

CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

Zooplankton.

Sheet 53.

POLYCHAETA (contd.)

**Families: Tomopteridae and
Typhloscolecidae**

(By B. J. Muus)

1953.

(For key to all North-Atlantic species of planktonic polychaetes see Sheet No. 52).
Families of Polychaeta continued:

Family TOMOPTERIDAE (Plates I and II).

Two antennae. Two epaulette-shaped nuchal organs. Two pairs of setigerous appendages, the first pair often lacking in adult specimens. Parapodia biramous without bristles. Rami bordered with foliaceous pinnae containing glands.

Genus ENAPTERIS Rosa:

Rectangular rami, the pinnae not bordering their inner margins. One species.

Genus TOMOPTERIS Eschscholz:

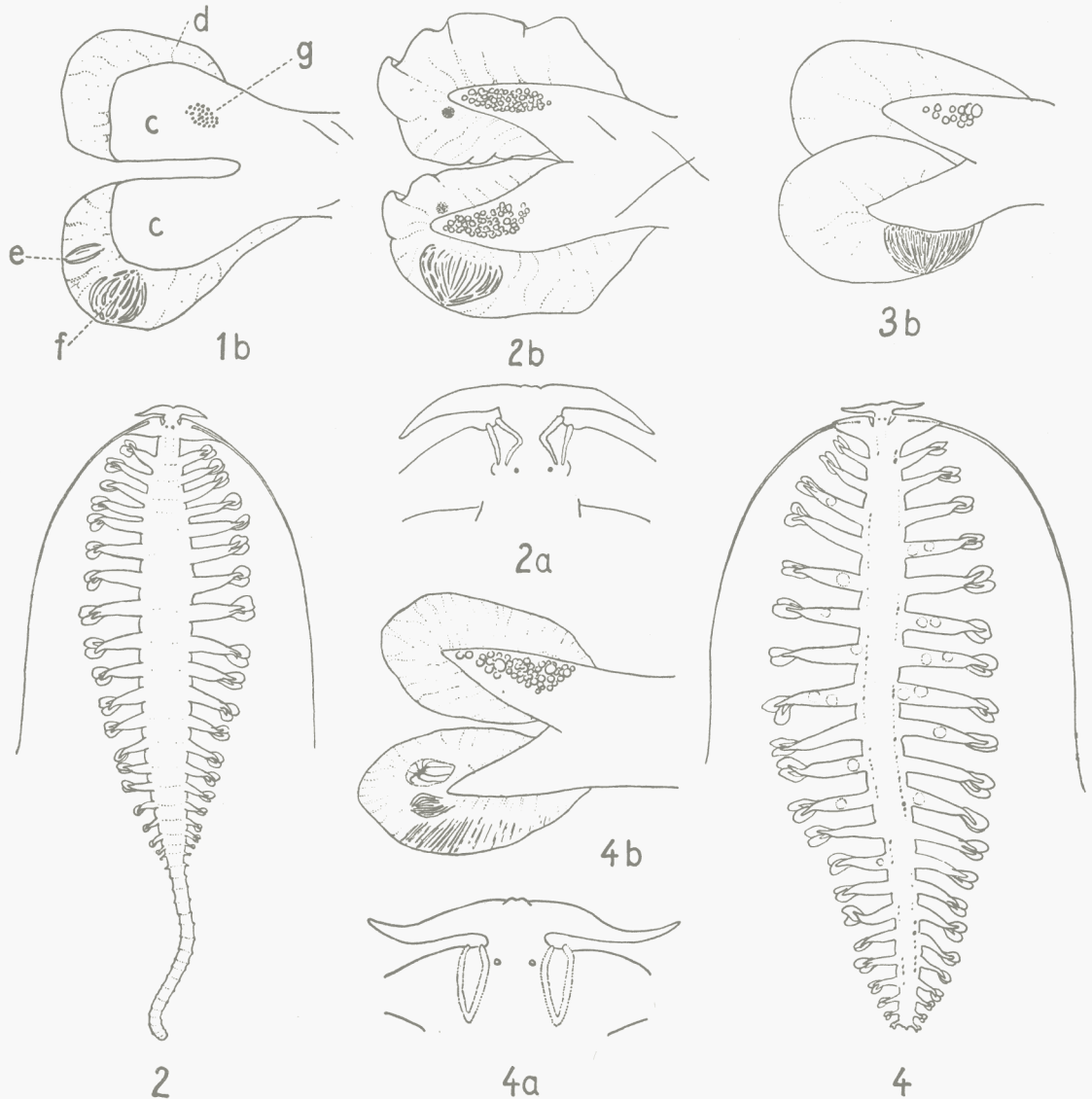
Conical rami bordered on both margins by pinnae.

Subgenus Johnstonella Gosse:

A brown or yellowish gland (rosette) situated interiorly to the apex of the rami. "Tail" with rudimentary parapodia. Gonads in both rami.

Subgenus Tomopterus sensu stricto:

Hyaline glands usually present, never situated interiorly to the apex of the rami. Gonads in the dorsal rami. "Tail" present or absent.



**Plate I.1, *Enapteris euchaeta*. 2, *Tomopterus helgolandica*. 3, *T. planctonis*. 4, *T. septentrionalis*.
a, anterior part; b, parapodium; c, ramus; d, pinna; e, hyaline gland; f, cromophile gland; g, gonads.
(Original, except Figs. 2a, 4a, after E. Wesenberg-Lund).**

Species	Setigerous appendages		Parapodia	Chromophile gland	Hyaline gland	Gonads	Tail	Length in mm.	Remarks
	First pair	Second pair							
1. <i>Enapteris eu-chaeta</i> Chun	Absent	Much longer than the body	Truncated about 15 pairs	Oval	Apically, indistinct	In the dorsal ramus	Present	ca. 13	
2. <i>Tomopteris (Johnstonella) helgolandica</i> Greeff	Lacking in adult specimens	Two thirds of the body	ca. 21 pairs	Voluminous inferiorly to the ventral ramus	—	In both rami	"	ca. 40	
3. <i>T. planctonis</i> Apstein	Absent	Smaller than the body	ca. 17 pairs	Large at the inner edge of the ventral ramus.	Indistinct. At the apex of the ventral ramus	In the dorsal ramus	Absent	ca. 11	
4. <i>T. septentrionalis</i> de Quatrefages	"	"	ca. 20 pairs	Parallel glandular tubes below the hyaline gland	At the apex of the ventral ramus	"	"	10—20	Ciliated epaulettes V-shaped
5. <i>T. krampi</i> E. Wesenberg-Lund	Always present	A little longer than the body	ca. 21 pairs	Oval	Spindle-shaped apically to the rami	"	Present	ca. 15	Red when alive
6. <i>T. nisseni</i> Rosa	Absent	Longer than the body	25—30 pairs	Button-shaped	Apically in both pinnae	"	"	20—50	Pinnae with a bright inner and a darker marginal zone
7. <i>T. cavalli</i> Rosa	"	Smaller than the body	15—17 pairs	Voluminous, inferiorly to the ventral ramus	Lacking	"	Absent	ca. 15	
8. <i>T. kefersteini</i> Greeff	"	"	ca. 15 pairs	"	Apically in both pinnae	In both rami	"	4—5	

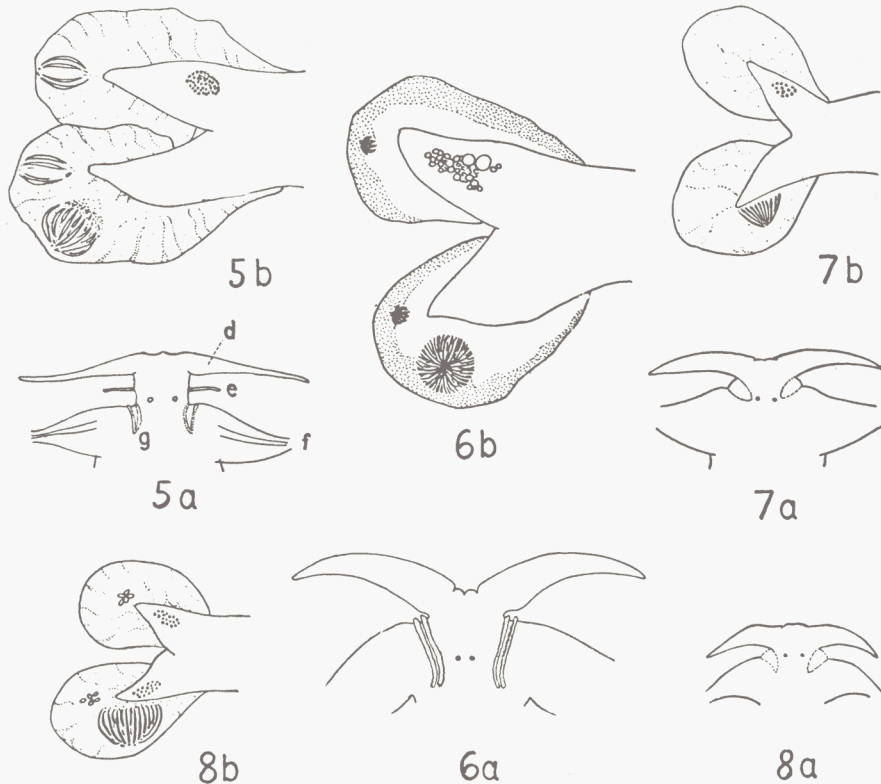


Plate II. 5, *Tomopteris krampi*. 6, *T. nisseni*. 7, *T. cavalli*. 8, *T. kefersteini*.

a, anterior part; b, parapodium; d, tentacles; e, first pair of setigerous appendages; f, second pair; g, ciliated epaulettes. (Figs. 5a, 6a, 7a, 8a, after E. Wesenberg-Lund. Figs. 5b, 6b, 7b, 8b, original).

Family TYPHLOSCOLECIDAE (Plate III).

Body cylindrical. No eyes. Peristomium and the first two segments each carrying one pair of foliaceous cirri, the following segments with dorsal and ventral cirri. Parapodia rudimentary. Above the pharynx a retort-shaped organ.

Genus SAGITELLA Wagner:

No ciliated lobes and no papillae between the nuchal organs.

9. *Sagitella kowalevskii* Wagner. Twenty to fifty segments. Prostomium conical with two foliaceous cirri, a terminal palpod and a dorsal thickening behind which there are two oblong cushions curving in posteriorly. Under the thickening the retort-shaped organ. Length 5—15 mm.

Genus TRAVISIOPSIS Levinsen:

A dorsal papilla more or less surrounded by nuchal organs.

10. *Travisopsis lanceolata* Southern. Twenty-two segments. Prostomium with a small palpod. The nuchal organs stretching backwards, anteriorly surrounding the median, triangular or T-shaped papilla. Length 10—25 mm.
11. *T. levinseni* Southern. Twenty-five segments. Prostomium with palpod. The papilla large, rounded. Nuchal organs posteriorly diverging, anteriorly wartshaped, not surrounding the papilla on the front. Length ca. 24 mm.

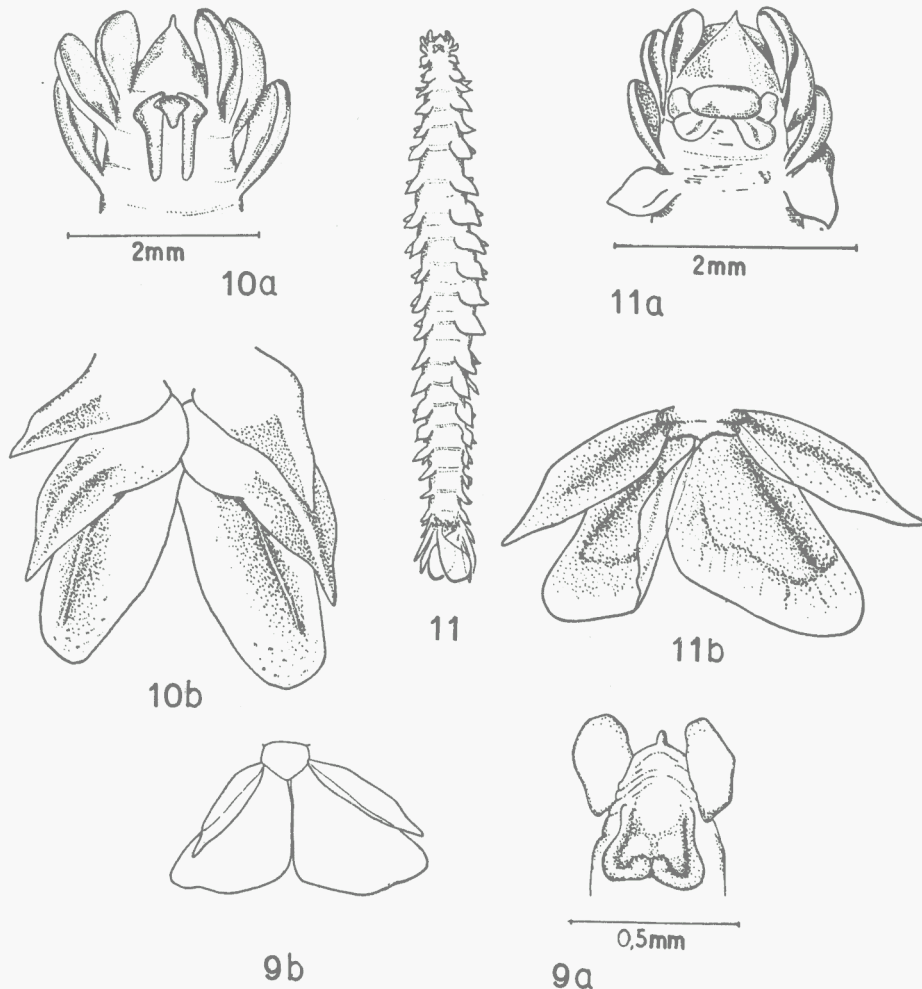


Plate III. 9, *Sagitella kowalevskii*. 10, *Travisopsis lanceolata*. 11, *Travisopsis levinseni*.

a, anterior part; b, anal cirri.

(Figs. 9a, b, 10b, 11b, after Støp-Bowitz. Figs. 11 (×2), 11a, after E. Wesenberg-Lund. Fig. 10a, original).

Further Information on Identification

1. *E. euchaeta*: Rosa, 1908b, p. 269; Fauvel, 1923, p. 218, Fig. 82; Støp-Bowitz, 1948, p. 39.
2. *T. helgolandica*: Greeff, 1879; Southern, 1911, p. 8; Wesenberg-Lund, 1935, p. 5, Pl. I, Figs. 5, 6; Støp-Bowitz, 1948, p. 42, Fig. 28.
3. *T. planctonis*: Apstein, 1900; Malaquin and Carin, 1911, p. 14; Støp-Bowitz, 1948, p. 52, Fig. 39.
4. *T. septentrionalis*: Apstein, 1900; Fauvel, 1923, p. 223, Fig. 84d; Wesenberg-Lund, 1935, p. 9, Pl. I, Figs. 7, 8, 9; Støp-Bowitz, 1948, p. 49, Fig. 36.
5. *T. krampi*: Wesenberg-Lund, 1936, p. 8, Fig. 1; Støp-Bowitz, 1948, p. 48, Fig. 34.
6. *T. nisseni*: Rosa, 1908a; Southern, 1911, p. 17, Pl. I, Figs. 1, 2; Fauvel, 1923, p. 222, Fig. 83e, f, g; Wesenberg-Lund, 1935, p. 6, Pl. I, 13, 14, 15; Støp-Bowitz, 1948, p. 44, Fig. 29.
7. *T. cavalli*: Rosa, 1907; 1908b; Southern, 1911, p. 29; Fauvel, 1923, p. 222, Fig. 84a; Wesenberg-Lund, 1935, p. 9, Pl. I, 1, 2, 3; Støp-Bowitz, 1948.
8. *T. kefersteini*: Greeff, 1879, p. 275, Pl. 15, Figs. 40, 41, 43, 46, 47; Fauvel, 1923, p. 225; Wesenberg-Lund, 1935, p. 12, Pl. I, Figs. 10, 11, 12.
9. *S. kowalevskii*: Southern, 1911, p. 33, Pl. II, Figs. 11, 12; Fauvel, 1923, p. 228; Støp-Bowitz, p. 56, Fig. 43.
10. *T. lanceolata*: Southern, 1911, p. 30, Pl. I, Figs. 3, 5, 6; Fauvel, 1923, p. 229; Wesenberg-Lund, 1935, p. 13; 1939, p. 20, Fig. 16; Støp-Bowitz, 1948, p. 58; Friedrich, 1950, p. 317, Fig. 3.
11. *T. levinseni*: Southern, 1911, p. 32, Pl. II, Figs. 7—10; Fauvel, 1923, p. 229; Wesenberg-Lund, 1935, p. 14; Støp-Bowitz, 1948, p. 59; Friedrich, 1950.

Distribution

Species

(species in brackets occur only occasionally)

Gulf of Bothnia	—
Gulf of Finland	—
Baltic proper	—
Belt Sea	(2)
Kattegat	(2), (4)
Skagerak	2, 4
Northern North Sea	2, 4
Southern North Sea	2
English Channel	2
South and West Ireland and Atlantic	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Faroe Iceland Area	2, 4, 5, 6, 7, 8, (10), 11
Norwegian Sea	2, 4
Irminger Sea	2, 3, 4, 5, 6, 7, 11
Davis Strait	(2), 4, 5, 6, 7, 10, 11

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