

Zooplankton

Sheet 15

**COPEPODA**

**SUB-ORDER: CALANOIDA**

**Family: Heterorhabdidae**

**GENERA: HETEROSTYLITES**

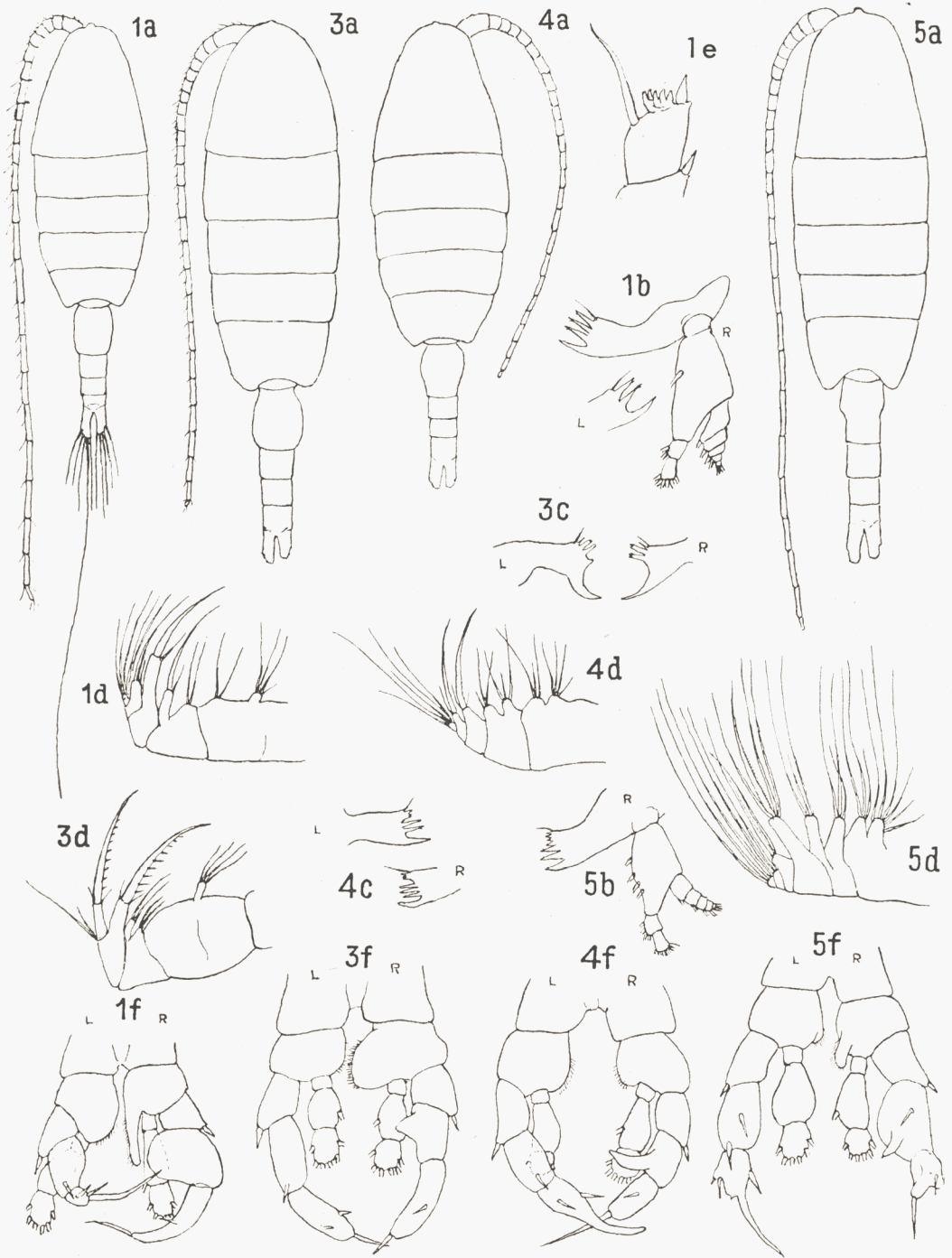
**HEMIRHABDUS**

**MESORHABDUS**

**DISSETA**

(By G. P. Farran†)

**1948**



1. *H. longicornis*. — 3. *H. grimaldii*. — 4. *M. brevicaudatus*. — 5. *D. palumboi*.  
a. ♀ dorsal. b. ♀ mandible. c. ♀ cutting teeth of mandible. d. ♀ 2nd maxilla. e. ♀ 5th foot, 2nd joint of exopodite. f. ♂ 5th feet.  
(All figures after Sars).

**Genus HETEROSTYLITES Sars 1920.**

Resembles *Heterorhabdus*, the furca being slightly asymmetrical with elongated seta on the left ramus and the 5th feet of the ♂ of the same type with 3-jointed exopodite and endopodite. 4th lobe of 2nd maxilla very long with stout terminal spine, mandible with small gap between the ventral tooth and the remainder. 1st joint of maxilliped without elongate seta. ♀ with comb of stout teeth distally on 2nd joint of exopodite of 5th feet.

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|---------------------------------------|--------------------------------|---|-------------------------|
| 1. <i>H. longicornis</i><br>(Giesbr.) | ♀ 2.9—3.5 mm.<br>♂ 2.9—3.5 mm. | Antennules longer than the body by about ¼ of their length.<br>♂ with very long digitate process on 2nd basal joint of right 5th foot.              | Oceanic,<br>deep water. |
| 2. <i>H. major</i><br>(Dahl)          | ♀ 4.5—5.0 mm.                  | No significant difference from <i>H. longicornis</i> except its larger size and longer antennules, exceeding the body by about 1/3 of their length. | Oceanic,<br>deep water. |

**Genus HEMIRHABDUS Wolfenden 1911.**

Resembles *Heterorhabdus* but mandible with a more open gap between the large ventral tooth and the remainder. Maxillae with setae reduced in number and size. 2nd maxilla with large strong claws, spinose on the inner edge, on the 5th and 6th lobes; setae on the terminal joints reduced. 1st joint of maxilliped without elongated seta.

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|-------------------------------------|--------------------------|-------------------------------|-------------------------|
| 3. <i>H. grimaldii</i><br>(Richard) | ♀ 10.3 mm.<br>♂ 10.2 mm. | Antennules reaching to furca. | Oceanic,<br>deep water. |
|-------------------------------------|--------------------------|-------------------------------|-------------------------|

**Genus MESORHABDUS Sars 1905.**

Resembles *Heterorhabdus* but mandible with 3 or 4 sub-equal teeth, not widely spaced. Lobes of 2nd maxilla sub-equal with medium claws on 5th and 6th lobes. Maxilliped without elongated seta on 1st joint.

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|---|----------------------------|---|-------------------------|
| 4. <i>M. brevicaudatus</i><br>(Wolfenden) | ♀ 3.3—3.5 mm.<br>♂ 3.6 mm. | Antennules a little longer than the body. | Oceanic,<br>deep water. |
|---|----------------------------|---|-------------------------|

**Genus DISSETA Giesbrecht 1859.**

Resembles *Heterorhabdus* but mandible with sub-equal teeth without gap. 2nd maxilla without definite claws, setae sub-equal. Maxilliped without elongated seta on 1st joint.

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| 5. <i>D. palumboi</i><br>Giesbrecht | ♀ 5.7—7.0 mm.<br>♂ 6.3—7.7 mm. | Posterior half of genital segment narrowed, slightly asymmetrical.<br>Exopodite of right 5th foot short with short setae. | Oceanic,<br>deep water. |
|-------------------------------------|--------------------------------|---|-------------------------|

**References to Description and Figures.**

- H. longicornis*: Giesbrecht, 1892, Pl. XX, Figs. 14, 21, 25, 26; Pl. XXXIX, Fig. 44, (as *Heterochaeta*). Giesbrecht u. Schmeil, 1898, (as *Heterorhabdus*). Sars, 1924—25, Pl. LXVII, Wilson, 1932, Fig. 91 (as *Heterorhabdus*). Van Breemen, 1908, Fig. 144, (as *Heterorhabdus*). Wolfenden, 1911, p. 302.
- H. major*: Sars, 1924—25, Pl. LXVII, Figs. 17, 18. ? Wolfenden, 1911, Fig. 55, (as *Alloiorhabdus medius*). Jespersen, 1934, Fig. 27.
- H. grimaldii*: Sars, 1924—25, Pl. LXIII (as *Macrorhabdus* on plate). Wolfenden, 1905, Pl. IV, Figs. 3—5 (as *Heterorhabdus*); 1911, Fig. 56. Giesbrecht u. Schmeil, 1898. Sewell, 1932, Fig. 100.
- M. brevicaudatus*: Wolfenden, 1905, Pl. IV (as *Heterorhabdus*). Sars, 1924—25, Pl. LXV.
- D. palumboi*: Giesbrecht, 1892, Pl. XXIX, Figs. 2, 8, 14, 19, 23—25, 27; Pl. XXXVIII, Fig. 44. Sars, 1924—25, Pl. LX. Wolfenden, 1904, Pl. IX, Fig. 36, (as *Heterorhabdus grandis*); 1905, Pl. IV, Figs. 7, 8, (as *Heterorhabdus grandis*). Scott, 1909, Pl. XLI, Figs. 11—21. Van Breemen, 1908, Figs. 145, 243 (as *Heterorhabdus grandis*). Esterly, 1906, Pl. IX, Fig. 21; Pl. XI, Figs. 45—46; Pl. XIII, Fig. 69; Pl. XIV, Figs. 88, 94, (as *Disseta grandis* ♀); 1911, Pl. XXVII, Figs. 40, 41; Pl. XXX, Figs. 76, 80; Pl. XXXI, Fig. 100; Pl. XXXII, Figs. 107, 108, (as *Disseta sp.*). Rose, 1929, Pl. II, Fig. 4. Sewell, 1932, Figs. 102, 103; 1947, Fig. 48.

**Distribution**

**Species**

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

**References to Work on Biology.**

- Farran (1908), 1, 2, 3, 4, 5; (1920), 1; (1926), 1, 3, 4, 5. Giesbrecht (1892), 1, 5. Giesbrecht u. Schmeil (1898), 1, 2, 3, 5. Jespersen (1934), 2, 3, 4; (1940), 1, 2. Rose (1929), 5. Sars (1924—25), 1, 2, 3, 4, 5. Sewell (1932), 1, 2, 3, 5; (1947), 1, 3, 5. Störmer (1929), 2. Van Breemen (1908), 1, 2, 3, 4. Wolfenden (1904), 1, 5.

### References.

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— 1911. Deutsch. Südpolar Exp. Vol. XII, Zool. Vol. IV.