

CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

Zooplankton

Sheet 86

ROTATORIA III

ORDER: MONOGONENTA

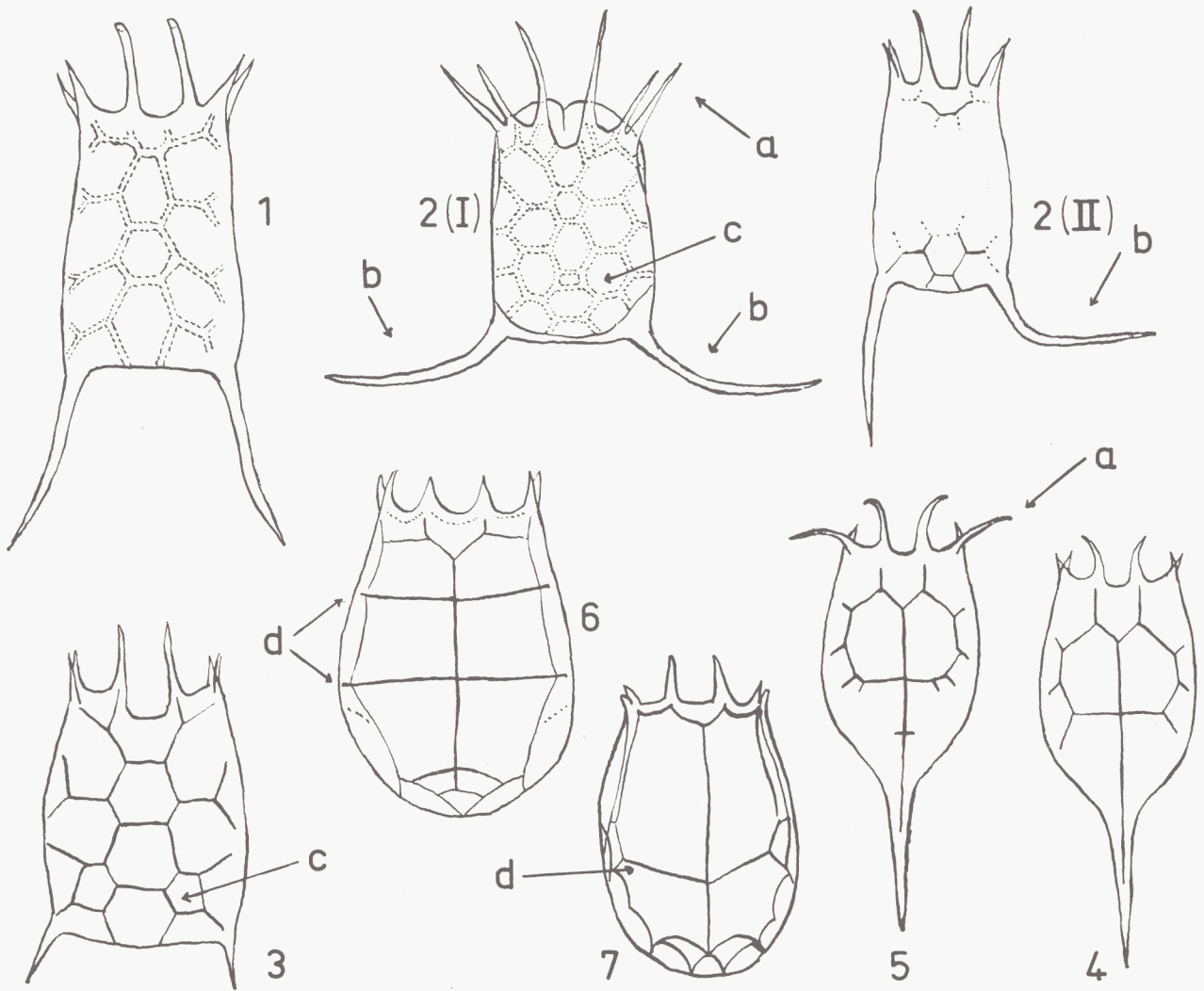
SUB-ORDER: PLOIMA

Family: Brachionidae

Genus: KERATELLA

(By Bruno Berzins)

1960



1, *Keratella quadrata quadrata*. 2 (I—II), *K. quadrata platei*. 3, *K. testudo*.
4, *K. cochlearis cochlearis*. 5, *K. cochlearis recurvispina*. 6, *K. cruciformis cruciformis*.
7, *K. cruciformis eichwaldi*.

a = bent anterior spines, b = bent posterior spines, c = extra plaques, d = dividing lines.

(After various authors and original.)

Genus *Keratella* Bory de St. Vincent 1822

Brachionid rotifers with loricate body, separated into a dorsal and ventral plate. Dorsoventrally more or less compressed. Anterior margin usually with six spines. Posterior spines often present, one or two in number, single posterior spine usually median. Dorsal plate with sculptural pattern, with or without areolate network, postulation, or fine spines. (Syn. *Anuraea* Ehrbg.)

Many species in fresh water, only a few in brackish water. *Keratella cruciformis cruciformis*, *cr. eichwaldi*, *quadrata platei*, and *cochlearis recurvispina* are typical brackish-water forms.

Species	Sculpture of the dorsal lorica	Posterior spines	Anterior spines	Dorsal plaques on lorica	Length in μ				Width of body (μ)
					Total	Body	Anterior spines	Posterior spines	
1. <i>Keratella quadrata quadrata</i> (Mueller)	Median a row of plaques	2 long, nearly straight	Usually long, nearly straight	Without extra pairs of plaques	220— 350	130— 170	20— 60	80— 130	90— 120
2. <i>K. quadrata platei</i> (Jägerskiöld)	Median a row of plaques	2 long, both (or usually only the right) extend from body nearly at right angles	Long, the antero-intermediate and lateral are usually strongly divergent	With 2 extra pairs of plaques	230— 260	70— 100	50— 60	80— 110	125— 140
3. <i>K. testudo</i> (Ehrenberg)	Median a row of plaques	2 short or very short	Usually short or very short	With one extra pair of plaques to the side of postero-medial plaques	160— 190	100— 120	20— 30	30— 40	75— 90
4. <i>K. cochlearis cochlearis</i> (Gosse)	Median, with unbroken line (edge)	1 long, nearly straight	Relatively long, and very little bent	With plaques on both sides of median line; plaques small	120— 200	75— 100	15— 30	30— 70	50— 70
5. <i>K. cochlearis recurvispina</i> (Jägerskiöld)	Median, with unbroken line (edge)	1 long and stout, nearly straight	Intermediates long, stout; divergent laterally, often bending nearly at right angles to the body	With small plaques on both sides of median line	210— 260	110— 120	40— 50	100— 110	80— 90
6. <i>K. cruciformis cruciformis</i> (Thompson)	Median, with unbroken line (edge)	Without	Relatively short, straight	With 3 pairs of large plaques on both sides of median line	190— 210	165— 180	20— 25	140— 160	—
7. <i>K. cruciformis eichwaldi</i> (Levander)	Median, with unbroken line	Without	Relatively short, straight	With 2 pairs of very large plaques on both sides of median line	140— 170	125— 150	75— 105	10— 25	—

References to Descriptions and Figures

1. *K. quadrata quadrata*: Mueller, 1786, p. 354, Pl. 49, Figs. 12—13; Carlin, 1943, p. 41, Fig. 6; Ahlstrom, 1943, p. 439, Pl. 40, Figs. 1—7.
2. *K. quadrata platei*: Jägerskiöld, 1894, p. 17, Fig. 1; Remane, 1929, p. 97, Fig. 79; Ahlstrom, 1943, p. 445, Pl. 40, Fig. 8.
3. *K. testudo*: Ehrenberg, 1838, p. 507, Pl. 62, Fig. 12; Hofsten, 1909, p. 283, Fig. 26; Carlin, 1943, p. 50, Fig. 7; Ahlstrom, 1943, p. 446, Pl. 41, Figs. 5—8 (as *brevispina*); Gillard, 1948, Pl. 2, Fig. 5.
4. *K. cochlearis cochlearis*: Gosse, 1851, p. 202; Hudson & Gosse, 1889, p. 124, Pl. 29, Fig. 7; Lauterborn, 1900, p. 421, Pl. 10, Figs. 2—4; Wulfert, 1942, p. 16, Pl. 3, Figs. 12—16; Ahlstrom, 1943, p. 420, Pl. 35, Figs. 1—14; Gillard, 1948, p. 173, Pl. 2, Fig. 6 (as *stipitata*).
5. *K. cochlearis recurvispina*: Jägerskiöld, 1894, p. 19, Fig. 2; Zernov, 1901, p. 30, Pl. 4, Fig. 8; Ahlstrom, 1943, p. 428, Pl. 36, Fig. 7; Voigt, 1957, p. 177, Pl. 23, Fig. 15.
6. *K. cruciformis cruciformis*: Rousselet, 1895, p. 125, Pl. 7, Fig. 6; Levander, 1901, p. 54, Fig. 2; Lie-Pettersen, 1905, p. 41, Pl. 2, Fig. 12; Remane, 1929, p. 97, Fig. 76; Ahlstrom, 1943, p. 453, Pl. 38, Fig. 10.
7. *K. cruciformis eichwaldi*: Levander, 1894, p. 62, Pl. 3, Fig. 41; Remane, 1929, p. 97, Fig. 77; Ahlstrom, 1943, p. 453, Pl. 38, Fig. 11; Gillard, 1952, p. 327, Fig. 1; Ridder, 1959, p. 8, Fig. 2.

Distribution

Species

Gulf of Bothnia	1, 2, 4, 5, 7
Gulf of Finland	1, 2, 3, 4, 5, 7
Gulf of Riga	2, 4, 5, 7
Baltic proper	(1), 2, (4), 5, 7
Belt Sea	(1), 2, 5, 7
Kattegat	—
Skagerak	6
Northern North Sea	6
Southern North Sea	(1), (4), 6, 7
English Channel, eastern	(1), 6, 7
English Channel, western	(1), 6
Bristol Cannel and Irish Sea	(1)
South and West Ireland and Atlantic .	—
Faroe-Shetland and Faroe-Iceland area	—
Norwegian Sea	6, (7)
Barents Sea	6
Species from littoral regions or estuaries in brackets.	

References to Work on Biology

Ahlstrom, 1943; Gillard, 1948; Lauterborn, 1900; Levander, 1894; Lie-Pettersen, 1905; Ruttner-Kolisko, 1949; Wesenberg-Lund, 1930; Wulfert, 1942.

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