CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

Zooplankton
Sheet 88

ROTATORIA V

ORDER: MONOGONONTA

SUB-ORDER: PLOIMA

(i) Family: Asplanchnidae

Genus: ASPLANCHNA

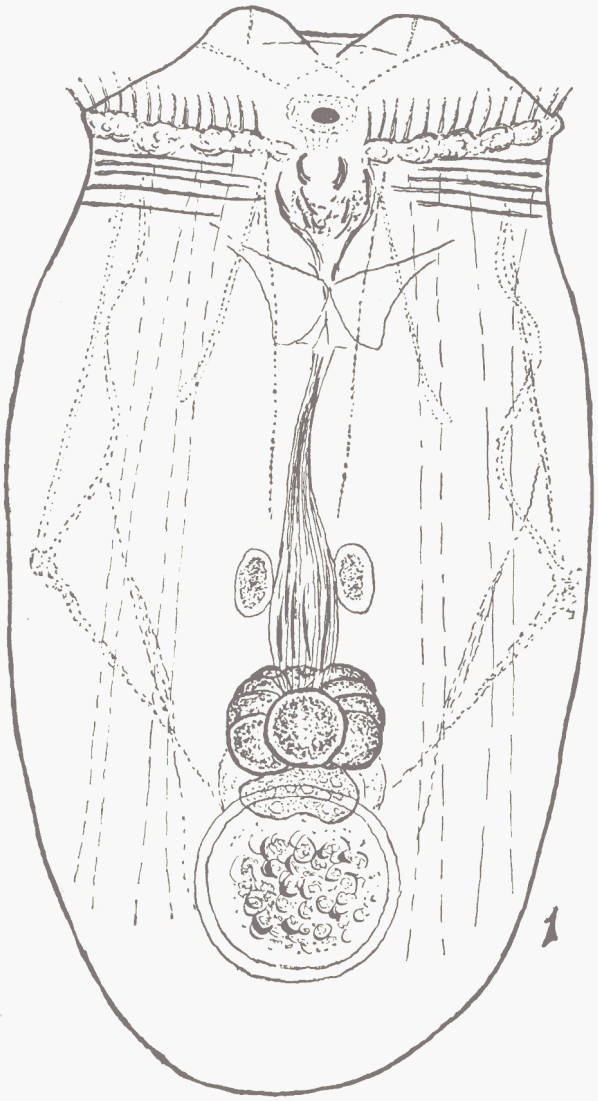
(ii) Family: Synchaetidae

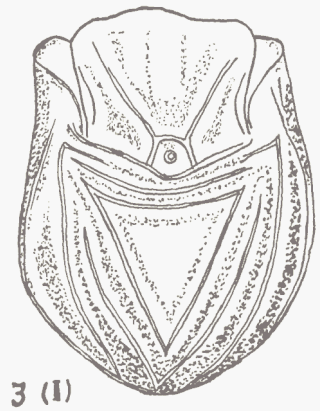
Genera: PLOESOMA
POLYARTHRA

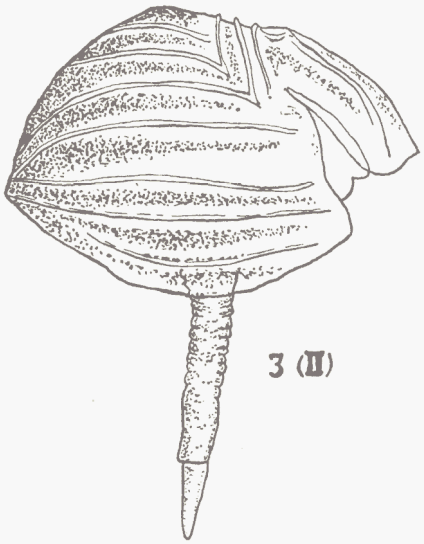
(By Bruno Berzins)

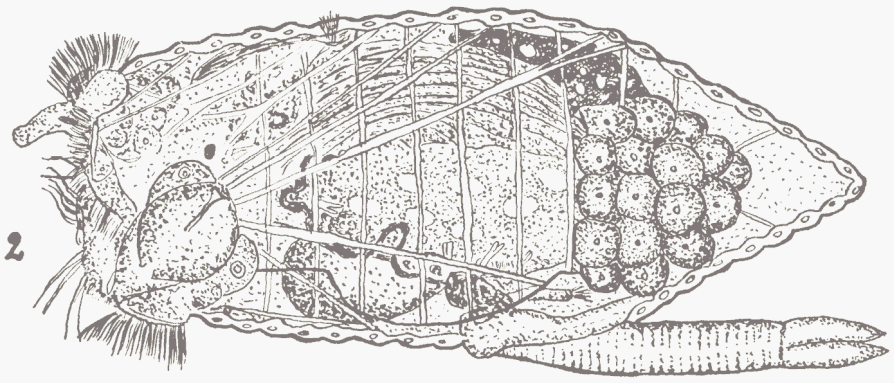
1960

https://doi.org/10.17895/ices.pub.5013

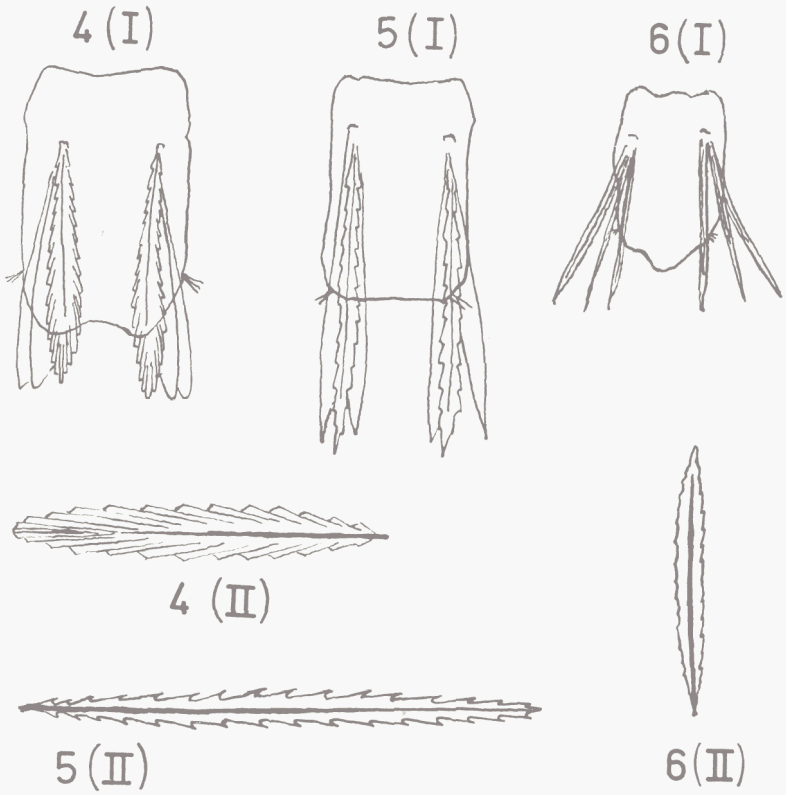








1, *Asplanchna priodontata*. 2, *Ploesoma hudsoni*, laterally. 3 (I—II), *Ploesoma trunctatum*, dorsally and laterally respectively. (After various authors.)



4 (I—II), *Polyarthra vulgaris* (II = single appendage or fin). 5 (I—II), *P. dolichoptera* (II = single fin). 6 (I—II), *P. remata* (II = single fin). (After various authors.)

Family ASPLANCHNIDAE

Body sac-shaped, with a soft cuticule and a well developed corona. Intestine and anus lacking. Mastax incudate.

Genus Asplanchna Gosse 1850

Without foot.

1. *Asplanchna priodonta* Gosse 1850. Length 400—1,500 μ.
Body very transparent. Ovary roundish. Without cement glands. Viviparous.
Freshwater species, found in estuaries.

Family SYNCHAETIDAE

Body varied in form, often with a firm lorica. Corona with sensory bristles or frontal palps. Mastax rod-shaped.

Genus Ploesoma Herrick 1885

Lorica firm; often open along the midventral line. Corona with frontal palps. Foot long and annulated.

2. *Ploesoma hudsoni* (Imhof) 1891. Length 300—600 μ.
Often with foam-like structure of the hypodermis. Without open midventral line.
Freshwater species, found in estuaries.

3. *Ploesoma truncatum* (Levander) 1894. Length 150—300 μ.
Lorica firm, with many ridges placed longitudinally and also across the dorsal side. Open along midventral line. Lorica rounded in front.
Freshwater species, in estuaries and brackish bays.

Genus Polyarthra Erhenberg 1834

With 12 movable, sword-shaped lateral appendages or fins. Body a short, dorso-ventrally flattened cylinder.

4. *Polyarthra vulgaris* Carlin 1943. Length of body 100—145 μ, fins 85—150 μ.
Fins only somewhat longer posteriorly than body; rather wide and with strong saw-toothed margins. Lateral antennae somewhat before the end of body.
Freshwater species, in eastern Baltic and in estuaries.

5. *Polyarthra dolichoptera* Idelson 1925. Length of body 80—145 μ, fins 100—200 μ.
Fins very extended posteriorly; long and thin, with strong saw-toothed margins. Lateral antennae on the posterior end of body.
Freshwater species, in eastern Baltic and in estuaries.

6. *Polyarthra remata* Skorikov 1896. Length of body 75—105 μ, fins 80—125 μ.
Fins not very extended posteriorly; rather thin, with a strong midrib, but with thin margins. Lateral antennae near posterior edge of body. Very small species.
Freshwater species, also found only in the eastern part of the Gulf of Finland.

References to Descriptions and Figures

1. *A. priodonta:* Hudson & Gosse, 1889, I, p. 123, Pl. 12, Fig. 2; Remane, 1929, p. 100; Wesenberg-Lund, 1930, p. 163, Pl. 12, Figs. 1 and 5, Pl. 14, Figs. 1—2; Voigt, 1957, p. 385, Pl. 84, Fig. 7; Waniczek, 1930, pp. 169—322, Pls. 14—25.
2. *Pl. hudsoni:* Remane, 1929, p. 109, Fig. 13; Wesenberg-Lund, 1930, p. 143, Pl. 10, Figs. 1—5; Voigt, 1957, p. 403, Pl. 86, Fig. 24.
3. *Pl. truncatum:* Levander, 1894, p. 25, Pl. 1, Figs. 9—10 (as *Gastroschiza truncata*); Remane, 1929, p. 109, Fig. 98; Voigt, 1957, p. 404, Pl. 86, Fig. 27.
4. *Po. vulgaris:* Carlin, 1943, p. 82, Pl. 1, Fig. 1, Pl. 3, Fig. 1; Pejler, 1956, p. 246, Figs. 1—2; Voigt, 1957, p. 392, Pl. 23, Figs. 3 and 18.
5. *Po. dolichoptera:* Carlin, 1943, p. 83, Pl. 2, Figs. 1 and 5, Pl. 4, Fig. 1; Pejler, 1956, p. 246, Figs. 1—2; Voigt, 1957, p. 394, Pl. 23, Fig. 4.
6. *Po. remata:* Skorikov, 1896, p. 277, Pl. 7, Figs. 3—4; Carlin, 1943, p. 85, Pl. 2, Figs. 2 and 4; Voigt, 1957, p. 395, Pl. 23, Fig. 6.

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

References to Work on Biology

Carlin, 1943; Levander, 1894; Wesenberg-Lund, 1930.

References

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Hudson, C. T., & Gosse, P. H., 1889. *The Rotifera or Wheel-Animalcules.* **2** (and suppl.).

Levander, K. M., 1894. Acta Soc. Flora Fauna Fenn., **12** (3).

Pejler, B., 1956. Evolution, **10**: 246—61.

Remane, A., 1929. *Tierwelt der Nord- und Ostsee.* Lief. 7, e: 156 pp.

Ridder, M. de, 1959. Bull. Inst. roy. Sci. nat. Belg., **35** (20).

Skorikova, 1896. Trav. Soc. nat. Univ. Imp. Kharkov, **30**.

Sokolova, M., 1927. *Etudes de la Neva.* **1**(5): 48 pp.

Waniczek, H., 1930. Ann. Mus. Zool. Pol., **8**: 169—322.

Wesenberg-Lund, C., 1930. K. Dan. Vid. Selsk. Nat. Math., Avd. 9, **2** (1): 230 pp.