

CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

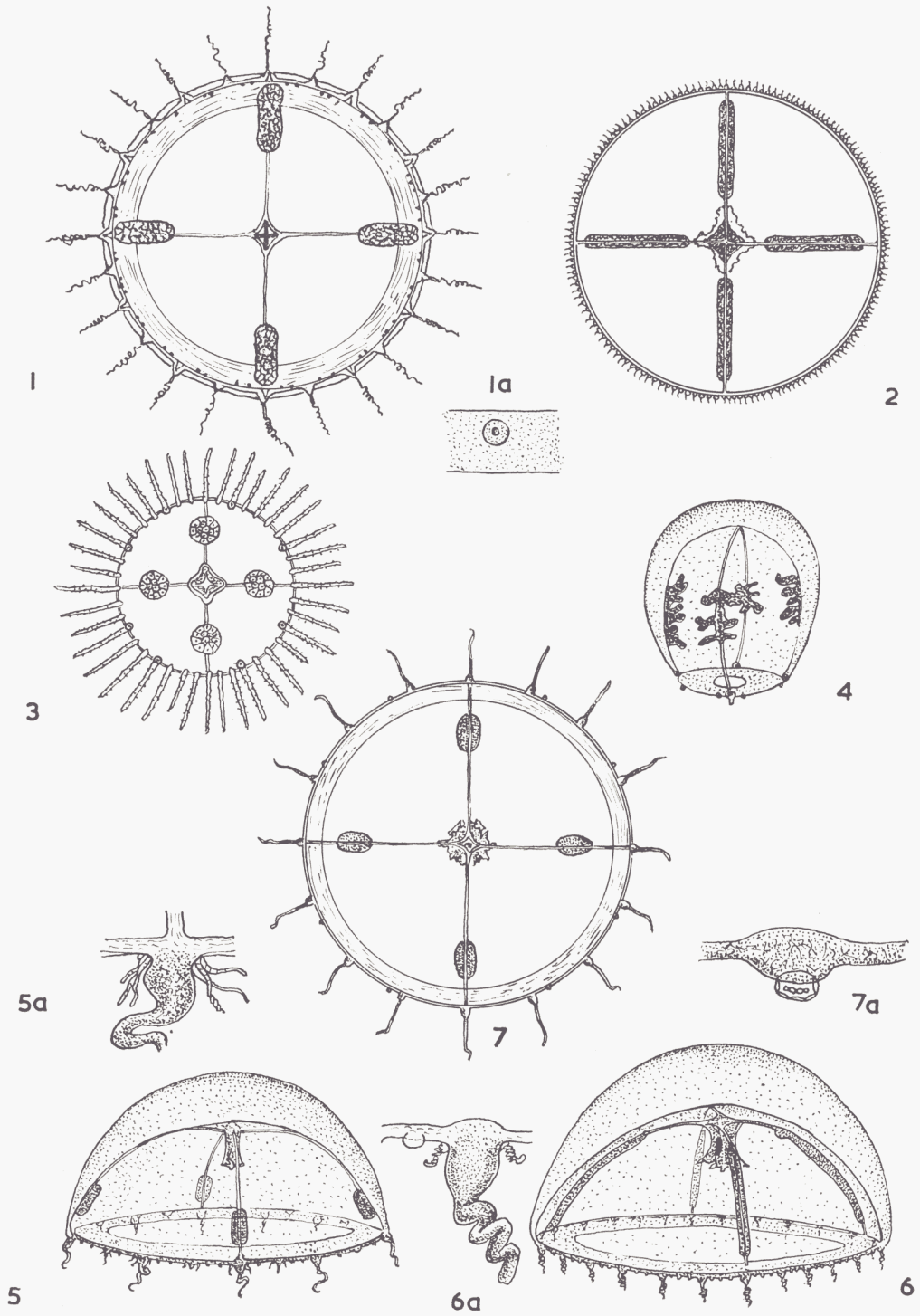
Zooplankton
Sheet 101

HYDROMEDUSAE

Families: Campanulariidae
Lovenellidae
Phialellidae

(BY F. S. RUSSELL)

1963



1. *Phialidium hemisphaericum*; 1a, marginal vesicle. — 2. *Phialidium islandicum*. — 3. *Obelia* sp. — 4. *Agastra mira*. — 5. *Lovenella clausa*; 5a, tentacle base and lateral cirri. — 6. *Eucheilota maculata*; 6a, tentacle base and lateral cirri. — 7. *Phialella quadrata*; 7a, marginal vesicle.

Family Campanulariidae

Small stomach without peduncle; usually four simple radial canals; no excretory pores; gonads on radial canals separated from stomach; hollow, rarely solid, marginal tentacles; no marginal or lateral cirri; closed marginal vesicles; no ocelli. (Differ from Phialellidae only in hydroid characters).

Genus PHIALIDIUM Leuckart

Hollow marginal tentacles; numerous marginal vesicles.

1. *Phialidium hemisphaericum* (L.). 16 to 32 marginal tentacles; usually two marginal vesicles between adjacent tentacles; up to 20 mm in diameter.
2. *Phialidium islandicum* Kramp. Up to about 200 marginal tentacles; about 200 marginal vesicles; up to 40 mm in diameter.

Genus OBELIA Péron & Lesueur

Reduced velum; solid marginal tentacles; eight marginal vesicles.

3. *Obelia* spp. As yet there is no satisfactory method of distinguishing the species of *Obelia* medusae.

Genus AGASTRA Hartlaub

Reduced medusae without stomach or marginal tentacles; eight marginal vesicles.

4. *Agastra mira* Hartlaub. Gonads in lateral, irregular lobes on middle half of radial canals; about 1 mm high and wide.

Family Lovenellidae

Small stomach without peduncle; four simple radial canals; no excretory pores; gonads on radial canals separated from stomach; hollow marginal tentacles; no marginal cirri; with lateral cirri; closed marginal vesicles; no ocelli.

Genus LOVENELLA Hincks

With indefinite number of marginal vesicles.

5. *Lovenella clausa* Hincks. Gonads oval on distal ends of radial canals; 16 to 24 marginal tentacles; 1 to 3 lateral spiral cirri on either side of base of tentacle; 16 to 23 marginal vesicles each with one concretion; up to 9 mm in diameter.

Genus EUCHEILOTA McCrady

With fixed number of marginal vesicles.

6. *Eucheilota maculata* Hartlaub. Gonads linear on distal $\frac{2}{3}$ of radial canals; 16 to 30 marginal tentacles; one to three rudimentary bulbs between adjacent tentacles; one lateral spiral cirrus on either side of base of tentacle and rudimentary bulb; eight marginal vesicles each with 5 to 10 concretions; up to 13 mm in diameter; four large black spots one on each interradial wall of stomach.

Family Phialellidae

Small stomach without peduncle; four simple radial canals; no excretory pores; gonads on radial canals separated from stomach; hollow marginal tentacles; no marginal or lateral cirri; closed marginal vesicles; no ocelli. (Differ from Campanulariidae only in hydroid characters).

Genus PHIALELLA Browne

Characters as Family.

7. *Phialella quadrata* (Forbes). Gonads elongated oval on distal third of radial canals; 16 to 32 marginal tentacles; eight adradial marginal vesicles, each with 2 to 8 concretions, on cushion-like swellings; up to 13 mm in diameter.

Further Information on Identification

1. *Phialidium hemisphaericum*: MAYER, 1910, p. 266, Figs. 140–144. KRAMP, 1919, p. 91, Textfigs. 16, 17; Pl. IV, Fig. 14; Pl. V, Fig. 3. RUSSELL, 1953, p. 285, Textfigs. 172–179; Pl. XVI, Fig. 1, Pl. XVII, Fig. 6. KRAMP, 1959, p. 148, Fig. 185. KRAMP, 1961, p. 167.
2. *Phialidium islandicum*: KRAMP, 1919, p. 95, Pl. IV, Figs. 11–13; Pl. V, Figs. 1, 2. RUSSELL, 1953, p. 294, Textfigs. 180, 181. KRAMP, 1959, p. 149, Fig. 190. KRAMP, 1961, p. 169.
3. *Obelia* spp.: MAYER, 1910, p. 238, Textfigs. 124–134; Pl. 30, Figs. 1–6; Pl. 31, Figs. 6–8. RUSSELL, 1953, p. 297, Textfigs. 182–185; Pl. XVIII, Figs. 1, 2; Pl. XIX, Fig. 2. KRAMP, 1959, p. 147, Fig. 184. KRAMP, 1961, p. 162.
4. *Agastra mira*: HARTLAUB, 1897, p. 504; Pl. XXII, Figs. 8–10. RUSSELL, 1953, p. 303, Textfigs. 186–188; Pl. XIX, Fig. 1. KRAMP, 1959, p. 146, Fig. 182. KRAMP, 1961, p. 160.
5. *Lovenella clausa*: RUSSELL, 1953, p. 307, Textfigs. 189–192; Pl. XVI, Fig. 2; Pl. XVII, Figs. 3, 4. KRAMP, 1959, p. 153, Fig. 202. KRAMP, 1961, p. 178.
6. *Eucheilota maculata*: HARTLAUB, 1897, p. 499, Pl. XX, Figs. 4–8. RUSSELL, 1953, p. 311, Textfigs. 193–195. KRAMP, 1959, p. 154, Fig. 206. KRAMP, 1961, p. 174.
7. *Phialella quadrata*: RUSSELL, 1953, p. 315, Textfigs. 196–200; Pl. XVI, Figs. 4–6; Pl. XVII, Fig. 5. KRAMP, 1959, p. 152, Fig. 200. KRAMP, 1961, p. 180.

Distribution

Species

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

References to Work on Biology

(Numbers after references give species referred to)
 KRAMP (1927), 1. RUSSELL (1938), 1. RUSSELL (1953),
 1, 3, 7.

References

HARTLAUB, CL., 1897. <i>Wiss. Meeresuntersuch. (N.F.)</i> , Bd. II, Abt. Helgoland, Heft I, X: 449.	KRAMP, P. L., 1959. <i>Dana-Report</i> , No. 46.
KRAMP, P. L., 1919. <i>Danish Ingolf Exped.</i> , 5, Pt. 8.	KRAMP, P. L., 1961. <i>J. mar. biol. Ass. U.K.</i> , 40.
KRAMP, P. L., 1927. <i>Kgl. Danske Vidensk. Selsk. Skr., Afd. 8, Rk. XII</i> , No. 1.	MAYER, A. G., 1910. <i>Medusae of the World</i> .
	RUSSELL, F. S., 1938. <i>J. mar. biol. Ass., U.K.</i> , 22: 411.
	RUSSELL, F. S., 1953. <i>The Medusae of the British Isles</i> .