

CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

Zooplankton.

Sheet 45.

COPEPODA

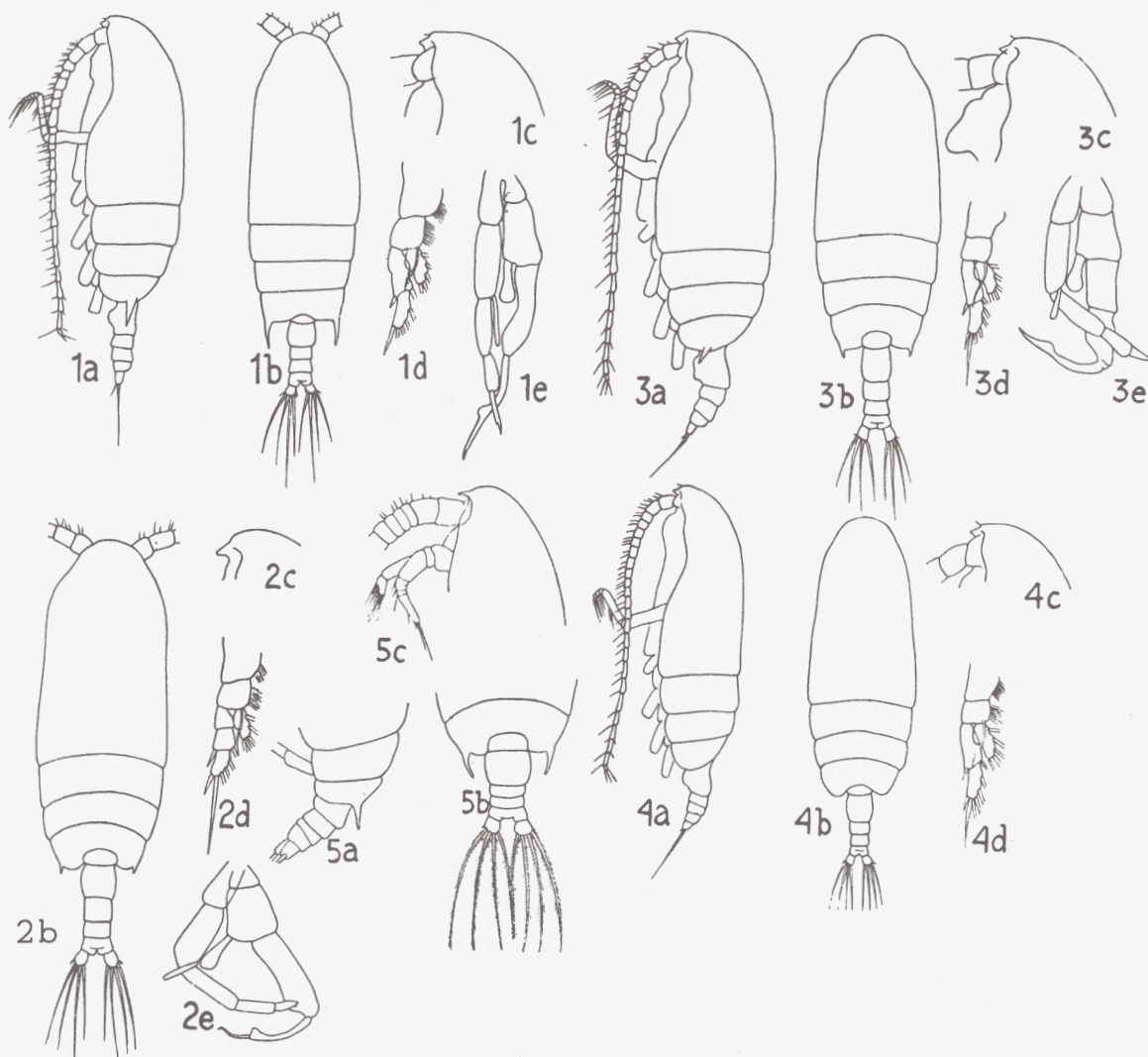
SUB-ORDER: CALANOIDA

Family: Aetideidae

GENUS: GAIDIUS

(By W. Vervoort)

1952.



1, *Gaidius tenuispinus*. 2, *Gaidius brevispinus*. 3, *Gaidius affinis*. 4, *Gaidius minutus*. 5, *Gaidius pungens*.
a, ♀, lateral view; b, ♀, dorsal view; c, ♀, head, lateral; d, 1st feet; e, ♂, 5th feet.
(1—4, after Sars; 5 after Vervoort)

Genus GAIDIUS Giesbrecht, 1895

Head and 1st thoracic segment, as well as the 4th and 5th thoracic somites fused. Cephalon rounded into a 1-pointed, rather strong rostrum, directed downwards. Postero-lateral thoracic border rounded or provided with acute spines. Females with 24-jointed, slender 1st antennae. Endopods of 2nd antennae $\frac{3}{4}$ the length of exopods. 2nd basal joints of maxillipeds much longer than 1st basal joints; last joints usually each with rounded, distinctly produced lappet along external margin. Endopods of 1st feet 1- or 2-jointed, exopods 2- or 3-jointed. Endopods of 2nd feet 2-jointed. Posterior surfaces of 1st basal joints of 4th feet each with one or several rows of hair-like tubes. Terminal spines on exopods of 2nd—4th feet with acute, triangular teeth along external margins.

Males with spines of lateral thoracic border of reduced length. 1st antennae of reduced length and with a reduced number of joints. Oral parts reduced. 1st basal joints of 4th feet without tubes. 5th feet biramose on both sides; endopods short, club-shaped, 1-jointed; left exopod 3-jointed, more or less styliform; right 5th exopod 2- or 3-jointed, apical joint forming feeble clasping apparatus with preceding joints.

(The genus *Gaidius* is closely related to *Chiridius* and *Gaetanus*; in its present definition it includes some forms transferred by Sars to *Gaetanus*).

1. *Gaidius tenuispinus* G. O. Sars, 1900. ♀ 3.0—3.8 mm., ♂ 2.0 mm. Body rather slender, postero-lateral margin with long, acute, needle-shaped points, reaching end of genital segment, slightly thickened at the base, pointing straightly backwards. Abdomen contained 3-4 times in cephalothorax. Genital segment as long as wide, genital swelling distinct. 1st antennae as long as or slightly longer than cephalothorax. No lamellae on 1st basal joints of maxillipeds. Exopods of 1st feet 3-jointed, articulations between two proximal joints indistinct; 1st exopodal joints without external spines. Endopods of 2nd feet 2-jointed. 1st basal joints of 4th feet each with 5—6 rows of hair-like tubes on posterior surface.

Male with reduced number of joints of 1st antennae, basal parts thickened, beset with club-shaped sensory appendages, slightly longer than cephalothorax. Spines of lateral thoracic margin scarcely reduced in length. Exopods of 1st feet distinctly 3-jointed. 5th feet biramose on both sides; left endopod 1-jointed, elongated; exopod composed of 3 rather short joints; right endopod club-shaped, 1-jointed, short; exopod 2-jointed, basal joint swollen, apical joint forming a feeble clasping organ.

Deep and moderately deep water of Atlantic and Arctic.

Gaidius pungens Giesbrecht, 1895. ♀ 2.65—3.20 mm., (Fig. 5) has occasionally been recorded from the Atlantic. Body more slender than preceding form and spines of posterior part of cephalothorax shorter, $\frac{3}{5}$ the length of genital segment, curved slightly inwards. Endopods of 2nd feet 1-jointed; 1st basal joints of 4th feet each with one row of hairs on posterior surface. Male unknown.

2. *Gaidius brevispinus* G. O. Sars, 1900. ♀ 4.6—4.8 mm., ♂ 3.1 mm.

♀. Body robust, cephalon in lateral aspect broadly rounded, rostrum small, triangular. Points at lateral thoracic margin small, distinctly set off from the broadly rounded border.

Abdomen short, $\frac{1}{3}$ the length of cephalothorax. Genital segment slightly longer than broad, genital swelling distinct. 1st antennae long, reaching end of furca. Exopods of 1st feet 3-jointed, 1st joints without spines on outer edges; endopods 1-jointed. Endopods of 2nd feet 2-jointed. Rounded lappets on 1st basal joints of maxillipeds.

♂. Body much more slender than in female; 1st antennae 22-jointed, scarcely reaching end of cephalothorax. Oral parts reduced. 5th feet biramose on both sides, endopods 1-jointed, exopods 2-jointed; right exopod larger than left, distal segment thin, curved, forming a hinge with preceding joint. Terminal joint of exopod on left side spatulate.

Deep water of Atlantic and Arctic.

3. *Gaidius affinis* G. O. Sars, 1905. ♀ 3.6 mm., ♂ 2.3 mm.

♀. Resembles *G. tenuispinus* but body more robust, cephalon in lateral aspect broadly rounded. Points on lateral thoracic border small, $\frac{1}{3}$ the length of the genital segment, slightly curved inwards. 1st antennae reach 2nd abdominal segment. Abdomen $\frac{1}{3}$ the length of cephalothorax. Rostrum triangular, apex minutely bifurcate. 1st basal joints of maxillipeds with elongated lamellae. Legs as in *G. tenuispinus*.

♂. Body more slender, of reduced length. 1st antennae almost as long as in female, number of joints reduced, apical portions swollen, beset with club-shaped sensory appendages. Oral parts reduced. 5th feet as in *G. tenuispinus*, but right exopod 3-jointed.

Deep water of Atlantic.

4. *Gaidius minutus* G. O. Sars, 1905. ♀ 2.50—2.95 mm., ♂ unknown. Body slender, cephalon narrowly rounded in lateral aspect. Postero-lateral border of cephalothorax rounded, without spines. 1st antennae as long as cephalothorax. Abdomen $\frac{1}{4}$ the length of cephalothorax. Genital segment with distinct genital tubercle. Exopods of 1st feet 2-jointed as the two proximal joints are coalescent, each with 1 spine on outer edge.

Deep water of Atlantic.

References to Descriptions and Figures.

1. *G. tenuispinus*: Sars, 1900, Pl. 18 (as *Chiridius tenuispinus*); 1901—03, Pl. 18 (as *C. tenuispinus*), Suppl. Pl. 6, Fig. 1; Mrázek, 1902, Figs. 7—9; Nordgaard, 1905, Pl. 11, Fig. 13; Damas & Koefoed, 1907, Fig. 14; Vanhöffen, 1907, Pl. 21, Fig. 27, Pl. 22, Fig. 33; van Breemen, 1903, Fig. 39; Esterly, 1911, Pl. 28, Fig. 26, Pl. 29, Fig. 64; Wolfenden, 1911, Fig. 11; With, 1915, Pl. 2, Fig. 8, Pl. 3, Fig. 2, Textfig. 23; Wilson, 1932, Fig. 33; Rose, 1933, Fig. 67; Jespersen, 1934, Fig. 14; Vervoort, 1949, Fig. 7.
2. *G. brevispinus*: Sars, 1900, Pl. 19; 1901—03, Suppl. Pl. 6, Fig. 2; van Breemen, 1908, Fig. 38; With, 1915, Pl. 2, Fig. 7, Pl. 3, Fig. 1, Textfig. 24; Wilson, 1932, Fig. 34; Rose, 1933, Fig. 66; Jespersen, 1934, Fig. 14.
3. *G. affinis*: Sars, 1905; Farran, 1908, Pl. 2, Figs. 9, 10; Sars, 1924—25, Pl. 14, Figs. 9—13, Pl. 15, Figs. 14, 15; Rose, 1933, Fig. 64.
4. *G. minutus*: Sars, 1907; 1924—25, Pl. 14, Figs. 14—18; Rose, 1933, Fig. 65.

Distribution

Species

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

References to Work on Biology.

Bernstein (1934) 1; Bigelow (1926) 1, 2; van Breemen (1908) 1, 2; Catalogue, etc. (1906, 1909, 1916) 1, 2; Damas & Koefoed (1907) 1; Derjugin (1928) 1; Esterly (1911) 1; Farran (1905) 1, 2; (1908) 1, 3; (1911) 1; (1926) 1, 3, 4; (1929) 1; Gran (1902) 1; Jespersen (1923) 1; (1934) 1, 2, 3; (1939, 1939a) 1; (1940) 1, 2; Lysholm & Nordgaard (1921) 1; Lysholm, Nordgaard & Wiborg (1945) 1, 2, 4; Mrázek (1902) 1, 2; Nordgaard (1905) 1; Paulsen (1904, 1909) 1; Rose (1933) 1, 2, 3, 4; Sars (1900) 1; (1901—03) 1, 2; (1912) 1; (1924—25) 1, 2, 3, 4; Sewell (1929) 1, 4; A. Scott (1909) 1; Stephensen (1913) 1; Störmer (1929) 1; Vanhöffen (1907) 1; Wilson (1932) 1, 2; (1936) 1; (1942) 1, 2, 3; With (1915) 1, 2; Wolfenden (1904, 1911) 1.

References

see Sheet No. 41.