Zooplankton.
Sheet 54.

HYDROMEDUSAE
Families: Pandeidae and Tiarannidae
(By F. S. Russell)
1955.

(After various authors).

(After various authors).
Family PANDEIDAE

Mouth with four simple or crenulated lips. Gonads simple or folded, situated adradially or interradially on stomach wall, rarely on perradii of subumbrella. Two, four or more marginal tentacles with swollen bases, or without basal swellings and with terminal nematocyst clusters: with or without rudimentary marginal tentacles, warts or tentaculae.

Sub-family Amphineminae

Simple mouth lips. Two perradial marginal tentacles with basal swellings.

Genus AMPHINEMA Haeckel:

Characters as sub-family.
2. *A. rugosum* (Mayer). Folded adradial gonads, with 3 or 4 folds sloping obliquely downwards towards interradii. 16–24 small marginal tentaculae. Height up to 6 mm.

Sub-family Protiarinae

Genus PARATIARA Kramp & Damas:

Characters as sub-family.
3. *Paratiara digitalis* Kramp & Damas. Simple unfolded interradial gonads. 8 or more marginal tentacles. Height up to 10 mm.

Sub-family Pandeinae

Crenulated mouth lips. Folded gonads. Up to eight or more marginal tentacles with basal swellings.

Genus HALITHOLUS Hartlaub:

Much crenulated mouth lips. Peduncle present. Attachment of stomach extending on to subumbrella surface to form "mesenteries". Folded interradial gonads, horse-shoe shaped with horizontal folds directed towards perradii.
4. *Halitholus cirratus* Hartlaub. Up to 120 marginal tentacles. Height up to 16 mm. [H. pauper Hartlaub, with only 8 marginal tentacles, which occurs in Greenland waters, has been recorded from the north-west coast of Iceland by Kramp (1926).]

Genus LEUCKARTIARA Hartlaub:

Crenulated mouth lips. No peduncle. Attachment of stomach extending on to subumbrella surface to form "mesenteries". Folded interradial gonads, horse-shoe shaped with horizontal folds directed towards perradii.
5. *Leuckartiara octona* (Fleming). 16–23 marginal tentacles with basal abaxial exumbrellar spurs. With ocelli. Height up to 15 mm. or more.
6. *L. nobilis* Hartlaub. 40 or more marginal tentacles, without well-developed basal abaxial exumbrellar spurs. With ocelli. Height up to 27 mm.
7. *L. brevicornis* (Murbach & Shearer). Up to 140 marginal tentacles, without well-developed basal abaxial exumbrellar spurs. No ocelli. Height up to 45 mm.

Genus ANNATIARA Russell:

Exumbrellar nematocyst tracks. Much crenulated mouth lips. Folded interradial gonads.
8. *Annatiara affinis* (Hartlaub). Up to 44 marginal tentacles without well-developed basal abaxial exumbrellar spurs. With ocelli. Diameter up to 23 mm.

Genus CATABLEMA Haeckel:

Much crenulated mouth lips. Broad radial canals with distinctly denticulate edges. Complicated interradial gonads with irregular folds running from upper edge of stomach and from perradii.
9. *Catablema vesicarium* (A. Agassiz). 30–40 marginal tentacles, and equal number of rudimentary tentacles. Height 30 mm. [C. multicitrata Kishinouye, with up to 120 marginal tentacles, has been recorded off Greenland (Kramp, 1926).]

Genus NEOTURRIS Hartlaub:

Crenulated mouth lips. Folded interradial gonads with adradial folds directed towards interradii and with isolated interradial pits.

Genus PANDEA Lesson:

With or without exumbrellar nematocyst ribs. Folded interradial gonads with irregular network of ridges with pits between.

Sub-family Calycopsinae*)

Marginal tentacles without basal swellings, and (where known) with terminal nematocyst clusters.

*) Should probably have Family rank.
Genus BYTHOTIARA Günther:

With four branching radial canals; without centripetal canals. Four primary radial canals, each bifurcating once. Gonads with horizontal folds not divided longitudinally. Eight marginal tentacles. Height up to 20 mm.

Genus CALYCOPSIS Fewkes:

With four unbranched radial canals. With centripetal canals. Chromatonema (as Stomotoca). Four centripetal canals. With four branching radial canals; without centripetal canals. With four unbranched radial canals. With centripetal canals. Further Information on Identification

Further Information on Identification

1. A. dinema: Mayer, 1910, p. 109, Textfig. 60, Pl. IX, Figs. 8—10, Pl. X, Figs. 1—4 (as Stomotoca); Hartlaub, 1914, p. 261, Fig. 215 (as Tiara coeca); Russell, 1953, p. 180, Pl. X, Figs. 1, 2, 4, Pl. XI, Figs. 1, 3.

2. A. rugosum: Mayer, 1910, p. 112, Pl. X, Figs. 5, 6, Pl. XI, Figs. 1, 2 (as Stomotoca); Hartlaub, 1914, p. 259, Figs. 214, 216, 217 (as A. dinema); Russell, 1953, p. 183, Textfig. 90, Pl. X, Fig. 3, Pl. XI, Figs. 2, 4.


4. H. cirratus: Hartlaub, 1914, p. 274, Figs. 225—234; Kram & Damas, 1926, p. 74, Pl. II, Fig. 4.[H. pauper: Hartlaub, 1914, p. 272, Figs. 223, 224; Kram & Damas, 1926, p. 71, Pl. II, Figs. 1—3.]

5. L. octona: Hartlaub, 1914, p. 285, Figs. 238—252; Kram & Damas, 1926, p. 76, Textfig. 35, Pl. II, Figs. 5—7; Russell, 1953, p. 188, Textfigs. 91—96, Pl. XI, Figs. 5, 6, Pl. XII, Fig. 3, Pl. XXXI.

6. L. nobilis: Hartlaub, 1914, p. 306, Figs. 257—260; Kram & Damas, 1926, p. 83, Textfig. 36, Pl. II, Fig. 9; Russell, 1953, p. 195, Textfig. 97, Pl. XII, Fig. 4.

7. L. brevicirrus: Murbach & Shearer, 1903, p. 170, Pl. XVIII, Figs. 1, 2; Hartlaub, 1914, p. 304, Figs. 254—256; Russell, 1953, p. 198, Textfigs. 99, 100, Pl. XII, Fig. 2.

8. A. affinis: Hartlaub, 1914, p. 269, Figs. 220, 221 (as Tiara anna); Kram & Damas, 1920, p. 6, Pl. I, Fig. 1; 1926, p. 68, Pl. I, Figs. 15—17 (as Tiara anna); Russell, 1953, p. 200, Textfigs. 101—103.


10. N. pileata: Hartlaub, 1914, p. 326, Figs. 270, 273, 274—281; Kram & Damas, 1926, p. 92, Textfig. 37, Pl. II, Figs. 13, 14; Russell, 1953, p. 203, Textfigs. 104—106, Pl. XII, Fig. 1.


12. P. rubra: Bigelow, 1913, p. 14, Pl. II, Figs. 1—7; Hartlaub, 1914, p. 340, Fig. 288; Kram & Damas, 1926, p. 96, Pl. II, Fig. 15; Russell, 1953, p. 211, Textfigs. 111, 112.

13. B. murrayi: Hartlaub, 1914, p. 355, Figs. 304—306; Kram & Damas, 1926, p. 97, Textfigs. 38—40; Ranson, 1936, p. 98, Pl. I, Fig. 12; Russell, 1953, p. 215, Textfigs. 113—116, Pl. XIII, Fig. 1.

14. C. simplex: Kram & Damas, 1925, p. 288, Fig. 23.

15. T. rotunda: Hartlaub, 1914, p. 266, Figs. 218, 219; 1917, p. 411, Figs. 341—343 (as Rotundula brochii); Kram & Damas, 1925, p. 275, Figs. 21, 22; Kram & Damas, 1926, p. 68; Russell, 1953, p. 219, Textfigs. 117—119.

16. C. rubrum: Kram & Damas, 1919, p. 7, Textfig. 3, Pl. I, Figs. 1—8; 1920, p. 8, Pl. I, Figs. 5, 6; 1933, p. 552, Figs. 14, 15; Ranson, 1936, p. 102, Pl. II, Fig. 13; Russell, 1953, p. 223, Textfigs. 120, 121.

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Genus TIARANNA Hartlaub:

Folded interradial gonads on stomach.

15. Tiaranna rotunda (Quay & Gaimard). 16—28 marginal tentacles. Diameter up to 22 mm.

Genus CHROMATONEMA Fewkes:

Gonads forming pouches along radial canals.

16. Chromatonema rubrum Fewkes. 20—24 marginal tentacles. Diameter up to 27 mm.
References