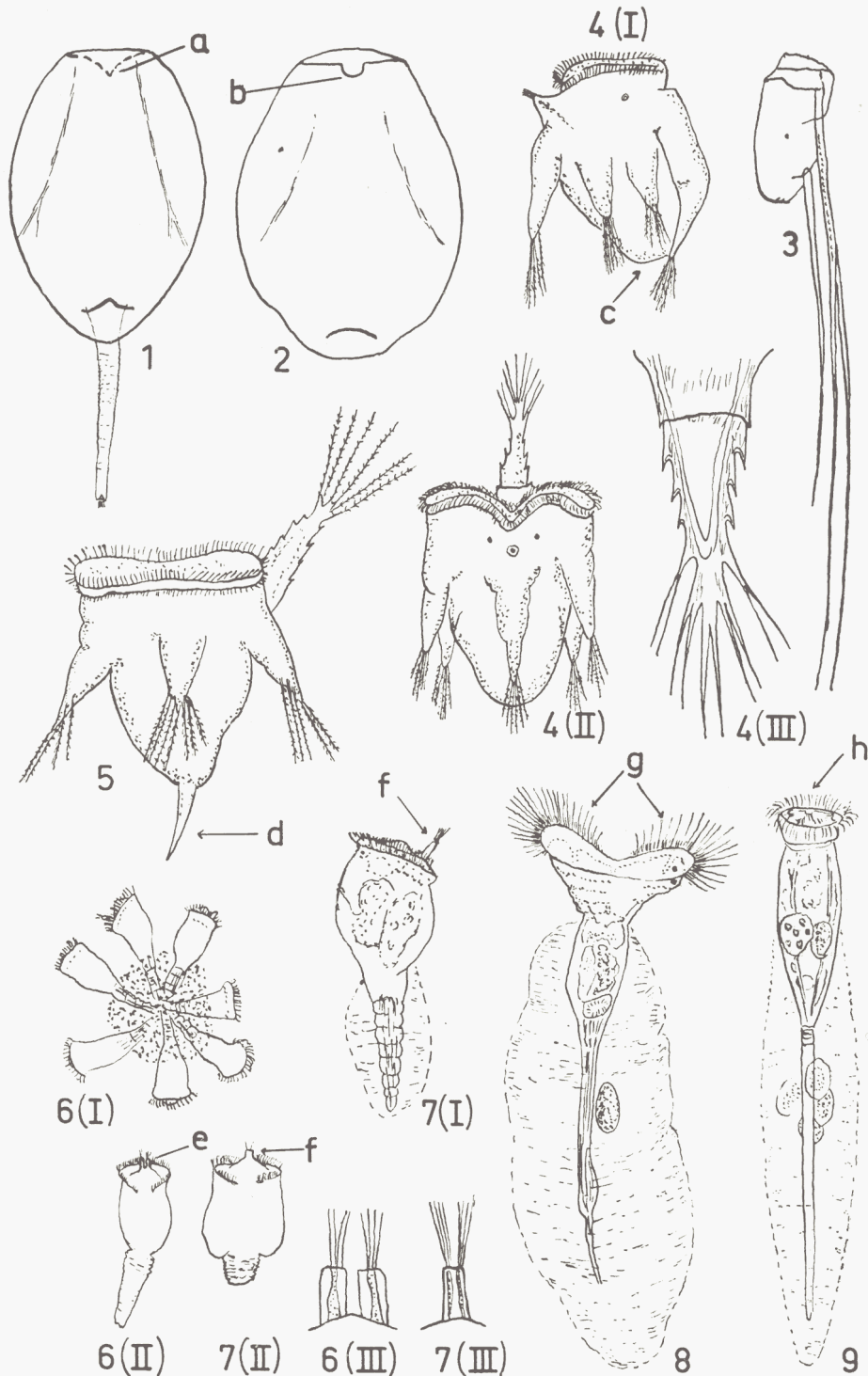


Zooplankton
Sheet 89

- ROTATORIA VI**
ORDER: MONOGONONTA
(1) SUB-ORDER: FLOSCULARIACEAE
(i) Family: Testudinellidae
Genera: TESTUDINELLA,
FILINIA, HEXARTHRA
(ii) Family: Conochildae
Genus: CONOCHILUS
(2) SUB-ORDER: COLLOTHECACEAE
Family: Collothecidae
Genus: COLLOTHECA
(By Bruno Berzins)

1960



1, *Testudinella clypeata clypeata*, dorsal. 2, *T. clypeata crassa*, ventral. 3, *Filinia longiseta* (*limnetica*). 4 (I—III), *Hexarthra fennica fennica* (I = lateral, II = dorsal, III = ventral appendage). 5, *H. fennica oxyuris*. 6 (I—III), *Conochilus hippocrepis* (I = young colony of *Conochilus*, II = contracted animal, III = lateral antennae). 7 (I—III), *C. unicornis* (I = extended animal, II = contracted animal, III = lateral antennae). 8, *Collothecha mutabilis*. 9, *C. pelagica*.

a = V-shaped anterior ventral margin, b = rounded notch on anterior ventral margin, c = body without appendages posteriorly, d = body with spine posteriorly, e = double lateral antennae, f = single lateral antennae, g = with two coronal lobes, h = without lobes on corona.

SUB-ORDER FLOSCULARIACEAE

Family TESTUDINELLIDAE

Free-swimming. Foot, if it exists, has in the adult a brush of cilia on the end. Without case. Mastax malleorammat.

Genus *Testudinella* Bory de St. Vincent 1826

Lorica dorso-ventrally flattened. Foot long, retractile, annulated, and terminating in a tuft of cilia.

1. *Testudinella clypeata clypeata* (Mueller) 1786. Length of lorica 120—170 μ .
Lorica elliptical, anterior gently rounded. Ventral anterior margin with a V-shaped sinus. Foot opening is a curved cleft. Marine species, usually in the littoral zone.
2. *Testudinella clypeata crassa* (Levander) 1892. Length 150—160 μ .
Lorica elliptical, narrowed anteriorly. Anterior margin gently rounded, with a rounded or rectangular notch ventrally. Brackish-water species, in the littoral zone.

Genus *Filinia* Bory de St. Vincent 1824

Body sac-shaped, without lorica. With two lateral and one posterior spine.

3. *Filinia longiseta* (Ehrenberg) 1834. Length of body 130—250 μ , length of lateral spines 240—500 μ , posterior spine 130—400 μ .
If lateral spines are only 2—3 times as long as the body, it is *forma typica*, but if the spines are more than 4 times as long it is called *longiseta limnetica* (Zacharias).
Freshwater species, also found in estuaries.

Genus *Hexarthra* Schmarida 1854 (syn. *Pedalia* and *Pedalion*)

With six, stout, setose appendages. Body conical. Corona with a double ciliary wreath, and a ciliated groove between.

4. *Hexarthra fennica fennica* (Levander) 1892. Length of body 120—300 μ .
Body posteriorly rounded, without caudal appendage. Ventral appendage (limb) as long as body.
Brackish-water species, in eastern Baltic.
5. *Hexarthra fennica oxyuris* (Sernov) 1903. Length of body 160—200 μ .
Body posteriorly with a stout spine.
Brackish-water species, littoral.

Family CONOCHILIDAE

Colonies composed of radiating animals inhabiting adhering gelatinous tubes (after fixation they often split into separate individuals). Free-swimming. With a ventral gap in the ciliary wreath.

Genus *Conochilus* Ehrenberg 1834

Antennae on the corona.

6. *Conochilus hippocrepis* (Schrank) 1830. Length of body 500—800 μ .
With two antennae on corona. Colonies with many individuals.
Freshwater species, also in estuaries.
7. *Conochilus unicornis* Rousselet 1892. Length of body 200—400 μ .
Only one antenna on corona. Colonies smaller.
Freshwater species, also in estuaries.

SUB-ORDER COLLOTHECACEAE

Family COLLOTHECIDAE

Corona usually large, without double wreath of cilia; without developed antennae. Mouth central. Mastax uncinata. Solitary, usually sessile.

Genus *Collotheca* Haring 1913

Corona circular, usually lobed. Foot terminated by a contractile peduncle.

8. *Collotheca mutabilis* (Hudson) 1885. Length 200—500 μ .
Corona much wider than body, two-lobed (dorsal lobe larger). Vibratile setae set round the whole circle of the disc.
Freshwater species, found in the eastern Baltic.
9. *Collotheca pelagica* (Rousselet) 1893. Length 300—500 μ .
Corona without lobes, circular, narrow. Short vibratile cilia on the exterior coronal margin; longer non-vibratile setae on 5 projections of the inner margin.
Freshwater species, also found in estuaries.

References to Descriptions and Figures

1. *T. clypeata clypeata*: Hudson & Gosse, 1889, Vol. 2, p. 115, Pl. 17, Fig. 14; Hofsten, 1912, p. 220, Fig. 8; Wulfert, 1942, p. 22, Pl. 4, Fig. 18; Voigt, 1957, p. 411, Pl. 87, Fig. 14, Pl. 89, Fig. 19.
2. *T. clypeata crassa*: Levander, 1894, p. 57, Pl. 3, Fig. 40; Hofsten, 1912, p. 220; Voigt, 1957, p. 411, Pl. 89, Fig. 16 (syn.: *Pterodina*).
3. *Filinia longiseta*: Levander, 1894, p. 24 (as *Triarthra*); Carlin, 1943, p. 35, Fig. 4; Voigt, 1957, p. 419, Pl. 89, Fig. 1, Pl. 90, Fig. 1.
4. *H. fennica fennica*: Levander, 1894a, p. 1, Figs. 1—3, 5 (as *Pedalion*); Sladeczek, 1955, p. 64, Figs. 1—5; Voigt, 1957, p. 418, Pl. 90, Fig. 9.
5. *H. fennica oxyuris*: Zernov, 1903, p. 9, Pl. 1, Figs. 2—3; Hauer, 1925, p. 182, Fig. 16; Voigt, 1957, p. 415, Pl. 90, Fig. 10.
6. *Con. hippocrepis*: Hudson & Gosse, 1889, Vol. 1, p. 89, Pl. 8, Fig. 9 (as *volvox*); Hlava, 1908, p. 26, Fig. 9 (as *volvox*); Voigt, 1957, p. 436, Pl. 96, Fig. 14.
7. *Con. unicornis*: Rousselet, 1892, p. 367, Pl. 24, Fig. 11; Hlava, 1908, p. 28, Fig. 10; Kolisko, 1939, p. 78, 17 figs.; Voigt, 1957, p. 436, Pl. 96, Fig. 15.
8. *Coll. mutabilis*: Hudson & Gosse, 1889, Vol. 1, p. 56, Pl. 3, Fig. 2 (as *Floscularia*); Lie-Pettersen, 1909, p. 18, Pl. 1, Figs. 2—3; Berzins, 1951, p. 370; Voigt, 1957, p. 440, Pl. 97, Fig. 3.
9. *Coll. pelagica*: Rousselet, 1893, p. 444, Pl. 7, Fig. 1; Berzins, 1951, p. 370; Voigt, 1957, p. 439, Pl. 97, Fig. 1.

Distribution

Species

Gulf of Bothnia	3, 7, 8, 9
Gulf of Finland	2, 3, 4, 5, 6, 7, 8, 9
Gulf of Riga	1, 3
Baltic proper	1, 3, 9
Belt Sea	1, 3, 6
Kattegat	1
Skagerak	1
Northern North Sea	1, 2
Southern North Sea	1, 3, 4, 8
English Channel, eastern	1, 3
English Channel, western	1
Bristol Channel and Irish Sea	1
South and West Ireland	1
North-eastern Atlantic	—
Faroe-Shetland, Faroe-Iceland area ..	—
Norwegian Sea	1
Barents Sea	—

References to Work on Biology

Levander, 1894a; Hlava, 1908; Hauer, 1925; Kolisko, 1939.

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