

... Compliments

THE
C R U S T A C E A

OF

DEVON AND CORNWALL B 3240

A.B. 28740



BY

CANON A. M. NORMAN, M.A., D.C.L., LL.D.,
F.R.S., F.L.S.,

AND

R

THOMAS SCOTT, LL.D., F.L.S.

WILLIAM WESLEY AND SON

28 ESSEX STREET, STRAND, LONDON

1906

EUPHAUSIA MÜLLERI, Claus.

1868. *Euphausia Mülleri*, Claus, "Einige Schizopoden und niedere Malacostraken Messina's," Zeits. f. wiss. Zool. vol. xiii. p. 442, pl. xxviii. figs. 29-31, pl. xxix. figs. 1-34.

1882. *Thysanopoda bidentata*, G. O. Sars, "Oversigt Norges Crustaceer, i. Podopthalma &c.," Christ. Vidensk.-Selsk. Forhandl. p. 52, pl. i. figs. 16-18.

As in a previous publication A. M. N. gave characters of the then known British Schizopoda, it may be well here to add a description of *Euphausia* and its species, which is taken for the most part from Sars. But Dr. H. J. Hansen has just published a paper (Bull. du Mus. Océanographique de Monaco, No. 42, July 1905) which throws much light on the genus *Euphausia*, and therefore the name *E. Mülleri* is here employed, and not *E. pellucida*.

"*Euphausia*. Carapace with antero-lateral angles but slightly produced; rostral projection, as a rule, small. Tail powerfully developed. Eyes of normal structure. Antennular peduncle alike in both sexes, cylindrical, basal joint sometimes provided at the end superiorly with a small lappet; both flagella elongate and consisting of numerous joints. Second maxillæ with terminal joint very broad, exognath comparatively small. First pair of legs nearly similar in structure to maxillipeds and succeeding legs, save that the terminal joint is somewhat expanded and armed with a fascicle of short spines. The last two pairs of legs are quite rudimentary, being present only as a minute setiferous process."

These are the main characters. The genus is distinguished from *Nyctiphanes* chiefly in having the last two pairs of legs quite rudimentary, whereas in *Nyctiphanes* only the last pair are rudimentary; the penultimate pair being developed, but having the outer joints confluent.

The following specific characters of *Euphausia Mülleri* are the most important:—Carapace distinctly keeled on its anterior portion, terminating in a sharp-pointed rostrum which reaches to the middle of the basal joint of the antennules. Sides of the carapace bearing two pairs of spines near the lower margin. Antennules bearing a small lappet which is straight or slightly convex distally, and deeply pectinate with several (6-8) setiform denticles, its outer angle is produced into a narrow process with about three similar denticles. No spine over the base of the telson; below there is a præanal spine which is pectinated. Telson extending beyond the uropods; the lateral spine processes very strong, and finely denticulated on the inner edge.

Dr. Gough sent us a specimen for examination which had been taken in August 1903, in the tow-net, at Stat. 5 of the International Fisheries Commission, that is to the south of the Scilly Isles.

It had previously been added to the British fauna by the cruise of the 'Oceana,' when it was captured by Mr. G. Murray at Stat. 2 of that cruise, lat. 52° 45' N., long. 12° 27' W. (*cf.* Holt & Beaumont, l. c. p. 30).

RHODA INERMIS (Krøyer).

1892. *Boreophausia inermis*, Norman, l. c. p. 461.

The genus *Rhoda*, Sim, was instituted in 1872, and we quite agree with those who have used this name instead of *Boreophausia*, Sars, 1883. The type species is *Rhoda Raschii*, M. Sars = *Rhoda Jardineana*, Sim.

This has been taken twice by Dr. Gough in his tow-nettings, in Feb. 1904 at Stat. 5, which is south of the Scilly Isles, and in Nov. 1903 at Stat. 4. This last station is further south, nearer the French coast and beyond the British area.

Tribe II. MYSIDACEA.

Fam. I. SIRIELLIDÆ*.

[SIRIELLA NORVEGICA, G. O. Sars.

Taken in the tow-net by Dr. Gough in November 1903, at Stations 3 and 4; the former is off Ouessant, the latter at the entrance of the English Channel; both stations are south of the British area, but so near to it that there is every probability of the species being taken off the Cornish coast.]

SIRIELLA CLAUSI, G. O. Sars.

Near Drake Island, and in Whitsand Bay, Plymouth, 1889 and 1903; Scilly Isles (*A. M. N.*).

SIRIELLA JALTENSIS, Czerniavsky = *S. crassipes*, G. O. Sars.

Starcross, 1883; Plymouth, 1889 and 1903 (*A. M. N.*). Abundant among weeds on shores of Drake Island, Plymouth (*Garstang*, iii. p. 221).

* I am of opinion that the Subfamilies as used in my papers of 1892 should be raised to the rank of Families.—A. M. N.

SIRIELLA ARMATA (H. Milne-Edwards).

1888. *Siriella intermedia*, Gourret, "Revis. Podophthalmes du Golfe de Marseille," Ann. Mus. d'Hist. Nat. Marseille, Zool. vol. iii. p. 183, pl. xvii. figs. 7-17, pl. xviii. fig. 1.

West of Starcross, 1883; Plymouth, chiefly in Whitsand Bay, 1889 and 1903; Fowey, 1903 (*A. M. N.*). In spawn at Plymouth, June (*Garstang*).

[A half-grown female of this species, taken at Plymouth in 1889, was erroneously recorded (*Ann. & Mag. Nat. Hist.* ser. 6, vol. ix. 1892, p. 153) by A. M. N. as *Siriella frontalis*; but the description of *S. frontalis* in that paper is correct. This last species has not, it would seem, as yet been found in the British seas, as in all probability the insufficiently described *Mysis Griffithsiae* of Bell and *Mysis producta* of Gosse are referable to *S. armata*. The correction as regards the occurrence of *S. frontalis* has been already made by Holt and Beaumont (*Ann. & Mag. Nat. Hist.* ser. 7, vol. iii. 1899, p. 151).]

Fam. 2. GASTROSACCIDÆ.

GASTROSACCUS SANCTUS (P. J. van Beneden).

Abundant in Whitsand Bay, Plymouth, in August 1903 (*A. M. N.*). A young specimen, taken in tow-net by Dr. Gough, Nov. 1903, at Stat. 8, off the Cornish coast. In spawn at Plymouth, August (*Garstang*).

GASTROSACCUS SPINIFER (Goës).

Starcross (*C. Parker, in Mus. Nor.*). Nine were taken on the gravel on the west side of Bullhill Bank, estuary of the Exe (*R. A. Todd*, vi. 1904, p. 323); Padstow, 1903 (*A. M. N.*).

HAPLOSTYLUS NORMANI (G. O. Sars).

1880. *Haplostylus Normani*, Kossman, Zool. Ergeb. Reise in die Küstengebiete des Rothen Meeres, Zweite Hälfte, p. 95.

1892. *Gastrosaccus Normani*, Norman, "British Mysidæ," *Ann. & Mag. Nat. Hist.* ser. 6, vol. x. p. 155.

1900. *Haplostylus Normani*, Holt & Beaumont, Studies Marine Laboratory of Dublin Roy. Soc. vol. i. pt. 1: "Report Schizopoda of Ireland," p. 9 (separate copy).

Plymouth, with spawn (*Garstang*, iii. p. 227).

ANCHIALINA * AGILIS (G. O. Sars).

Near the Eddystone Lighthouse, 1889, and Whitsand Bay, Plymouth, 1903 (*A. M. N.*, Journ. vol. i. n. s. p. 117).

* Nom. nov. = *Anchialus*, Kröyer, 1861 (nec *Anchialus*, Thompson (Coleoptera), 1859).

Fam. 3. HETEROMYSIDÆ.

HETEROMYSIS FORMOSA, S. I. Smith = *Heteromysis norvegica*, G. O. Sars.

Plymouth, rare, 1889 and 1903 (*A. M. N.*); Millbay Channel, New Grounds, Cawsand Bay, the Yealm and off Stoke Point, all near Plymouth, and with spawn in October and November (*Garstang*).

Fam. 4. LEPTOMYSIDÆ.

ERYTHROPS ELEGANS, G. O. Sars = *Nematopus pygmaeus*, G. O. Sars.

Near Eddystone Lighthouse, 1908 (*A. M. N.*); with spawn in October at Plymouth (*Garstang*, iii. p. 227); Exmouth, 1904 (*A. M. N.*).

MYSIDOPSIS ANGUSTA, G. O. Sars.

Start Bay, 1898, and off Plymouth (*Holt & Beaumont*, v. p. 344).

MYSIDOPSIS GIBBOSA, G. O. Sars.

Exmouth and Fowey (*A. M. N.*); fine gravel and sandy ground off Blackpool, and Slapton Sands in Start Bay in 5-8 fathoms (*Holt & Beaumont*, v. p. 344); spawning in Cawsand Bay, Plymouth Sound, in July (*Garstang*, iii. p. 221).

LEPTOMYSIS GRACILIS, G. O. Sars.

Plymouth, Oct. 1893 (*Garstang*, iii. p. 221).

LEPTOMYSIS MEDITERRANEA, G. O. Sars.

Teignmouth Bay and Plymouth (*A. M. N.*); common, Cawsand Bay, Plymouth Sound, and spawning in October (*Garstang*, iii. pp. 221 & 227); Exe Estuary, in 2-3 fathoms (*R. A. Todd*, vi. p. 323).

LEPTOMYSIS LINGVURA, G. O. Sars.

1888. *Leptomysis Marioni*, Gourret, "Revis. Podophthalmes du Golfe de Marseille," Ann. Mus. d'Hist. Nat. Marseille, Zool. vol. iii. p. 185, pl. xviii. figs. 8-14.

1900. *Leptomysis lingvura*, Holt & Beaumont, Studies Marine Lab. of Dublin Roy. Soc.: "Report Schizopoda of Ireland," p. 17.

Teignmouth Bay; Whitsand and Bovisand Bays near Plymouth, 1889 and 1903 (*A. M. N.*); off Pole Sands, in the Exe Estuary, 2-3 fathoms (*R. A. Todd*, vi. p. 323).