CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

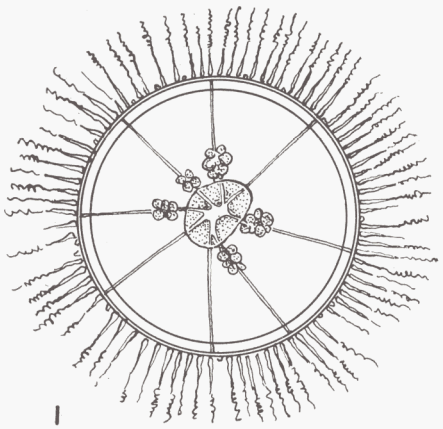
Zooplankton
Sheet 99

HYDROMEDUSAE

Families: Dipleurosomatidae
Melicertidae
Laodiceidae

(By F. S. Russell)

1963



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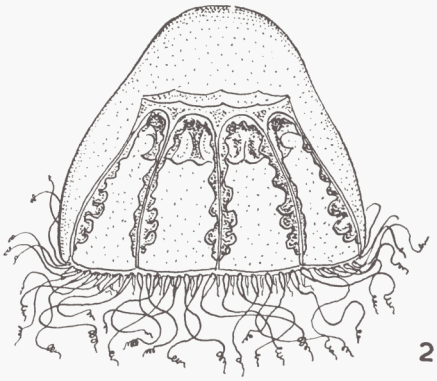

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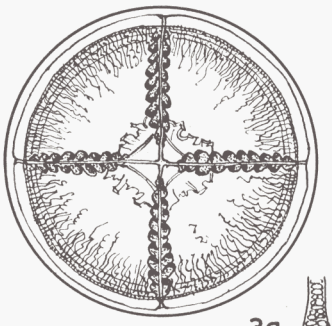

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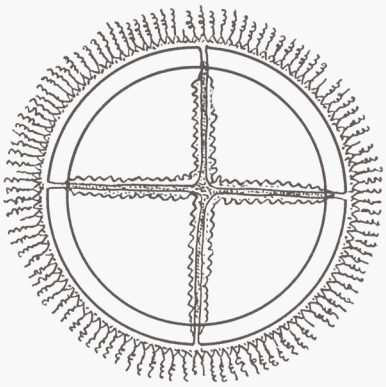

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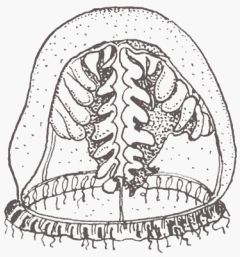

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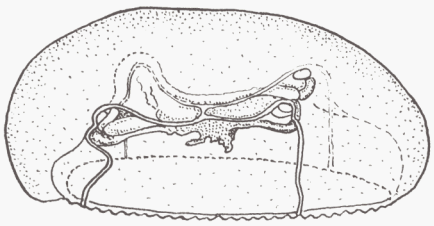

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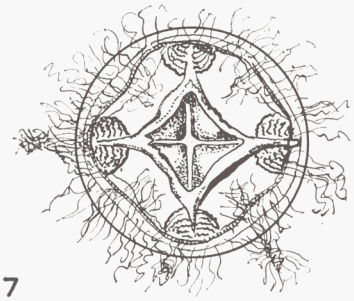

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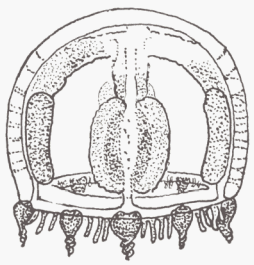

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1. *Dipleurosoma typicum*. — 2. *Melicertum octocostatum*. — 3. *Laodicea undulata*; 3a, cordylus. — 4. *Staurophora mertensi*; 4a, cordylus. — 5. *Ptychogena crocea*. — 6. *Ptychogena hyperborea*. — 7. *Ptychogena lactea*. — 8. *Krampella dubia*.

Family Dipleurosomatidae

Three, four or more simple or branched radial canals, irregularly arranged if simple; gonads on radial canals separated from stomach; hollow marginal tentacles; no marginal cirri nor marginal sense organs.

Genus DIPLEUROSOMA Boeck

Three or more main radial canals, some or all branching irregularly; gonads on proximal portions of radial canals; ocelli may be present.

1. *Dipleurosoma typicum* Boeck. 5 to 18 main radial canals, simple or branching irregularly; 1 to 12 gonads, usually 5; up to 100 or more marginal tentacles, each with adaxial ocellus.

Family Melicertidae

Base of stomach attached over its whole surface; eight simple or bi-furcated radial canals; gonads on radial canals adjacent to or separated from stomach; hollow marginal tentacles; no marginal cirri nor marginal sense organs.

Genus MELICERTUM L. Agassiz

With simple radial canals, four primary and four secondary arising from stomach; gonads on radial canals separated from stomach.

2. *Melicertum octocostatum* (M. Sars). 64 to 72 large marginal tentacles alternating with same number of small tentacles; up to 14 mm high.

Family Laodiceidae

Four to eight or more simple or branched radial canals; with hollow marginal tentacles; with or without marginal cirri; no marginal vesicles; with marginal cordyli; with or without ocelli.

Genus LAODICEA Lesson

Small stomach with four simple crenulated lips; four simple radial canals; simple wavy gonads on radial canals contiguous with stomach; with or without marginal cirri; with adaxial ocelli.

3. *Laodicea undulata* (Forbes & Goodsir). Up to 400 or more marginal tentacles with basal endodermal spurs; usually one or two marginal cirri between adjacent marginal tentacles; cordyli club-shaped without nematocysts, usually one between adjacent tentacles; adaxial ocellus usually on each third to fifth tentacle; up to 37 mm in diameter, usually smaller.

Genus STAUROPHORA Brandt

Cross-shaped stomach with mouth opening extending along radial canals; four simple radial canals; gonads in branched diverticulae in walls of mouth; no marginal cirri; with adaxial ocelli.

4. *Staurophora mertensi* Brandt. Up to 4000 or more marginal tentacles, all with adaxial ocellus; cordyli club-shaped witout nematocysts, alternating with marginal tentacles; up to 200 mm or more in diameter.

Genus PTYCHOGENA A. Agassiz

Four radial canals with lateral diverticulae; gonads in diverticulae of radial canals; no marginal cirri; no ocelli.

5. *Ptychogena crocea* Kramp & Damas. Each radial canal with 6 to 7 lateral lamellae on either side; up to 64 marginal tentacles with slight abaxial endodermal spurs; 2 to 4 cordyli between adjacent marginal tentacles, each with distal nematocysts; up to 25 mm in diameter; colour saffron.
6. *Ptychogena hyperborea* Kramp. Stomach with four large perradial lobes; gonads in 2 to 3 pairs of lateral folds on proximal ends of radial canals; about 80 marginal tentacles and probably equal number of cordyli; up to 15 mm in diameter; stomach deep reddish brown.
7. *Ptychogena lactea* A. Agassiz. Each radial canal with 20 to 30 lamelliform diverticulae on either side; 300 to 500 marginal tentacles, with abaxial endodermal spurs; cordyli alternating with marginal tentacles, without nematocysts; up to 90 mm in diameter.

INCERTAE SEDIS

Genus KRAMPELLA Russell

Four simple radial canals with cross-shaped mouth; but without cordyli.

8. *Krampella dubia* Russell. Radial canals connected by fine strands with exumbrella surface; gonads along almost the whole length of radial canals; eight marginal tentacles; 3 to 4 small cirrus-like tentacles between adjacent marginal tentacles; 3 mm in diameter.

Further Information on Identification

1. *Dipleurosoma typicum:* KRAMP, 1933, p. 562, Fig. 24. RUSSELL, 1953, p. 251, Textfigs. 143–146. KRAMP, 1959, p. 132, Fig. 145. KRAMP, 1961, p. 134.
2. *Melicertum octocostatum:* KRAMP, 1919, p. 52, Pl. I, Fig. 10; Pl. III, Fig. 8. RUSSELL, 1953, p. 245, Textfigs. 138–142; Pl. XIII, Figs. 2–4. KRAMP, 1959, p. 134, Fig. 152. KRAMP, 1961, p. 136.
3. *Laodicea undulata:* MAYER, 1910, p. 201, Textfigs. 104, 105; Pl. XXI, Figs. 4,5; Pl. XXII, Figs. 2–6; Pl. XXIII, Figs. 1–3 (as *L. cruciata*). KRAMP, 1919, p. 16; Pl. II, Figs. 1–8. KRAMP, 1933, p. 554, Figs. 9a, 16–18. RUSSELL, 1953, p. 230, Textfigs. 123–130; Pl. XIV, Figs. 1–3. KRAMP, 1959, p. 135, Fig. 153. KRAMP, 1961, p. 141.
4. *Staurophora mertensi:* MAYER, 1910, p. 291, Pl. XXVI, Figs. 4–9. KRAMP, 1919, pp. 5 and 39, Pl. I, Fig. 9; Pl. II, Figs. 9, 10; Pl. III, Fig. 7. KRAMP, 1933, p. 599, Figs. 22, 23. RUSSELL, 1953, p. 239, Textfigs. 132–137. KRAMP, 1959, p. 138, Fig. 160. KRAMP, 1961, p. 148.
5. *Ptychogena crocea:* KRAMP & DAMAS, 1925, p. 290, Pl. 35, Figs. 1–7. KRAMP, 1933, p. 558, Fig. 21. KRAMP, 1959, p. 137, Fig. 158. KRAMP, 1961, p. 145.
6. *Ptychogena hyperborea:* KRAMP, 1942, p. 55, Fig. 18. KRAMP, 1959, p. 138, Fig. 159. KRAMP, 1961, p. 146.
7. *Ptychogena lactea:* KRAMP, 1919, p. 31, Textfig. 5; Pl. III, Figs. 1–6. KRAMP, 1959, p. 137, Fig. 157. KRAMP, 1961, p. 146.
8. *Krampella dubia:* RUSSELL, 1957, p. 445, Figs. 1, 2. KRAMP, 1959, p. 141, Fig. 168b. KRAMP, 1961, p. 139.

Distribution	Species
Gulf of Bothnia	—
Gulf of Finland	—
Baltic Proper	2
Belt Sea	2
Kattegat	2, 3
Skagerak	2, 3, 4
Northern North Sea	1, 2, 3, 4
Southern North Sea	2, 3, 4
English Channel (eastern)	1, 3
English Channel (western)	2, 3
Bristol Channel and Irish Sea	2, 3
South and West Ireland and Atlantic	1, 2, 3, 8
Faroe-Shetland Area	3, 4, 5
Faroe-Iceland Area	2, 3, 4
Norwegian Sea	2, 3, 4, 5
Barents Sea	4, 7
Greenland	2, 4, 6, 7

References to Work on Biology

(Numbers after references give species referred to) KRAMP & DAMAS (1925) 2. BIGELOW (1926) 4. RUSSELL (1953) 1, 2, 3, 4. KRAMP (1959), 1 to 8 (distribution).

References

BIGELOW, H. B., 1926. Bull. U.S. Bur. Fish. Washington, **40** (1924), Pt. 2.

KRAMP, P. L., 1919. Danish Ingolf Exped., **5**, Pt. 8.

KRAMP, P. L., 1933. Nordisches Plankton, Lief. 22, **12**, Teil 3, p. 541.

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