CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

Zooplankton

Sheet 121

ORDER: TINTINNIDA

Family: Favellidae

Genera: Poroecus, Cymatocylis, Favella

Family: Ptychocylididae

Genus: Ptychocylis

(By S. M. Marshall)

1969

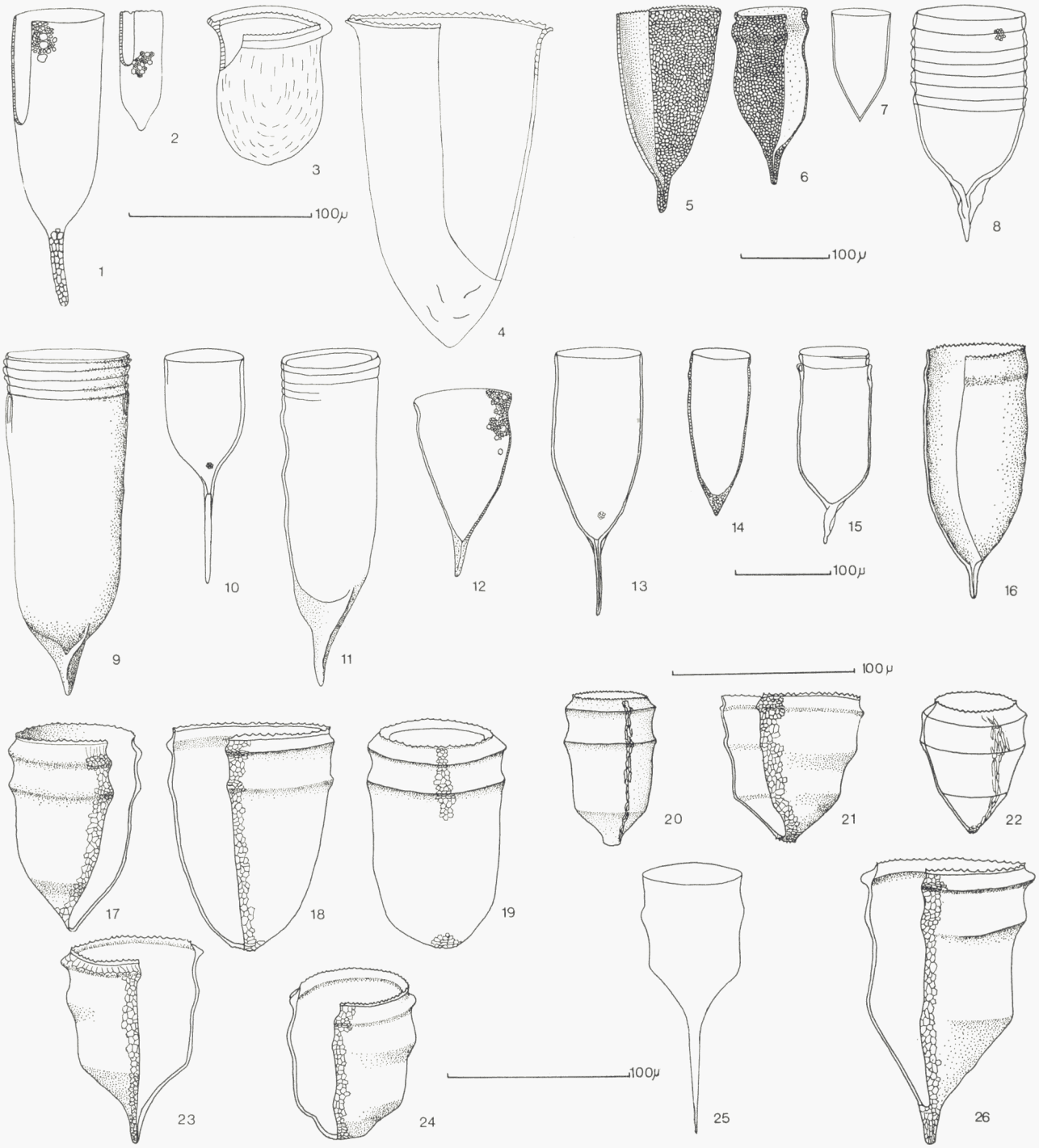
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Plate VI.

	Fig.	Length in μ	Oral diam. in μ (Max. width in brackets)	Approx. ratio L/oral diam.	Distribution	Notes on lorica
Family FAVELLIDAE Kofoid & Campbell, 1929						Campbell (1942) raised this to family rank although he subsequently (Campbell and Moore, 1954) reduced it again. Lorica usually tall, cylindrical with pedicel, sometimes short, bag shaped; spiral structure occasional. Oral end often modified, entire, irregular, channelled, or denticulate. Wall usually trilaminate, intermediate layer alveolar. Coccoliths present in *Poroecus*.
Genus *Poroecus* Cleve, 1902	Plate VI					Cylindrical with aboral end hemispherical or contracted into long or short pedicel. Mouth undifferentiated, oral rim smooth or irregular, sometimes weakly developed spiral suborally. Coccoliths often present, in intermediate layer according to Kofoid and Campbell, on outside according to Jörgensen.
P. apiculatus (Cleve, 1900)	1	85–275	33–58	3.2–4.7	12, 13	Cylindrical, sometimes irregularly bulging, contracting gradually to narrow pedicel. Oral rim entire or ragged. Coccoliths present.
P. curtus Kofoid & Campbell, 1929	2	52–70	25	2.0–2.9	12, 13	Short, cylindrical, contracting to blunt point aborally. Oral rim entire or irregularly denticulate. Wall with polygonal mesh usually filled with coccoliths. (Not clear in the figure).
Genus *Cymatocylis* Laackmann, 1909						Usually tall, cylindrical, conical, or vase-shaped, with or without pedicel. Mouth differentiated with everted, channelled, or reflexed oral rim, usually with a denticulate border. Wall with inner and outer lamellae and primary alveolar structure between. Outer wall with short striae locally or all over. Mainly a cold water Antarctic form.
C. kerguelensis Laackmann, 1909	3	80	56	1.5	3	Short, with rounded bowl. Mouth flaring with gutter between edge and denticulate oral rim. Striae all over bowl.
C. subconica Kofoid & Campbell, 1929	4	180–185	112–115	1.6	11	Cylindrical-conical with bluntly pointed aboral end. Mouth sharply everted, not channelled, oral rim erect, denticulate. Wall striate all over.
Genus *Favella** Jörgensen, 1924						Cylindrical, tall or short, usually with pedicel, sometimes a few spiral turns suborally. Oral rim entire or with a border, sometimes denticulate. Sometimes with wings from base of bowl to pedicel. Wall with inner and outer lamellae, primary and secondary alveoli between.

	Fig.	Length in μ	Oral diam. in μ (Max. width in brackets)	Approx. ratio L/oral diam.	Distribution	Notes on lorica
F. adriatica (IMHOF, 1886)		170–336	112–128	1.6–2.6	11	Cylindrical, bell-shaped vith pedicel $^1/_4$-$^2/_3$ total length. Wings sometimes visible.
F. arcuata (BRANDT, 1906)	6	160–218	80–144	1.9–2.8	11	More or less cylindrical with slightly expanded bowl and short to medium pedicel. Sometimes thickened and bulging at oral edge, always with a bulge below this. Narrow canal in pedicel sometimes open to exterior.
F. attingata KOFOID & CAMPBELL, 1929	5	222–300	116–150	1.8–2.0	4, 11	Cylindrical-conical, narrowing gradually to a short pedicel, whose canal may open to exterior. Oral rim with denticulate border.
F. azorica (CLEVE, 1900)	7	94–96	59–63	1.5–1.9	13	Short, cylindrical in upper $^2/_3$ then tapering to a point. Oral margin thin smooth. Alveolar structure visible in wall.
F. brevis KOFOID & CAMPBELL, 1929	8	164–310	81–153	2.0–2.1	6, 11	Cylindrical in upper half of bowl, lower part almost hemispherical with short pedicel. Pedicel solid, slightly twisted with wings attaching it to bowl. Spiral lamina present suborally for 4-7 turns.
F. ehrenbergii (CLAPARÈDE & LACHMANN, 1858)	9	145–400 (1045)	54–124	2.4–4.2	4, 5, 6, 7, 8, 10, 11	Long, cylindrical, bowl sometimes slightly expanded below middle, rounded below and joined by wings to a short, blunt, pedicel. Spiral turns sometimes present suborally. Wall thick.
F. fistulicauda JÖRGENSEN, 1924	10	249–309	89	2.9–3.1	11	Cylindrical in upper part narrowing below into a slender pedicel, mostly solid, nearly half total length. Single indistinct annulus suborally.
F. helgolandica (BRANDT, 1906)	11	250–384	74–138	2.1–3.5	4, 7, 8, 10, 11	Cylindrical, narrowing gradually into a short pedicel joined by 4 broad wings to base of bowl. Spiral band suborally.
F. infundibulum KOFOID & CAMPBELL, 1929	12	210	111	1.9	4	Short, conical, with suboral constriction. Ends aborally in short thickwalled pedicel with fine central cavity. Wall with meshwork and numerous fenestrae.
F. markusovszkyi (DADAY, 1887)	13	277–391	94–97	2.9–4.0	7, 11	Cylindrical for half total length, conical in next $^1/_4$ ending aborally in slender pedicel, hollow but cut off by membrane from cavity of bowl. 3 short wings join pedicel to bowl. Occasionally with a suboral spiral.
F. meunieri KOFOID & CAMPBELL, 1929	14	182–188	63–66	2.8–2.9	7, 10	Cylindrical in top half, narrowing gradually to solid sharp point. No spiral structure.
F. panamensis KOFOID & CAMPBELL, 1929	15	136–232	60–100	2.0–2.3 (2.9)	4, 7	Cylindrical for $^3/_4$ total length narrowing abruptly to short pedicel with oblique wings. 1 (usually) to 4 spiral turns suborally, slightly overlapping. Meshwork largest aborally.

	Fig.	Length in μ	Oral diam. in μ (Max. width in brackets)	Approx. ratio L/oral diam.	Distribution	Notes on lorica
F. serrata (Möbius, 1887)	16	180–348	87–145	1.6–3.5	1, 3, 4, 5, 6, 7, 8, 10, 11, 12, 14	Cylindrical in top $^2/_3$ then convex-conical to end in short narrow pedicel with fine canal extending part or all way. Oral rim hyaline and denticulate, sometimes contracted just below this, usually with suboral annular bulge.
Family PTYCHOCYLIDIDAE Kofoid & Campbell, 1929						Lorica an inverted bell with annular bulges, the first, suboral, bulge usually the most marked, sometimes forming projecting ledge. Aboral end bluntly pointed (usually) or with short or long pedicel. No collar or spiral structure. Oral rim usually denticulate. Lamellae of wall scarcely separate; outer surface covered with meshwork of delicate folds sometimes becoming ridges at aboral end.
Genus *Ptychocylis* Brandt, 1896	Plate VI					As family. A northern, cold-water genus.
P. acuta Brandt, 1896	17	110–145	63–82	1.7–2.1	1, 2, 4, 6, 7, 12, 14	Cylindrical in top $^2/_3$, then contracting to blunt point. Two bulges, one suboral, another below it. Oral rim hyaline, denticulate.
P. arctica Brandt, 1896	18	120–140	75–100	1.4–1.5	1, 2, 4, 6, 7, 12, 14	Wide, convex-conical, slightly flattened aborally. Two bulges, one suboral, another below it. Oral rim hyaline, denticulate.
P. basicurvata Meunier, 1910	19	116	67	1.9–2.0	1, 4, 6, 7, 14	Cylindrical, with hemispherical aboral end. Two bulges, one suboral, the other a little below. Oral rim denticulate.
P. cylindrica Meunier, 1910	20	83	42	2.0	1	Almost cylindrical for $^4/_5$ then contracting to a short blunt, wide pedicel. One suboral bulge, one below it in anterior half. Oral rim denticulate.
P. drygalskii Brandt, 1896	21	65–105 most 80–95	65–100 (most 70–85)	1.0–1.4	1, 2, 4, 6, 7, 14, 15	Short, wide, more or less conical, narrowing abruptly in aboral third to slightly or greatly flattened end. One suboral bulge, one just above middle, and often suggestion of a third at narrowing. Oral rim hyaline, denticulate. Wall thin.
P. glacialis Meunier, 1910	22	78	40	1.9	1	Short, top $^2/_5$ cylindrical, lower part contracting in two stages to a blunt point. Two bulges and suggestion of third at last contraction. Oral rim denticulate. Wall thickest in bulges.
P. minor Jörgensen, 1899	23	90–135	78–90	1.1–1.7	2, 3, 4, 5, 6, 7, 12, 13, 15	Almost cylindrical in upper $^2/_3$, contracting rapidly to short pedicel. Suboral bulge forms projecting shelf, second above middle of lorica. Oral rim hyaline, denticulate.

	Fig.	Length in μ	Oral diam. in μ (Max. width in brackets)	Approx. ratio L/oral diam.	Distribution	Notes on lorica
P. obtusa BRANDT, 1896	24	83–135	60–90	1.3–1.6	1, 2, 3, 4, 6, 7, 12, 14, 15	Short, cylindrical, with suboral shelf and second bulge above middle. Aboral end contracting to a flattened squarish end of variable size. Oral rim hyaline, denticulate.
P. ostenfeldi KOFOID & CAMPBELL, 1929	25	130–180	40–65	2.8	12	Cylindrical, narrowing abruptly to slender pedicel nearly half total length. One bulge above middle of bowl. Oral rim smooth.
P. urnula (CLAPARÈDE and LACHMANN, 1858)	26	140–190	75–100	1.4–2.8	1, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14	Cylindrical then narrowing to short pedicel. Suboral shelf, bulge above middle and a third at narrowing. Oral rim hyaline, denticulate. Wall thickest in suboral bulge.

(For introduction to Plankton Sheets 117–127, Key to numbers used in the tables for distribution, and Sources of illustrations, please refer to Sheet No. 117, pp. 2 and 11–12).