

FICHES D'IDENTIFICATION DU ZOOPLANCTON

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FICHE NO. 166

NARCOMEDUSAE

Families: Aeginidae
Solmaridae
Cuninidae

by

F. S. Russell

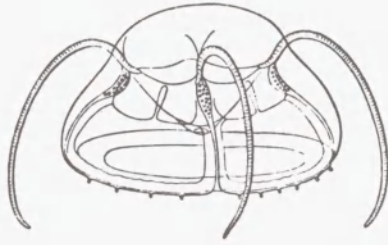
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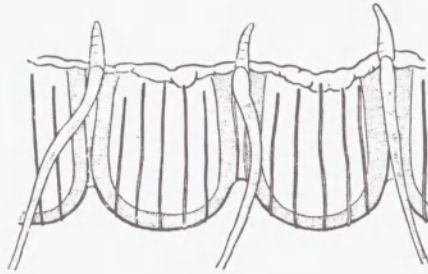
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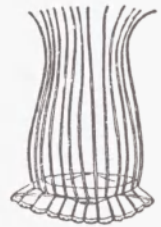
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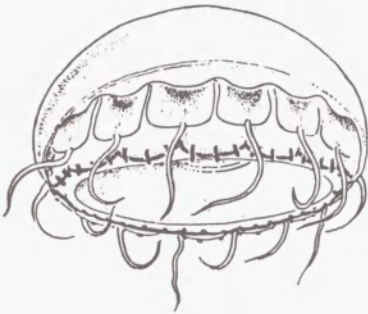
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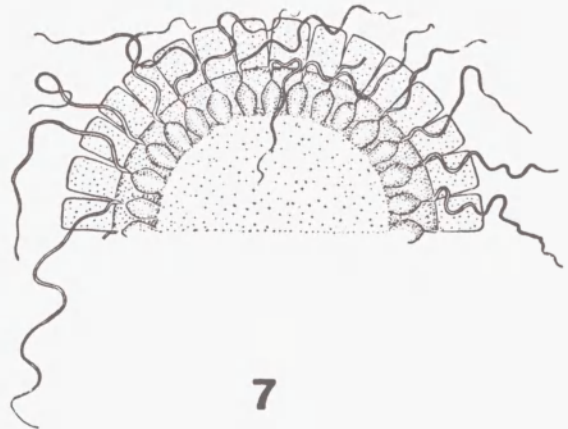
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1. *Aegina citrea*. – 2. *Aeginopsis laurentii*. – 3. *Aeginura grimaldii*. – 4. *Solmaris corona*. – 5. *Pegantha clara* (marginal lappets). – 6. *Cunina globosa*. – 7. *Solmissus incisa*.

(All from KRAMP, 1959, after various authors).

Order NARCOMEDUSAE

Hydromedusae with sides of umbrella divided by peronial grooves so that umbrella margin may be lobed; with broad stomach with entire circular periphery or with rectangular peripheral pouches; without radial canals and with or without peripheral canal system; with gonads on stomach walls; with solid primary tentacles leaving umbrella some distance above margin, and sometimes small secondary tentacles on umbrella margin itself; with marginal sense organs as free sensory clubs with endodermal axes, which may or may not have bristled ectodermal tracks known as otoporphae above them.

Family Aeginidae

Narcomedusae with interradial divided stomach pouches, containing gonads, with or without peripheral canal system; with primary periradial tentacles leaving umbrella between marginal pouches, in number at least half that of stomach pouches; pouches extending beyond points of origin of primary tentacles; with or without secondary tentacles on umbrella margin; sensory clubs with or without otoporphae.

Genus *Aegina* Eschscholtz 1829

Aeginidae with typically 8, occasionally 10 or 12, stomach pouches, which may or may not have secondary divisions; with peripheral canal system; with typically 4, occasionally 3, 5, or 6, primary tentacles and same number of peronia; without secondary marginal tentacles; without otoporphae.

1. *Aegina citrea* Eschscholtz 1829

Umbrella hemispherical with thick apical jelly, with 4 peronia. Stomach large circular with typically 8 rectangular pouches, some or all with slight median clefts or notches. Gonads on walls of stomach pouches, sometimes extending onto main body of stomach. Typically 4, often 5 or 6, primary tentacles issuing at upper ends of peronia at level of top of stomach, with root-like endodermal continuations into apical jelly. No secondary tentacles on umbrella margin. Up to ? 100 sensory clubs without otoporphae. Umbrella up to 50 mm in diameter. Yellow, brown, pink, or colourless.

Genus *Aeginopsis* Brandt 1835

Aeginidae with 16 stomach pouches; without peripheral canal system; with 4 primary tentacles and 8 peronia; without secondary tentacles on umbrella margin; sensory clubs without otoporphae.

2. *Aeginopsis laurentii* Brandt 1838

Umbrella hemispherical or somewhat conical with thick apical jelly. Stomach broad lenticular, with 16 rectangular pouches, the 8 primary pouches being deeply cleft. Four large primary tentacles issuing from very high level. Eight peronia. Two or three sensory clubs in each octant. Umbrella up to 25 mm wide.

Genus *Aeginura* Haeckel 1879

Aeginidae with 16 stomach pouches; peripheral canal system degenerate or absent; with 8 primary tentacles and 8 peronia; with secondary tentacles on umbrella margin; sensory clubs without otoporphae.

3. *Aeginura grimaldii* Maas 1904

Umbrella hemispherical with central part fairly thick; stomach large, circular, with 16 rectangular pouches with indications of slight median clefts; 8 large primary tentacles issuing at level of top of stomach, with peronia running to umbrella margin; 3–5 secondary tentacles on umbrella margin in each octant; one or two sensory clubs between adjacent secondary tentacles; colour of stomach pouches deep chocolate or purplish black; umbrella up to 45 mm wide.

Family Solmaridae

Narcomedusae without stomach pouches; with gonads developed either as thickenings or diverticula on oral wall of central stomach; with or without peripheral canal system; with numerous tentacles leaving umbrella at level of periphery of stomach; with or without otoporpaes.

Genus *Solmaris* Haeckel 1879

Solmaridae with simple annular gonad; without peripheral canal system; without otoporpaes.

4. *Solmaris corona* (Keferstein & Ehlers)

Umbrella with up to 35 rectangular marginal lappets, each up to twice as long as broad; up to 35 tentacles; 1–3, rarely 4, sensory clubs on each marginal lappet, each on a large cushion with long bristles; umbrella 12–15 mm wide.

Note. *Solmaris multilobata* with 64 or more marginal lappets and tentacles, recorded by Maas (1893) north of the Hebrides in 1889 and not recorded since, may have been a multitentaculate form of *S. corona*.

Genus *Pegantha* Haeckel 1879

Solmaridae with gonads forming diverticula of the margin of the oral wall of the stomach; with peripheral canal system; with otoporpaes.

5. *Pegantha clara* R. P. Bigelow 1909

Umbrella lenticular with thick smooth jelly, with up to 40 marginal lappets, quadrate or somewhat longer than broad and usually tongue-shaped; peripheral canals fairly narrow, of almost equal width throughout their length; gonads as simple smooth and somewhat crenulated pouches in each lappet radius; most often 3–5 sensory clubs and long linear otoporpaes usually as long as lappets; umbrella up to 50 mm wide and 20 mm high.

Family Cuninidae

Narcomedusae with perradial undivided stomach pouches, not extending beyond points of origin of tentacles; with or without peripheral canal system; with primary tentacles leaving umbrella opposite centre of each stomach pouch, equal in number to that of stomach pouches; without secondary tentacles on umbrella margin; with or without otoporpaes.

Genus *Cunina* Eschscholtz 1829

Cuninidae with or without peripheral canal system; without otoporpaes.

6. *Cunina globosa* Eschscholtz 1829

Umbrella conical or almost globular with thick jelly, with short broad marginal lappets; stomach on broad peduncle; 10–14 stomach pouches, wide quadratic with rounded angles, more than twice as wide as septa between them; peripheral canal system well developed; 10–14 primary tentacles arising only short distance above umbrella margin; no ectodermal pads below bases of tentacles; 3 sensory clubs on each marginal lappet; otoporpaes short and oval; umbrella up to 18 mm wide.

Genus *Solmissus* Haeckel 1879

Cuninidae without peripheral canal system; without otoporpaes.

7. *Solmissus incisa* (Fewkes 1886)

Umbrella flat disc-like with fairly thick smooth jelly with thin flexible margin, with 20–40 marginal lappets about as long as wide; stomach large circular with 20–40 marginal pouches; 20–40 stiff tapering primary tentacles arising at upper ends of peronia separating marginal lappets; 2–5 sensory clubs on each marginal lappet; umbrella up to 100 mm diameter, colourless or ? with red gastric pouches.

FURTHER INFORMATION ON IDENTIFICATION

1. *Aegina citrea*. MAAS, 1905, p. 71. MAYER, 1910, p. 451. RUSSELL, 1953, p. 461. KRAMP, 1959, p. 194; 1961, p. 266.
2. *Aeginopsis laurentii*. BIGELOW, 1909b, p. 314. HARTLAUB, 1909, p. 472. KRAMP, 1959, p. 195; 1961, p. 268.
3. *Aeginura grimaldii*. MAAS, 1905, p. 77. MAYER, 1910, p. 470. RUSSELL, 1953, p. 472. KRAMP, 1959, p. 195; 1961, p. 269.
4. *Solmaris corona*. MAYER, 1910, p. 437. RUSSELL, 1953, p. 476. KRAMP, 1959, p. 197; 1961, p. 278. RUSSELL, 1970, Pl. Is.
5. *Pegantha clara*. BIGELOW, 1909a, p. 90. MAYER, 1910, p. 445. KRAMP, 1957, p. 73; 1959, p. 198; 1961, p. 272.
6. *Cunina globosa*. BIGELOW, 1909a, p. 57. MAYER, 1910, p. 476. KRAMP, 1959, p. 201; 1961, p. 281.
7. *Solmissus incisa*. BIGELOW, 1909a, p. 67. RUSSELL, 1953, p. 464. KRAMP, 1959, p. 203; 1961, p. 286.

DISTRIBUTION

All species are oceanic with wide distributions in warm and temperate waters, except *Aeginopsis laurentii*, which is a cold-water species with a circumpolar distribution. *Solmaris corona* is the only species occasionally recorded in shallower waters in the western English Channel and northern North Sea.

Pegantha clara is a more southerly species living mainly in upper water layers. *Aeginura grimaldii* is bathypelagic, and *Aegina citrea* may occur at all depths but only at great depths in colder waters.

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