 4th foot; i, ♂, 5th feet.
(1, 2, 5, after Sars; 3, 4, 6, after Farran)

Genus BRADYIDIUS Giesbrecht, 1897

Females with strongly built bodies; cephalon and 1st thoracic somite fused. Cephalon broadly rounded laterally and provided in front with a bifurcated rostrum. Rostral points acute, pointing downwards. 4th and 5th thoracic somites fused, postero-lateral thoracic border produced into rather strong, acute, backwardly directed points. Abdomen rather short, anal segment notably short, furcal rami about as long as wide. 1st antennae about as long as or shorter than cephalothorax, 24-jointed, notably hirsute, as many thickened and ringed setae occur on the various joints. Both rami of 2nd antennae only slightly differing in length; 2nd basal joints of maxillipeds elongated. Endopods of 1st feet 1-jointed, of 2nd feet 2-jointed. Male more slender, abdomen comparatively longer. 1st antennae more slender, hirsute, with club-shaped or band-shaped sensory appendages on basal joints. 5th feet styliform, occasionally biramose on both sides.

1. *Bradyidius armatus* Giesbrecht, 1897. ♀ 2.65 mm., ♂ 2.20 mm.
♀. Points of 1st thoracic somite reach end of genital segment. 1st antennae as long as cephalothorax. Exopods of 2nd antennae slightly longer than endopods. Endopods of 2nd—4th feet spinulose on posterior surface.
♂. Points of lateral thoracic somite of reduced length. 1st antennae slightly longer than cephalothorax, 19-jointed. Right 5th foot absent or 3-jointed, short; left 5th foot styliform, composed of 5 elongated joints.
Moderately deep water of Arctic, boreal and subtropical region, but always at or near the bottom.
2. *Bradyidius similis* G. O. Sars, 1902. ♀ 3.0 mm., ♂ 2.4 mm.
♀. As preceding form, but slightly bigger, points of last abdominal somite reach middle of genital segment. 1st antennae shorter than cephalothorax. Exopods of 2nd antennae distinctly longer than endopods. No spinules on posterior surfaces of 2nd—4th endopods.
♂. Spines on last thoracic somite of reduced length. 1st antennae 24-jointed, as long as body. Both 5th feet biramose; exopods elongated, endopods short, more or less styliform, 1-jointed; right exopod longer than that on left side, 3-jointed, joints elongated.
Moderately deep water of Norwegian fjords, at or near the bottom.

Genus BRADYETES Farran, 1905

Females with cephalon and 1st thoracic somite fused or indistinctly separate, rostrum absent. 4th and 5th thoracic somites fused, postero-lateral border rounded. 1st antennae setose, setae on basal part ringed. 2nd antennae with exopods longer than endopods. Maxillipeds with rather long 2nd basal joints. Jointing of legs as in *Bradyidius*. Males unknown.

3. *Bradyetes inermis* Farran, 1905. ♀ 2.57 mm. Body comparatively slender, 1st antennae about as long as cephalothorax. Maxillipeds with 3 setae on proximal halves of each 2nd basal joint. Spine on outer edge of each 1st exopodal joint of 1st feet present. Internal seta on each 1st basipodal joint of 4th feet elongate, slender.
Moderately deep water of N. E. Atlantic, near the bottom.
4. *Bradyetes brevis* Farran, 1936. ♀ 2.31 mm. Body more robust than in preceding form. 1st antennae short, reaching middle of 3rd thoracic somite. 2nd endopodal joints of 2nd antennae proportionately longer than in preceding form. 2nd basal joints of maxillipeds each have 3 setae on distal half. No spines on outer edges of 1st exopodal joints of 1st feet, endopods with distinct swelling on external margins. Joints of 2nd—4th feet broader than in preceding species, terminal spines more coarsely dentate. Seta on each 1st basipodal joint of 4th feet stout, spiniform.
Moderately deep water of Arctic, near the bottom.

Genus BRYAXIS G. O. Sars, 1902

Cephalon and 1st thoracic somite fused, lateral margin deeply invaginated. Front of cephalon rounded, obtuse, without rostrum. 4th and 5th thoracic somites fused or separate, 5th produced into acute lappets, points turned upwards. Abdomen short, anal segment short. Furcal rami as long as broad. 1st antennae 24-jointed, strongly setose. Exopods of 2nd antennae poorly developed and of reduced length. Mandibles with remarkably strong palpi. Maxillipeds strongly built, 2nd basal joints rather long. Jointing of feet as in *Bradyidius*. Males unknown.

5. *Bryaxis brevicornis* G. O. Sars, 1902. ♀ 2.6 mm. 4th and 5th thoracic somites fused, points of lappet very acute. 1st antennae reach end of 4th thoracic somite. Setae on the 3rd to 6th joints of the exopods of the 2nd antennae strong; terminal joints about twice as long as broad, with feeble terminal setae. 1st basal joints of maxillipeds each with sensory appendage at apex.
Moderately deep water of N. E. Atlantic, at or near the bottom.
6. *Bryaxis minor* Farran, 1905. ♀ 1.6 mm. As the preceding form, but 4th and 5th thoracic somites separate, points of lateral border not so acute. 1st antennae slightly longer. Exopods of 2nd antennae with slender setae on the 3rd—6th joints and strong setae on the apical joints, which are 3—4 times as long as broad. No sensory appendages on 1st basal joints of maxillipeds.
Deep water of N. E. Atlantic, at or near the bottom.

References to Descriptions and Figures.

1. *B. armatus*: Brady, 1878, Pl. 4, Figs. 1—9, 11 (as *Pseudocalanus armatus* ♀); Sars, 1884 (as *Undinopsis bradyi*); Giesbrecht, 1897; Giesbrecht & Schmeil, 1898; Sars, 1901—03, Pls. 19, 20 (as *U. bradyi*); van Breemen, 1908, Fig. 31; A. Scott, 1909, Pl. 6, Figs. 1—11; With, 1915 (as *U. armatus*); Rose, 1933, Fig. 55 (as *U. bradyi*); Wilson, 1942, Fig. 135 (as *U. bradyi*).
2. *B. similis*: Sars, 1901—03, Pl. 21 (as *Undinopsis similis*); Vanhöffen, 1897, Fig. 17 (as *Bradyanus armatus*); Vanhöffen, 1907, Pl. 21, Fig. 24, Pl. 22, Figs. 28—30 (as *U. armatus*); van Breemen, 1908, Fig. 32; Sars, 1924—25 (as *U. similis*); Rose, 1933, Fig. 56 (as *U. similis*).
3. *B. inermis*: Farran, 1905, Pl. 3, Figs. 13—20, Pl. 4, Figs. 13, 14; van Breemen, 1908, Fig. 33; Rose, 1933, Fig. 57.
4. *B. brevis*: Farran, 1936, Textfig.
5. *B. brevicornis*: Sars, 1901—03, Pls. 22, 23; Farran, 1905, Pl. 4, Fig. 6; van Breemen, 1908, Fig. 40; Rose, 1933, Fig. 74.
6. *B. minor*: Farran, 1905, Pl. 4, Figs. 1—5, 7—12; van Breemen, 1908, Fig. 41; Rose, 1933, Fig. 75.

Distribution Species

Gulf of Bothnia	—
Gulf of Finland	—
Baltic proper	—
Belt Sea	—
Kattegat	—
Skagerak	—
Northern North Sea	(1), 5
Southern North Sea	—
English Channel (eastern)	—
English Channel (western)	—
Bristol Channel and Irish Sea	1
South and West Ireland	1, 3, 5, 6
North-eastern Atlantic	(1), 2, 3, 5, (6)
Faroe Shetland Area	—
Faroe Iceland Area	—
Norwegian Sea	1, 2
Barents Sea	1, 4, 5

References to Work on Biology.

van Breemen (1908) 1, 2, 3, 5, 6; Catalogue, etc. (1906, 1909, 1916) 1; Farran (1903) 1; (1905) 1, 3, 5, 6; (1911) 1; (1920) 1, 5; (1936) 4; Jespersen (1939, 1939a) 4; Mrázek (1902) 1; Rose (1933) 1, 2, 3, 5, 6; Sars (1884) 1; (1901—03) 1, 2, 5; (1924—25) 2; A. Scott (1909) 1; T. Scott (1906) 1; Sparre Schneider (1891) 1, 5; Thompson (1900, 1900a, 1903) 1; Vanhöffen (1897, 1907) 2; Wiborg (1940) 1; Wilson (1942) 1; With (1915) 1; Wolfenden (1905, 1911) 1.

References

see Sheet No. 41.