## FICHES D'IDENTIFICATION DU ZOOPLANCTON

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## FICHE NO. 158

## SCYPHOMEDUSAE OF THE NORTH ATLANTIC (2)

Families: Pelagiidae

Cyaneidae

Ulmaridae

Rhizostomatidae

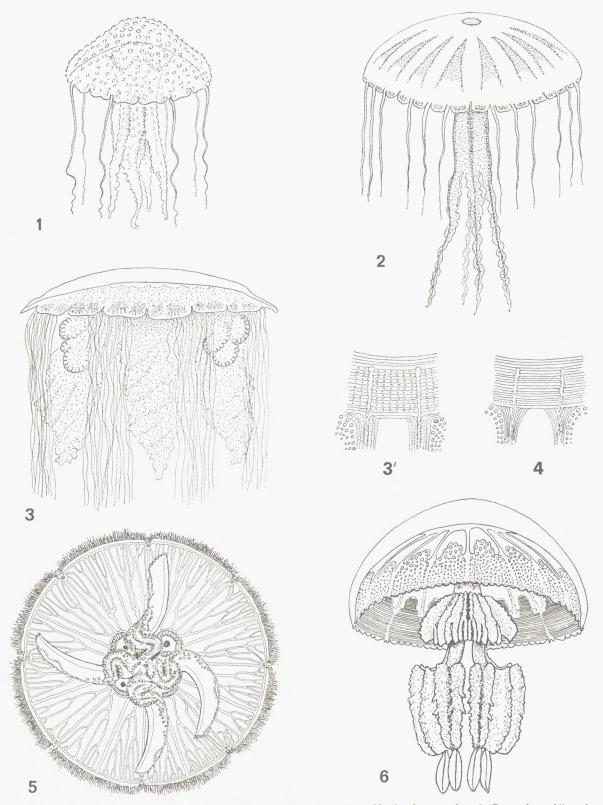
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Figures 1–6: 1. Pelagia noctiluca; 2. Chrysaora hysoscella; 3. Cyanea capillata; 3'. circular muscle; 4. Cyanea lamarckii – circular muscle; 5. Aurelia aurita; 6. Rhizostoma octopus.

## 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 lamarckii 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 "epaulettes" 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

- 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.
- Cyanea capillata: Thiel, 1962, p. 277. Russell, 1970, p. 106.
- 4. Cyanea lamarckii: Russell, 1970, p. 127.
- 5. Aurelia aurita: Russell, 1970, p. 140.
- 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, Gyanea 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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