

Zooplankton.

Sheet 52.

POLYCHAETA

**Families: Aphroditidae,
Phyllodocidae and
Alciopidae.**

(By B. J. Muus).

1953.

POLYCHAETA in the North Atlantic.¹⁾

- | | |
|--|---------------------------------------|
| 1. Elytra present (Figs. 2d and 3d) | APHRODITIDAE. |
| Elytra absent | 2 |
| 2. Parapodia with many bristles | 3 |
| Parapodia without or with very few bristles | 4 |
| 3. Eyes large, globular | ALCIOPIDAE. |
| Eyes small or lacking | PHYLLODOCIDAE. |
| 4. Two very long setigerous appendages, parapodia long
and biramous | TOMOPTERIDAE.²⁾ |
| No long setigerous appendages, parapodia more or less
rudimentary | TYPHLOSCOLECIDAE.²⁾ |

¹⁾ Comprises the region N. of 40°N. Lat.

²⁾ See Sheet No. 53.

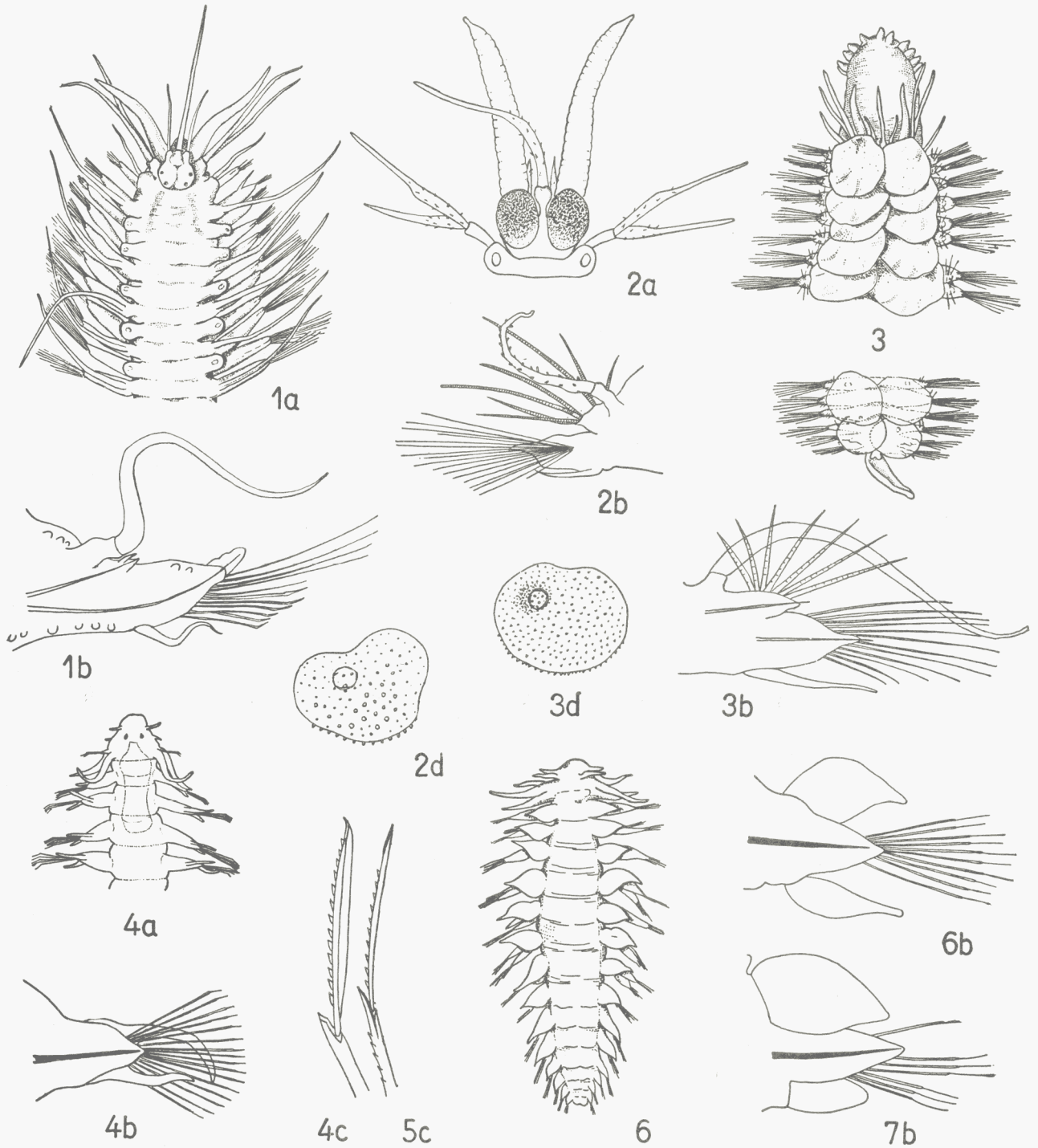


Plate I. 1, *Lepidasthenia grimaldii* (elytra lost). 2, *Harmothoe johnstoni*. 3, *Lagisca hubrechtii*. 4, *Pelagobia longicirrata*. 5, *Pelagobia serrata*. 6, *Maupasia coeca*. 7, *Maupasia magna*.
a, anterior part; b, parapodium; c, compound bristles; d, elytra.
(Figs. 1a, 3, 6, after E. Wesenberg-Lund. 2a, b, after Støp-Bowitz, 2b, slightly altered. Figs. 4a, b, after Reibisch. Figs. 1b, 2d, 3b, d, after Fauvel, Figs. 4c, 5c, 7b, after Southern. Fig. 6b, after Bergström).

Family APHRODITIDAE (Plate I).

The dorsum covered by elytra (scales or foliaceous expansions Figs. 2d and 3d).

Sub-family Polynoinae.

Genus LEPIDASTHENIA Malmgren:

Numerous small elytra covering the dorsum. Dorsal branch of the parapodia much reduced.

1. *Lepidasthenia grimaldii* Marenzeller. Number of segments varying, usually about twenty-five, at most two hundred. Dorsal bristles reduced or lacking, ventral bristles long. Post-larval stage bathypelagic. Length 3—15 mm.

Genus HARMOTHOE Kinberg:

Fifteen pairs of elytra completely covering the dorsum.

2. *Harmothoe johnstoni* McIntosh. At most forty segments. Elytra fringed, completely covering the dorsum. A well developed caudal appendage present. Post-larval stage bathypelagic. Length 6—10 mm.

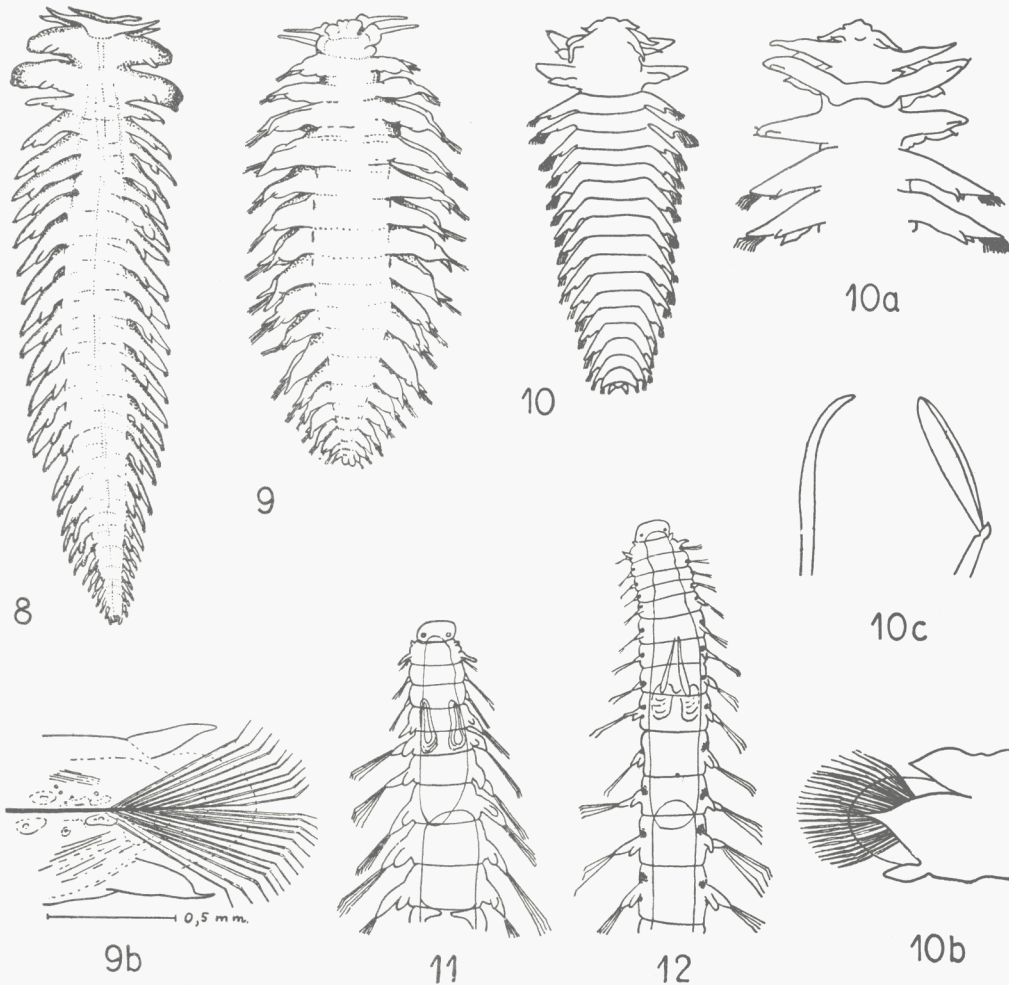


Plate II. 8, *Lopadorhynchus uncinatus*. 9, *L. (Prolopadorhynchus) appendiculatus*. 10, *L. (Prolopadorhynchus) henseni*. 11, *Phalacrophorus pictus*. 12, *Phalacrophorus uniformis*.

a, anterior part; b, parapodium; c, bristles.

(Figs. 8, 9, after E. Wesenberg-Lund. Fig. 10, after Støp-Bowitz. Figs. 11, 12, redrawn after Reibisch).

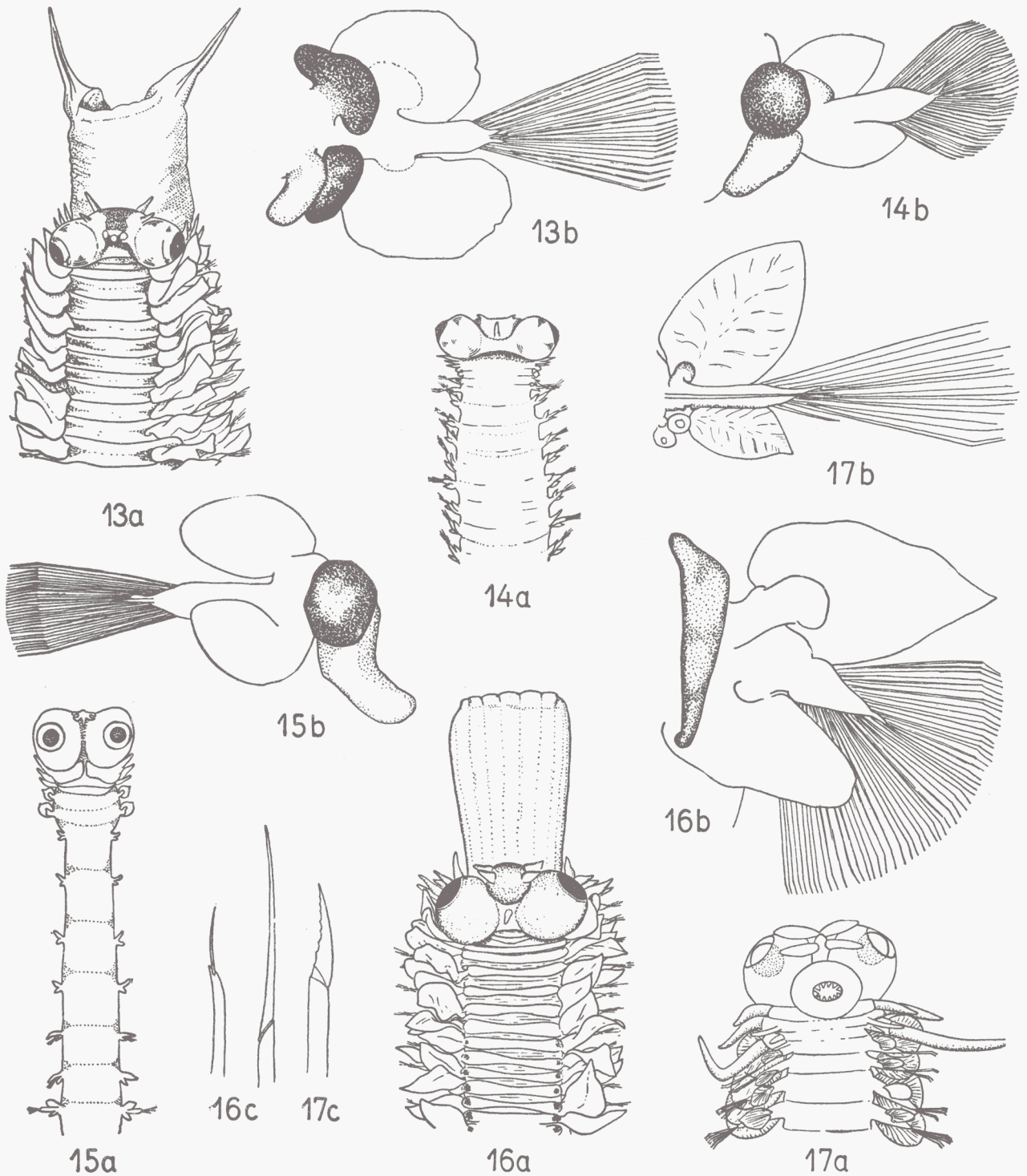


Plate III. 13, *Greeffia celox*. 14, *Vanadis formosa*. 15, *Vanadis crystallina*. 16, *Callizona angelini*. 17, *Callizona setosa*.

a, anterior part; b, parapodium; c, compound bristles.

(Figs. 13a, 14a, 16a, after E. Wesenberg-Lund. Figs. 13b, 14b, 15a, b, 16b, after Støp-Bowitz. 16c, 17a, c, after Apstein. 17b, after Hering).

Genus LAGISCA Malmgren (Plate I):

Fifteen pairs of elytra leaving the hindmost segments uncovered.

3. *Lagisca hubrechtii* McIntosh. Number of segments at most forty-six, in young specimens about twenty-seven. Elytra fringed, in adult specimens leaving about ten segments uncovered. Caudal appendage present. Bathypelagic. Length 20—25 mm.

Family PHYLLODOCIDAE.

Numerous segments. Prostomium distinct. Parapodia uniramous, dorsal and ventral cirri foliaceous.

Sub-family Lopadorhynchinae.

Genus PELAGOBIA Greeff (Plate I):

Dorsal and ventral cirri long, digitiform.

4. *Pelagobia longicirrata* Greeff. Fifteen to twenty-four segments. Eyes small. The shaft of the compound bristles with twelve to twenty fine denticles visible only at powerful enlargement. Length 3—8 mm.
5. *Pelagobia serrata* Southern. No eyes. The shaft of the compound bristles with twelve to fourteen well marked dentations, visible at medium enlargement. Length 3- 5 mm.

Genus MAUPASIA Viguier (Plate I):

Cirri foliaceous. No eyes.

6. *Maupasia coeca* Viguier. About fifteen segments. Tentacles of the 2nd tentacular segment a little longer than those of the first tentacular segment. Ventral cirri lanceolate and pointed. Length 3—5 mm.
7. *Maupasia magna* Southern. About twenty-five segments. Tentacles of the 2nd tentacular segment much longer than those of the first tentacular segment. Ventral cirri blunt. Length ca. 3.60 mm.

Genus LOPADORHYNCHUS Grube (Plate II):

Dorsal and ventral cirri thick and lanceolate.

Subgenus Lopadorhynchus sensu stricto:

No ventral cirri on the first two setigerous segments.

Subgenus Prolopadorhynchus Bergström:

Ventral cirri on the first two setigerous segments.

Species	Number of segments	Parapodia	Cirri	Eyes	Length in mm.
8. <i>Lopadorhynchus uncinatus</i> Fauvel	21—32	First two pairs much stouter than the rest.	First two segments without ventral cirri	Present	ca. 20
9. <i>L. (Prolopadorhynchus) appendiculatus</i> Southern	17—25	First two pairs stouter but shorter than the rest	Filiform appendages at the tips of the ventral cirri	„	4—13
10. <i>L. (Prolopadorhynchus) henseni</i> Reibisch	ca. 20	„	No filiform appendages	Absent	6—8

Sub-family Iospilinae (Plate II).

Genus PHALACROPHORUS Greeff:

No antennae. Dorsal and ventral cirri small, rounded. Proboscis with two stout crochets.

11. *Phalacrophorus pictus* Greeff. Twenty to thirty segments. From the fourth setigerous segment the parapodia are well developed. Length 3—6 mm.
12. *Phalacrophorus uniformis* Reibisch. About sixty segments. The parapodia increasing in size from the third pair of parapodia to the 12th—16th, which are well developed. Length about 10 mm.

Family ALCIOPIDAE (Plate III).

Eyes voluminous. Numerous segments. Parapodia uniramous, dorsal and ventral cirri foliaceous. Pigmented glands at the base of the parapodia.

Genus GREEFFIA McIntosh:

One species.

13. *Greeffia celox* (Greeff). Three pairs of tentacular cirri. Females with receptacula seminis in the ventral cirrus of the third to sixth parapodium. Pedal lobe with two cirriform appendages.

Genus VANADIS Claparède:

Compound capillary bristles only. Pedal lobe with one cirriform appendage. Three pairs of tentacular cirri. One hundred and fifty to two hundred segments.

14. *Vanadis formosa* Claparède. The first two parapodia rudimentary, in females transformed into receptacula seminis. Pedal lobe with one long cirriform appendage. Maximum length about 300mm.
15. *Vanadis crystallina* Greeff. Six pairs of rudimentary parapodia. The first two parapodia in females transformed into receptacula seminis. Pedal lobe with one long cirriform appendage. Length 30—80 mm.

Genus CALLIZONA Greeff:

Simple or compound acicular bristles and compound capillary bristles. Pedal lobe with one cirriform appendage. Five pairs of tentacular cirri.

16. *Callizona angelini* Kinberg. One hundred to one hundred and fifty segments. Coarse acicular bristles with minute end-pieces and long compound capillary bristles. Length 30—120 mm.
17. *Callizona setosa* Greeff. Forty to sixty segments. The acicular bristles compound with a rather large, denticulated end-piece. Length 15—20 mm.

Further Information on Identification

1. *Lepidasthenia grimaldii*: Fauvel, 1923, p. 90, Fig. 34 (as *Nectochaeta gr.*); Wesenberg-Lund, 1939, p. 8, Fig. 5 (as *Nectochaeta gr.*); Støp-Bowitz, 1948.
2. *Harmothoe johnstoni*: McIntosh, 1900, p. 358, Pl. 27, 30, 39; Fauvel, 1923, p. 61, Fig. 21; Støp-Bowitz, 1948, p. 8, Fig. 4.
3. *Lagisca hubrechtii*: McIntosh, 1900, p. 360, Pl. 28, 30, 33; Fauvel, 1923, p. 78, Fig. 29; Wesenberg-Lund, 1939, p. 6, Fig. 3; Støp-Bowitz, 1948, p. 11.
4. *Pelagobia longicirrata*: Greeff, 1879, p. 247, Pl. 14, Figs. 23—25; Reibisch, 1895, p. 21, Pl. 2, Figs. 1—9; Bergström, 1914; Fauvel, 1916; 1923, p. 192, Fig. 72.
5. *Pelagobia serrata*: Southern, 1909, p. 3, Pl. 1, Figs. 2—3; Fauvel, 1916, p. 62; 1923, p. 193, Fig. 72.
6. *Maupasias caeca*: Viguier, 1886, p. 382, Pl. 21, Figs. 14—20; Fauvel, 1916; 1923, p. 190, Fig. 71.
7. *Maupasias magna*: Southern, 1909, p. 5, Pl. 1, Figs. 6, 11, Figs. 7—11; Bergström, 1914, p. 174, Fig. 63; Fauvel, 1923, p. 191, Fig. 71.
8. *Lopadorhynchus uncinatus*: Fauvel, 1915, p. 3, Fig. 2; 1916, p. 57, Pl. 1, 4; 1923, p. 184, Fig. 87; Wesenberg-Lund, 1939, p. 12, Figs. 6—7; Støp-Bowitz, 1948.
9. *L. appendiculatus*: Southern, 1909, p. 7, Pl. 2, 3; Fauvel, 1916; 1923, p. 187, Fig. 69; Wesenberg-Lund, 1939, p. 17, Figs. 13—14; Støp-Bowitz, 1948, p. 20.
10. *L. henseni*: Reibisch, 1894; 1895; Støp-Bowitz, 1948, p. 19, Fig. 12.
11. *Phalacrophorus pictus*: Greeff, 1879, p. 249, Pl. 14, Figs. 26—30; Viguier, p. 395; Reibisch, 1895, p. 10, Pl. 1, Figs. 4—7; Fauvel, 1916; 1923, p. 196, Fig. 72.
12. *Phalacrophorus uniformis*: Reibisch, 1895, p. 15, Pl. 1, Figs. 10—16; Fauvel, 1916; 1923, p. 196, Fig. 72.
13. *Greeffia celox*: Greeff, 1876, p. 69, Pl. 4, Figs. 40—42, Pl. 5, Figs. 43—55; Apstein, 1900, p. 12, Pl. 2, Fig. 10; Southern, 1911; Fauvel, 1923, p. 208, Fig. 78; Wesenberg-Lund, 1939, p. 35, Fig. 23 (as *G. oahuensis*); Støp-Bowitz, 1948, p. 30, Fig. 21 (as *Alciopa reynaudii*).
14. *Vanadis formosa*: Apstein, 1900, p. 8, Pl. 1, Figs. 1—6; Southern, 1911; Fauvel, 1916; 1923, p. 205, Fig. 77;

Distribution

Species
(Species in brackets occur only occasionally)

Gulf of Bothnia	—
Gulf of Finland	—
Baltic proper	—
Belt Sea	—
Kattegat	—
Skagerak	—
Northern North Sea	(13)
Southern North Sea	(13)
English Channel (eastern)	13
English Channel (western)	13
South and West Ireland and Atlantic	All mentioned species
Faroe Iceland Area	3, (4), (14), (15), 16
Norwegian Sea	—
Irminger Sea	(3), 4, (11)
Davis Strait	3, 4

Wesenberg-Lund, 1939, p. 28, Fig. 20; Støp-Bowitz, 1948, p. 25, Fig. 17.

15. *Vanadis crystallina*: Apstein, 1900, p. 10, Pl. 1, Fig. 7; Fauvel, 1916; 1923, p. 206, Fig. 77; Wesenberg-Lund, 1939, p. 32, Fig. 22; Støp-Bowitz, 1948, p. 27, Fig. 19.

16. *Callizona angelini*: Apstein, 1900, p. 18, Pl. 4, Figs. 33—38; Southern, 1911; Fauvel, 1916; 1923, p. 215, Fig. 81; Wesenberg-Lund, 1939, p. 41, Fig. 27; Støp-Bowitz, 1948, p. 34, Fig. 22 (as *Rhynchonerella angelini*).

17. *Callizona setosa*: Apstein, 1900, p. 18, Pl. 4, Figs. 39—43; Southern, 1911; Fauvel, 1911; 1923, p. 214, Fig. 80; Wesenberg-Lund, 1939; Støp-Bowitz, 1948, p. 34 (as *Rhynchonerella petersii*).

References

see Sheet No. 53.

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