

# FICHES D'IDENTIFICATION DU ZOOPLANCTON

Editées par

G. A. ROBINSON

Institute for Marine Environmental Research  
Prospect Place, The Hoe, Plymouth PL1 3DH, England

FICHE NO. 165

## TRACHYMEDUSAE

**Family: Rhopalonematidae**

by

**F. S. Russell**

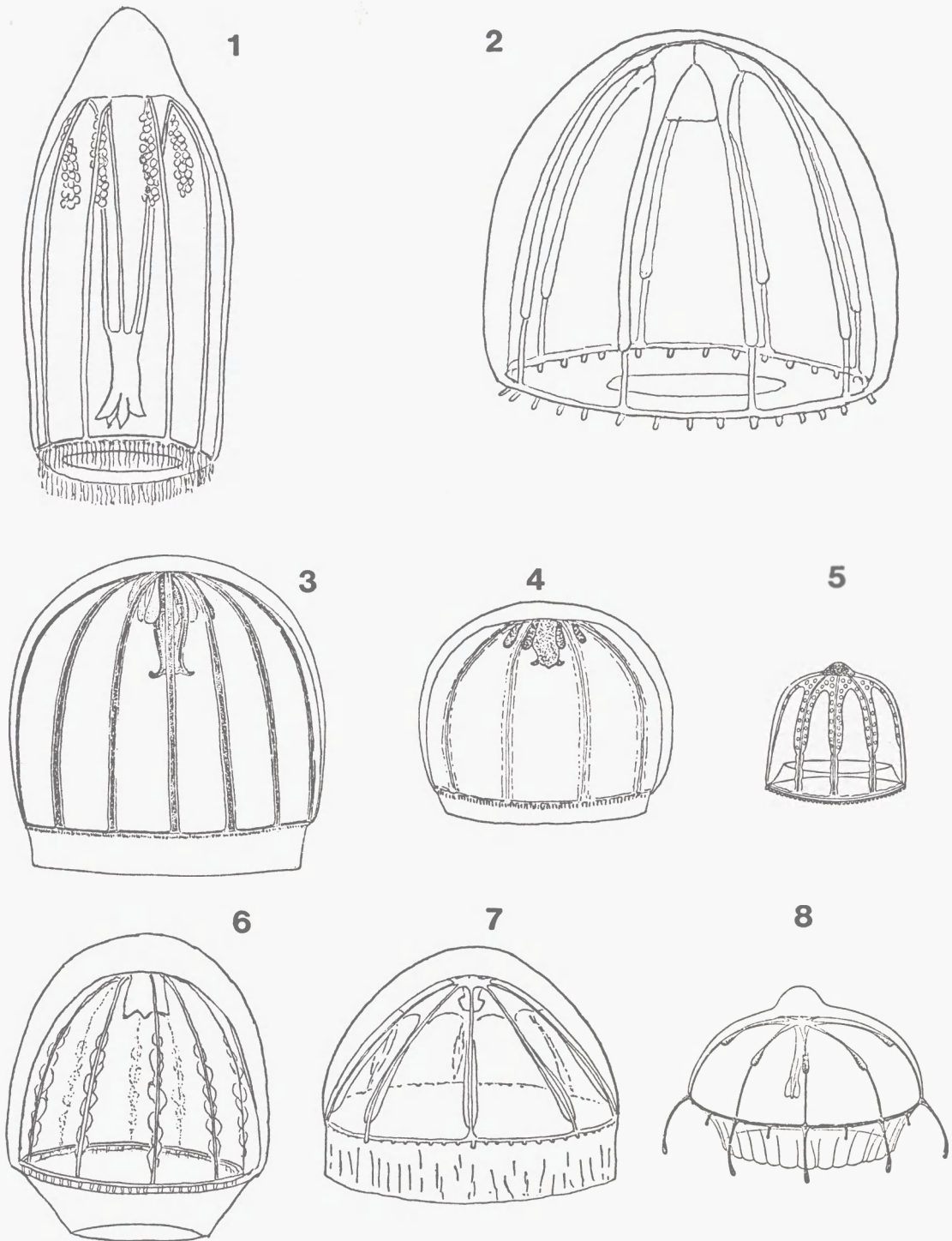
Marine Biological Association  
The Laboratory, Citadel Hill  
Plymouth, Devon PL1 2PB, England

(This publication may be referred to in the following form:  
Russell, F. S. 1981. Trachymedusae. Fich. Ident. Zooplancton 165: 4 pp.)

Conseil International pour l'Exploration de la Mer  
Palægade 2-4, DK-1261 Copenhague K, Danemark

NOVEMBRE 1981

ISSN 0443-9155



1. *Aglantha digitale* (after RUSSELL, 1953). - 2. *Colobonema sericeum* (after RUSSELL, 1953). - 3. *Crossota norvegica* (after KRAMP, 1959). - 4. *Crossota rufobrunnea* (after KRAMP, 1959). - 5. *Homoeonema platygonon* (after KRAMP, 1959). - 6. *Pantachogon haeckeli* (after RUSSELL, 1953). - 7. *Rhopalonema funerarium* (after VANHÖFFEN, 1902). - 8. *Rhopalonema velatum* (after MAYER, 1910).

## Order TRACHYMEDUSAE

### Family Rhopalonematidae

Stomach with or without peduncle; usually 8, rarely more, radial canals; gonads on radial canals or hanging as pouches into subumbrellar cavity; numerous marginal tentacles evenly distributed round umbrella margin or arranged in groups, sometimes of two kinds; with free, rarely enclosed, marginal sensory clubs.

#### Genus *Aglantha* Haeckel

Rhopalonematidae with long slender gastric peduncle; with 8 pendent sausage-shaped gonads hanging from subumbrellar portions of 8 radial canals; numerous marginal tentacles of one kind; with free club-shaped marginal sense organs.

##### 1. *Aglantha digitale* (O. F. Müller)

Umbrella tall thimble-shaped with small apical projection; gastric peduncle almost as long as subumbrellar cavity; mouth with 4 simple lips; gonads long, suspended from near base of peduncle; 80 or more marginal tentacles; 8 marginal sense organs. Height of umbrella 10–40 mm; colour pink of varying degrees.

#### Genus *Colobonema* Vanhöffen

Rhopalonematidae without gastric peduncle; with elongated gonads along 8 radial canals; marginal tentacles of one kind; free club-shaped marginal sense organs.

##### 2. *Colobonema sericeum* Vanhöffen

Umbrella bell-shaped, slightly conical, without apical projection; stomach elongated tubular; mouth with 4 small lips; gonads linear along greater part of radial canals; 32 marginal tentacles, with adradial tentacles developed before interradial; marginal sense organs probably alternating with marginal tentacles; broad velum. Umbrella diameter up to 45 mm; height up to 35 mm.

*Note.* Another species, *Colobonema apicatum* Russell, is not figured here as it has only once been recorded so far in areas somewhat south of the area covered by these identification sheets. It differs from *C. sericeum* in having a tall cylindrical *Aglantha*-like umbrella with a small conical projection and with a flat apical circular area without musculature as in *Pantachogon haeckeli*. The umbrella height is up to 10 mm. The specimens were caught in very deep water mostly below 1500 m. (RUSSELL, 1961).

#### Genus *Crossota* Vanhöffen

Rhopalonematidae with or without short gastric peduncle; with numerous meridional furrows on exumbrella; 8 or more radial canals; gonads sausage-shaped pendent from radial canals; numerous densely crowded marginal tentacles all of one kind; free club-shaped marginal sense organs.

##### 3. *Crossota norvegica* Vanhöffen

No gastric peduncle; stomach bottle-shaped with irregular longitudinal ridges; mouth with 5 to 7 upturned lips; 10–14 radial canals; gonads on radial canals near base of stomach; about 275 marginal tentacles; marginal sense organs unknown. Height of umbrella 18 mm; width 20 mm; colour of umbrella deep reddish brown.

##### 4. *Crossota rufobrunnea* (Kramp)

No gastric peduncle; stomach bottle-shaped with 8 deep longitudinal furrows and above them 8 small invaginations; mouth with 4 small out-turned lips; 8 radial canals; gonads on radial canals near base of stomach; about 200–250 marginal tentacles; number of marginal sense organs unknown. Height of umbrella up to 10 mm; width up to 15 mm; colour of umbrella, stomach, and marginal tentacles deep reddish brown.

#### Genus *Homoenema* (Maas) Browne

Rhopalonematidae without gastric peduncle; gonads forming continuous band around base of stomach and extending outwards along 8 radial canals; numerous marginal tentacles all of one kind; with vesicular marginal sense organs.

##### 5. *Homoenema platygonon* Browne

Gonads extending from stomach along half of radial canal; about 80 or more marginal tentacles; 4 marginal sense organs.

#### Genus *Pantachogon* Maas

Rhopalonematidae without gastric peduncle; with apical outlines of subumbrellar muscle fields forming an entire circle; gonads along 8 radial canals separated from stomach; marginal tentacles all of the same kind; with free club-shaped marginal sense organs.

##### 6. *Pantachogon haeckeli* Maas

Umbrella bell-shaped, without apical projection, with very strong conspicuous musculature and 32 exumbrellar furrows; stomach short, mouth with 4 small simple lips; gonads extending along greater part of 8 radial canals; 64 marginal tentacles; 64 marginal sense organs; very broad velum. Height of umbrella about 12 mm, width also about 12 mm.

### Genus *Rhopalonema* Gegenbaur

Rhopalonematidae with gastric peduncle; with gonads along 8 radial canals separated from stomach; marginal tentacles of two kinds; with radial clubs and inter- and adradial cirri; with vesicular marginal sense organs.

#### 7. *Rhopalonema funerarium* Vanhöffen

Umbrella somewhat conical without apical projection; stomach narrow, elongated, not quite reaching umbrella margin; gonads linear along distal two-thirds of radial canal; marginal tentacles, 8 radial simple, 8 interradial, and 16 adradial, very small, cirrus-like, each with globular terminal knob; 32 marginal sense organs; velum very broad. Height of umbrella up to 14 mm; width up to 17 mm.

#### 8. *Rhopalonema velatum* Gegenbaur

Umbrella somewhat flatter than a hemisphere with conical apical thickening; stomach narrow elongated, reaching almost to velar opening, with 4 short simple lips; gonads linear or oval along middle third of radial canal; marginal tentacles, 8 radial club-shaped, 8 interradial, and 16 adradial, very small, cirrus-like; a marginal sense organ near each radial tentacle and each interradial cirrus-like tentacle; velum very broad. Width of umbrella 8–10 mm.

### FURTHER INFORMATION ON IDENTIFICATION

1. *Aglantha digitale*. BIGELOW, 1909, p. 122. KRAMP, 1924, p. 29; 1959, p. 191; 1961, p. 248. RUSSELL, 1953, p. 447.
2. *Colobonema sericeum*. VANHÖFFEN, 1902, p. 57. MAAS, 1905, p. 52. RUSSELL, 1953, p. 436. KRAMP, 1959, p. 186; 1961, p. 255.
3. *Crossota norvegica*. KRAMP, 1947, p. 21; 1959, p. 191; 1961, p. 257.
4. *Crossota rufobrunnea*. KRAMP, 1947, p. 21; 1959, p. 191; 1961, p. 257. RUSSELL, 1953, p. 444.
5. *Homoeonema platygonon*. BROWNE, 1903, p. 21. KRAMP, 1959, p. 185; 1961, p. 258.
6. *Pantachogon haeckeli*. VANHÖFFEN, 1902, p. 63. MAYER, 1910, p. 389. KRAMP, 1947, p. 19; 1959, p. 186; 1961, p. 259. RUSSELL, 1953, p. 440.
7. *Rhopalonema funerarium*. VANHÖFFEN, 1902, p. 61. KRAMP, 1947, p. 14; 1959, p. 185; 1961, p. 261. RUSSELL, 1953, p. 434.
8. *Rhopalonema velatum*. MAYER, 1910, p. 378. RUSSELL, 1953, p. 430. KRAMP, 1959, p. 185; 1961, p. 262.

### DISTRIBUTION

All the species are oceanic and can be roughly divided as follows.

<i>Epipelagic</i>	Arctic: <i>Homoeonema platygonon</i>
	Arctic-Boreal: <i>Aglantha digitale</i> and <i>Rhopalonema velatum</i>
<i>Bathypelagic</i>	Arctic: <i>Crossota norvegica</i>
	Arctic-Boreal: <i>Pantachogon haeckeli</i>
	Boreal: <i>Crossota rufobrunnea</i>
	Boreal, extending into warm water: <i>Colobonema sericeum</i> and <i>Rhopalonema funerarium</i>

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