

CONSEIL INTERNATIONAL POUR L'EXPLORATION DE LA MER

Zooplankton.

Sheet 39.

COPEPODA

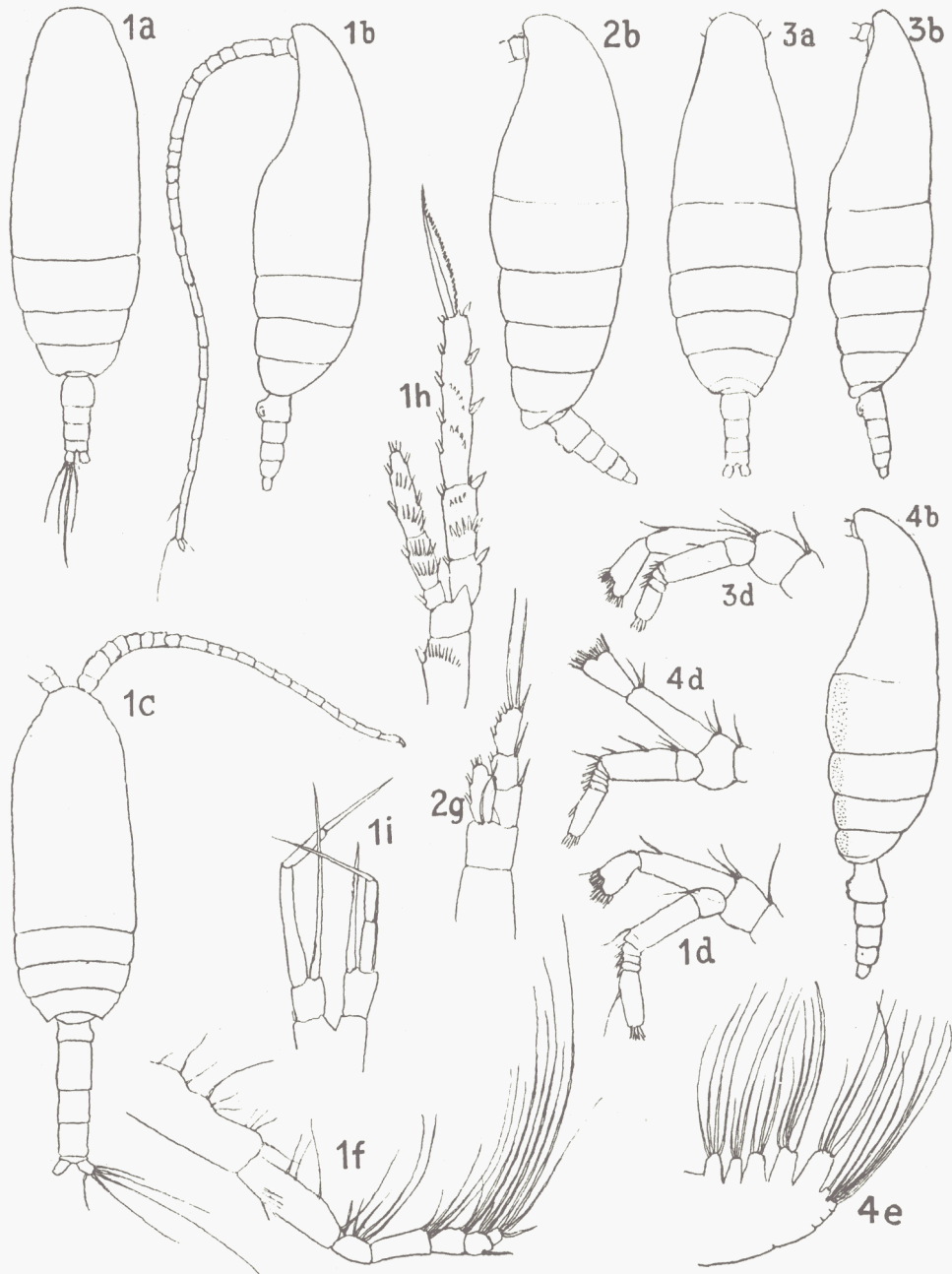
SUB-ORDER: CALANOIDA

Family: Spinocalanidae

Genus: SPINOCALANUS

(By G. P. Farran †,
revised by W. Vervoort)

1951.



1, *Spinocalanus abyssalis*; 2, *Spinocalanus magnus*; 3, *Spinocalanus angusticeps*;
4, *Spinocalanus spinosus*.

a, ♀ dorsal; b, ♀ lateral; c, ♂ dorsal; d, ♀ 2nd antenna; e, ♀ 2nd maxilla; f, ♀ maxilliped;
g, ♀ 1st foot; h, ♀ 4th foot; i, ♂ 5th feet.

(Figs. 1a—d, i, 2g, 3a, b, d, after Sars; Figs. 1f, h, after Giesbrecht (Fig. 1f modified); Figs. 2b, 4b, d, e, original).

Family SPINOCALANIDAE

Cephalon and 1st thoracic somite fused or separate, 4th and 5th thoracic somites fused or separate. Rostrum absent or represented by two acute, rather long, stiff points. 1st antennae of female 24-jointed. Exopods of 1st to 4th feet 3-jointed; endopods of 1st foot 1-jointed, of 2nd 2-jointed, of 3rd and 4th feet 3-jointed. 3rd joints of exopods of 1st feet each with 4 setae on inner edge, endopods of that pair each with 4 or 5 setae. 3rd exopodal joints of 2nd to 4th feet each with 3 spines on outer edge and 5 setae on inner edge. 5th feet absent in female. Male with reduced oral parts; 1st antennae 19-jointed, basal parts swollen, clothed with slender, club-shaped sensory appendages. 5th feet biramose, endopods reduced, 1-jointed, usually styliiform; exopods 3-jointed. Endopods and exopods of that pair without setae.

Genus SPINOCALANUS Giesbrecht, 1888

Rostrum absent. Maxillipeds of female each with 4th joints (2nd endopodal joints) longer than preceding. Male with endopods and exopods of 5th feet more or less styliiform. Feet in male and female with numerous fine, acute spinules on their posterior surface.

1. *S. abyssalis* Giesbrecht, 1888. (a smaller, deep-water form: var. *pygmaeus*) 4th and 5th thoracic somites fused. Maxillipeds each with short, smooth setae on outer edges of 6th and 7th joints (4th and 5th endopodal joints); 2nd (basal) joints each with transverse row of spinules.
Deep-water of subtropical and boreal region; epiplankton in the Arctic.
2. *S. magnus* Wolfenden, 1904. Cephalon stout. 4th and 5th thoracic segments separate. 2nd joints of exopods of 2nd antennae each with 2 setae. Outer edge setae of 6th and 7th joints (4th and 5th endopodal joints) of maxillipeds large and feathered.
Oceanic, mainly deep-water.
3. *S. angusticeps* G. O. Sars, 1920. Cephalon slender, tapering anteriorly. 4th and 5th thoracic segments partly fused. Exopods of 2nd antennae with shortened terminal joints and 2 very small setae on 2nd joints. Maxillipeds with short, slightly feathered setae on outer edges of 6th and 7th (4th and 5th endopodal) joints.
Deep-water, oceanic.
4. *S. spinosus* Farran, 1908. Cephalon stout. 4th and 5th thoracic somites also partly fused. 5th thoracic somite rounded posteriorly. Thoracic segments beset laterally with fine spinules. 2nd joints of 2nd antennae each with 3 setae. Maxillipeds each with short, broad outer edge setae on 6th and 7th (4th and 5th endopodal) joints and transverse row of spinules on 2nd (basal) joints.
Deep-water, oceanic.

Species	Length in mm.	Cephalon and 1st thoracic somite	4th and 5th thoracic somites	Length of abdomen	Setae on 6th and 7th joints of maxillipeds	Setae on 2nd joints of exopods of 2nd antennae	Transverse comb on 2nd joints of maxillipeds	Remarks
<i>S. abyssalis</i>	♀ 1.5—2.0 ♂ 1.7 var. <i>pygmaeus</i> ♀ 0.9—1.2 ♂ 1.2	fused	fused, 5th not produced, rounded	1/4 of cephalon	short and smooth	1 setae	present	
<i>S. magnus</i>	♀ 2.2—2.9 ♂ ?	partly fused	separate, 5th produced	1/3 of cephalon	large and feathered	2 setae	absent	
<i>S. angusticeps</i>	♀ 2.1—2.3 ♂ ?	partly fused	partly fused, slightly produced	1/4 of cephalon	short, slightly feathered	2 very small setae	absent	
<i>S. spinosus</i>	♀ 1.8—2.4 ♂ ?	partly fused	partly fused, not produced	1/3 of cephalon	short and broad, smooth	3 setae	present	body stout spinulose

References to Descriptions and Figures.

1. *S. abyssalis*: Giesbrecht, 1892, Pl. 13, Figs. 42—48. Giesbrecht & Schmeil, 1898. Sars, 1900, Pl. 22, Figs. 1—12 (as *S. longicornis* ♀); 1901—03, Suppl. Pl. 3, Fig. 2, Suppl. Pl. 12 (as *S. longicornis*). Mrázek, 1902, Pl. 4, Pl. 5, Fig. 1 (as *S. schaudinni*). Van Breemen, 1908, Fig. 27. With, 1915, Pl. 1, Fig. 10, Textfig. 15. Farran, 1926 (as *S. abyssalis* var. *pygmaeus*). Rose, 1933, Fig. 42. Tanaka, 1937, Fig. 4. Vervoort, 1946.
2. *S. magnus*: Wolfenden, 1904. Farran, 1905, Pl. 3, Figs. 1—12. Wolfenden, 1906, Pl. 14, Figs. 1—5. Damas & Koefoed, 1907, Fig. 15. Van Breemen, 1908, Fig. 29. Wolfenden, 1911, Pl. 25, Figs. 3—5, Textfig. 8. With, 1915. Sars, 1924—25, Pl. 9, Figs. 8—15. Rose, 1933, Fig. 43.
3. *S. angusticeps*: Sars, 1920; 1924—25, Pl. 8, Figs. 1—9.
4. *S. spinosus*: Farran, 1908, Pl. 1, Fig. 10. Wolfenden, 1911, Pl. 25, Figs. 1, 2, Textfig. 7 (as *S. horridus*). Hardy & Gunther, 1935 (as *S. horridus*). Vervoort, 1946.

Distribution

Species

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

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