

FICHES D'IDENTIFICATION DU ZOOPLANCTON

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FICHE NO. 158

SCYPHOMEDUSAE OF THE NORTH ATLANTIC (2)

Families: Pelagiidae
Cyaneidae
Ulmaridae
Rhizostomatidae

by

F. S. Russell

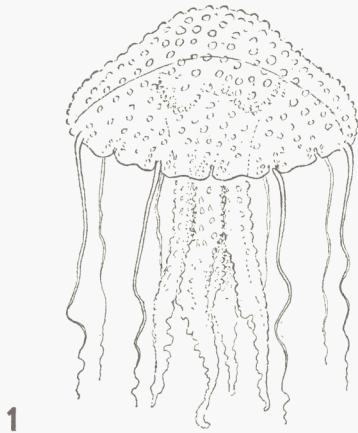
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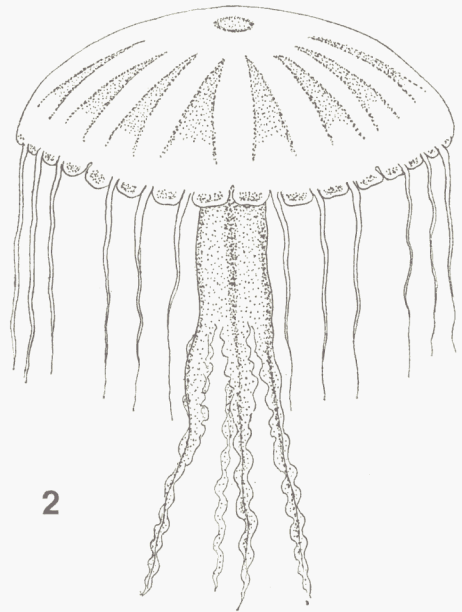
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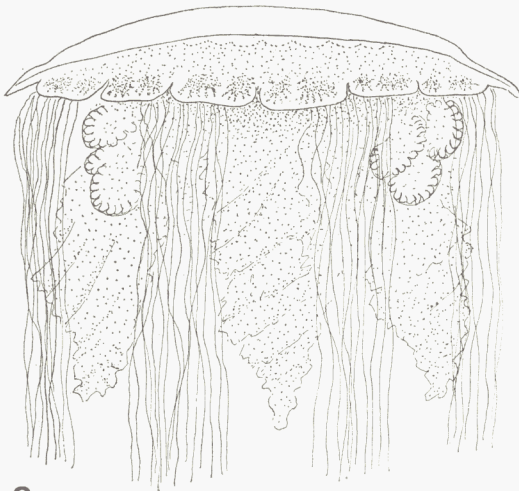
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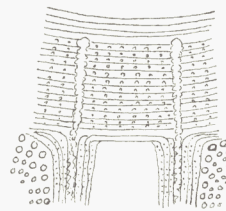
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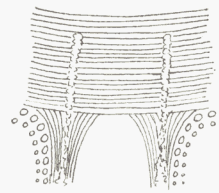
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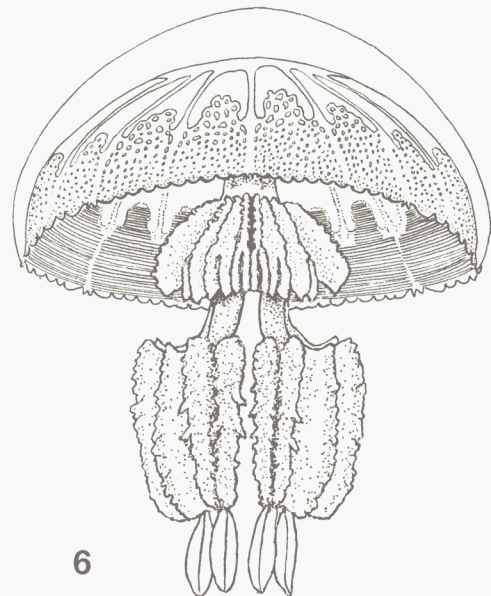
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4



5



6

Figures 1–6: 1. *Pelagia noctiluca*; 2. *Chrysaora hysoscella*; 3. *Cyanea capillata*; 3'. circular muscle; 4. *Cyanea lamarekii* – circular muscle; 5. *Aurelia aurita*; 6. *Rhizostoma octopus*.

Order SEMAEOSTOMEAE

Gastrovascular sinus divided by radial septa into separate rhopalar and tentacular pouches; without ring-canal.

Family Pelagiidae

Rhopalar and tentacular pouches simple and unbranched.

Genus *Pelagia* Péron & Lesueur

Pelagiidae with eight marginal tentacles alternating with eight marginal sense organs.

1. *Pelagia noctiluca* (Forskål). Exumbrella with medium-sized warts of various shapes; marginal tentacles with longitudinal muscle furrows embedded in mesogloea; up to 100 mm in diameter.

Genus *Chrysaora* Péron & Lesueur

Pelagiidae with groups of three or more marginal tentacles alternating with eight marginal sense organs.

2. *Chrysaora hysoscella* (L.). Exumbrella typically with 16 V-shaped radial brown markings with varying degrees of pigmentation between them; with dark brown apical circle or spot; with brown marginal lappets; 24 marginal tentacles in groups of three alternating with eight marginal sense organs.

Family Cyaneidae

Gastrovascular pouches branched; marginal tentacles arising from subumbrella surface at a distance from umbrella margin.

Genus *Cyanea* Péron & Lesueur

Cyaneidae with radial and circular muscles on subumbrella; with eight adradial groups of marginal tentacles arranged in more than one row; with eight marginal sense organs.

3. *Cyanea capillata* (L.). Coronal and radial muscle folds with pit-like intrusions from gastrovascular sinus; 13–15 coronal folds between radial septa; average numbers of marginal tentacles in each group 70–150 or more; terminal ramifications of gastrovascular sinus pouches without anastomoses; colour usually yellowish brown or reddish; diameter of umbrella usually 300–500 mm, up to 2000 mm.

4. *Cyanea lamarkii* Péron & Lesueur. Coronal and radial muscle folds without, or occasionally with only few, pit-like intrusions from gastrovascular sinus; 16–20 coronal folds between radial septa; average numbers of marginal tentacles in each group 40–60; terminal ramifications of gastrovascular sinus pouches without anastomoses; colour pale yellow to bright blue; diameter of umbrella 60–150 mm, up to 300 mm.

Family Ulmaridae

With gastrovascular system of unbranched and branched radial canals with varying degrees of anastomosis; with or without subgenital pits.

Subfamily Aureliinae

Ulmaridae with small marginal tentacles and lappet-like structures arising from exumbrella slightly above umbrella margin; with simple and branched radial canals with little or much anastomosis; with ring-canal; with subgenital pits.

Genus *Aurelia* Lamarck

Aureliinae with umbrella margin divided by 8 or 16 marginal clefts; with four unbranched oral arms; with anastomosis between a few or all of the radial canal branches.

5. *Aurelia aurita* (L.). Umbrella with eight simple marginal lobes; oral arms as long as umbrella radius, with thick firm mesogloea and much-crenulated lips with many small tentacle-like processes along their margins; adradial canals unbranched; perradial and interradial canals with primary canals unbranched, but with branches from their bases which branch successively towards umbrella margin having only few anastomoses; diameter of umbrella usually up to 250–400 mm.

Order RHIZOSTOMEAE

Without marginal tentacles; manubrium with lips branched to form eight oral arms each with numerous mouth openings.

Family Rhizostomatidae

Rhizostomid medusae with "scapulettes" or "cpaulettes" on manubrium; with single terminal club on each of eight oral arms.

Genus *Rhizostoma* Cuvier

With small epaulettes on base of manubrium; each oral arm with single club-shaped terminal appendage; usually with clearly defined main ring-canal from which arise intracircular coarse-meshed arcade networks of canals.

6. *Rhizostoma octopus* (L.). With usually an average of ten velar marginal lappets in each octant; terminal clubs of oral arms without thin basal stalks.

FURTHER INFORMATION ON IDENTIFICATION

1. *Pelagia noctiluca*: Broch, 1913, p. 17, (as *Pelagia perla*). Kramp, 1924, p. 46. Bigelow, 1928, p. 517. Russell, 1970, p. 71.
2. *Chrysaora hysoscella*: Russell, 1970, p. 87.
3. *Cyanea capillata*: Thiel, 1962, p. 277. Russell, 1970, p. 106.
4. *Cyanea lamarckii*: Russell, 1970, p. 127.
5. *Aurelia aurita*: Russell, 1970, p. 140.
6. *Rhizostoma octopus*: Thiel, 1965, p. 37. Russell, 1970, p. 173.

DISTRIBUTION

Pelagia is a warm temperate oceanic species with direct development and only occurs in coastal areas when drifted in. *Aurelia* is a cosmopolitan coastal and estuarine species. The other four species are coastal, *Cyanea capillata* extending farthest north.

Gulf of Bothnia	5
Gulf of Finland	5
Baltic proper	3, 5
Belt Sea	3, 5
Kattegat	2, 3, 4, 5, 6
Skagerrak	4, 5, 6
Northern North Sea	1, 2, 3, 4, 5, 6
Southern North Sea	1, 2, 3, 4, 5, 6
English Channel (eastern)	1, 2, 4, 5, 6
English Channel (western)	1, 2, 4, 5, 6
Bristol Channel & Irish Sea	1, 2, 4, 5, 6
S. and W. of Ireland	1, 2, 4, 5, 6
Faroe-Shetland area	3, 4, 5
Faroe-Iceland area	3, 4, 5
Norwegian Sea	3, 5
Barents Sea	3, 5

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- BIGELOW, HENRY B., 1928. Scyphomedusae from the Arcturus Oceanographic Expedition. Zoologica, N.Y., 8, 10: 495-524.
- BROCH, HJALMAR, 1913. Scyphomedusae from the "Michael Sars" North Atlantic Deep-Sea Expedition 1910. Rep. scient. Results Michael Sars N. Atlant. deep Sea Exped., 3(1): 1-20.
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