

CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

Zooplankton.

Sheet 55.

SIPHONOPHORA

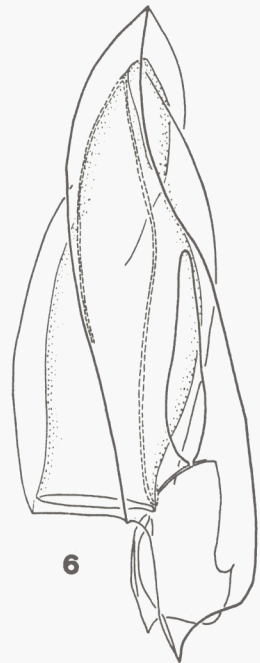
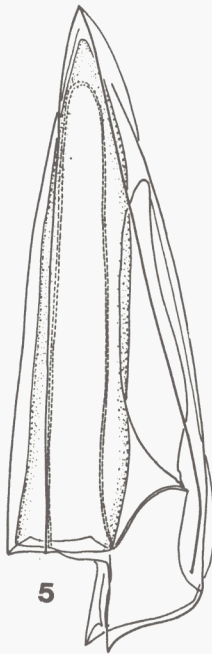
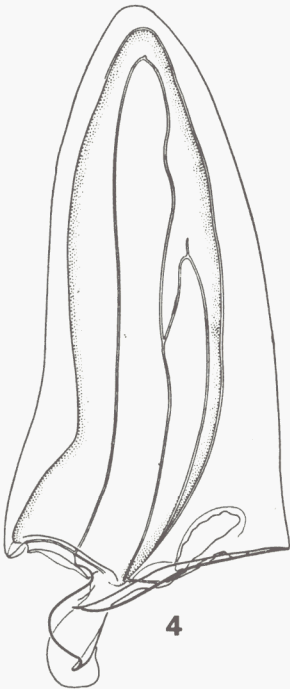
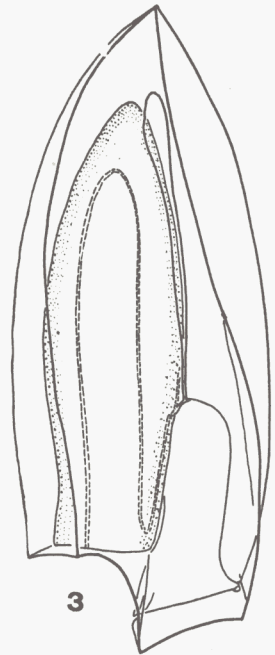
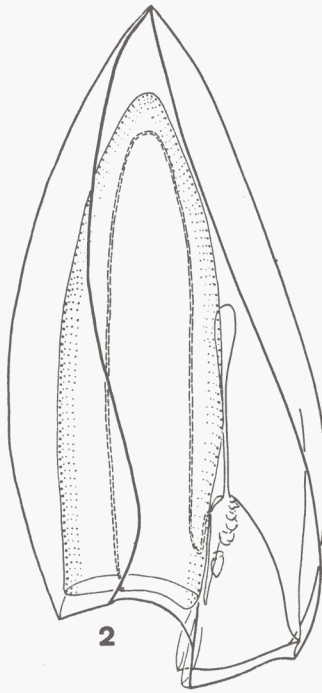
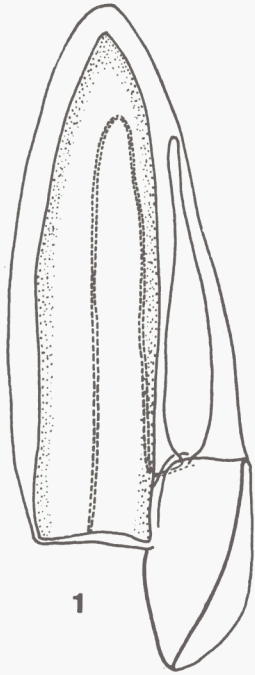
SUB-ORDER: CALYCOPHORAE

Family: Diphyidae

**GENERA: DIMOPHYES, MUGGIAEA
SULCULEOLARIA, CHELOPHYES
EUDOXOIDES**

(By A. K. Totton and J. H. Fraser)

1955.



- | | |
|-------------------------------|--------------------------------------|
| 1. <i>Dimophyes arctica</i> . | 4. <i>Sulcoleolaria biloba</i> . |
| 2. <i>Muggiaea kochi</i> . | 5. <i>Chelophyes appendiculata</i> . |
| 3. <i>M. atlantica</i> . | 6. <i>Eudoxides spiralis</i> . |

(Figure 4 from T o t t o n, 1954; remainder original).

Family DIPHYIDAE

Some genera of Calycophorae in which the heteromorph larval nectophore is caducous. In *Sulculeolaria* spp. there may be a succession of four definitive nectophores; in *Chelophyes*, *Dimophyes* and *Eudoxoides* a succession of two; and in *Muggiaea* only one definitive nectophore. In *Sulculeolaria* the eudoxids are not freed till sexual maturity, if freed at all, and are not known in a free state, whilst in *Dimophyes* they appear to be freed early on.

| Species | Number of ridges on anterior bell | Hydroecium | Somatocyst | Basal wing | Inferior bell |
|---|---|----------------------------|--------------------------|---------------------------------------|---------------|
| 1. <i>Dimophyes arctica</i> (Chun) | Absent | Deep, open at ventral side | Long and fusiform | Single | Present |
| 2. <i>Muggiaea kochi</i> (Will) | 5 | Deep | Half length of nectosac | Divided, corners not produced | Absent |
| 3. <i>Muggiaea atlantica</i> Cunningham | 5 | Deep | Whole length of nectosac | Divided, corners not produced | Absent |
| 4. <i>Sulculeolaria biloba</i> (Sars) | Absent | Very shallow | Very short and ovate | Two distinct lamellae | Present |
| 5. <i>Chelophyes appendiculata</i> (Eschscholtz) | 5 at base, one very short leaving 4 at apex | Medium | Large and fusiform | Divided, corners not greatly produced | Present |
| 6. <i>Eudoxoides spiralis</i> (Bigelow) | 5, spirally twisted | Medium | Half length of nectosac | Divided, corners distinctly produced | Absent |
| <i>Lensia</i> spp. (see following sheet, No. 56) | 5 or more | Very shallow | Varies | Divided, corners not produced | Present |

(A separate sheet will deal with the sub-family Chuniphyinae).

Further Information on Identification

1. *Dimophyes arctica*: Chun, 1897, p. 20, Pl. 1, Figs. 1—5; Moser, 1925, Pl. 26, Figs. 1—9.
2. *Muggiaea kochi*: Chun, 1882, p. 1155, Pl. 17 (as *Monophyes primordialis*, *Muggiaea kochii* and *Eudoxia eschscholtzii*); Moser, 1925, p. 100, Pl. 1, Fig. 1.
3. *Muggiaea atlantica*: Cunningham, 1892, p. 212, Figs. 1—2; Bigelow, 1911, p. 187, Pl. 7, Fig. 1; Pl. 9, Figs. 7—8; Moser, 1925, Pl. 1, Fig. 5; Russell, 1938, p. 441, Figs. 1—6.
4. *Sulculeolaria biloba*: Sars, 1846, Pl. 7, Figs. 16—21 (as *Diphyes biloba*); Bigelow, 1911, Pl. 5, Figs. 8, 9, 9 bis (as *Galeolaria australis*, this is the *Galetta biloba* or *G. australis* of several recent authors); Totton, 1954, Discovery Rep., Vol. XXVII, Figs. 49—51.
5. *Chelophyes appendiculata*: Bigelow, 1911, p. 248, Pl. 7, Figs. 5—6, Pl. 8, Figs. 7—8, Pl. 9, Fig. 6, Pl. 10, Fig. 6, Pl. 11, Fig. 1 (as *Diphyes appendiculata*) non Fig. 9, Pl. 11 (— *Eudoxoides mitra*).
6. *Eudoxoides spiralis*: Bigelow, 1911, p. 249, Pl. 7, Fig. 4, Pl. 8, Figs. 1—2, Pl. 9, Fig. 3, Pl. 11, Fig. 4 (as *Diphyes spiralis*); Moser, 1925, Pl. 1, Figs. 6—11 (as *Muggiaea spiralis*); Totton, 1932, Fig. 30.

Distribution

Species
(Species in brackets occur only exceptionally)

| | |
|--|-------------------|
| Gulf of Bothnia | — |
| Gulf of Finland | — |
| Baltic proper | — |
| Belt Sea | — |
| Kattegat | — |
| Skagerak | — |
| Northern North Sea | 1, 4, 5 |
| Southern North Sea | — |
| English Channel (eastern) | — |
| English Channel (western) | 2, 3 |
| Bristol Channel and Irish Sea | 2, 3 |
| South and West Ireland and Atlantic .. | 1, 2, 3, 4, 5, 6 |
| Faroe Shetland Area | 1, (3), 4, 5, (6) |
| Faroe Iceland Area | 1, (4), (5) |
| Norwegian Sea | 1, (4), (5) |
| Barents Sea | 1 |

References to Work on Biology

are so few and scattered that they have been disregarded for this sheet.

References.

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- Sars, M., 1846. *Fauna littoralis Norvegiae* . . . , **1**, pp. 31
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- Totton, A. K., 1932. Gt. Barrier Reef Exped., **4**, 10, pp.
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