

ON *STAURONBREIS CAECUS*  
(DORVILLEIDAE, POLYCHAETA)  
NEW FOR THE SOUTHERN NORTH SEA.

by

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Résumé

*Stauronereis caecus*, nouvellement trouvée dans le Sud de la Mer du Nord, est décrite et deux figures sont données. L'attention est attirée spécialement sur l'armature de la trompe.

Introduction

During an ecological study on the macrobenthic fauna of the Southern Bight [Project I.C.W.B. (1)], a little known species of the genus *Stauronereis* has been found. Until now *Stauronereis caecus* has not been recorded from the North Sea. The position of the localities where *S. caecus* is found are shown on the map (Fig. 1).

Description

*Stauronereis caecus* (Webster and Benedict, 1884).

*Staurocephalus caecus* : Webster and Benedict (1884), p. 721, Ushakov (1955), p. 246 ; *Stauronereis ? furcata* (non Hartman) : Eliason (1962), p. 258; *Stauronereis caecus*: Pettibone (1963), p. 233, Hartmann-Schröder (1971), p. 260, Hobson (1971), p. 541, Banse and Hobson (1974), p. 91.

The material originated from the sampling stations M11, M14 and M23 of the I.C.W.B.-North Sea Research Program. Station M11: 51°50'50" N 3°47'00" E, depth 9,1 m, 7 July 1971, 1 specimen; station M14: 51°50'50" N 2°52'00" E, depth 25,6 m, 9 July 1971, 2 specimens; 12 July 1972, 7 specimens; station M23: 52°36'30" N 3°47'00" E, depth 25,6 m, 25 August 1971, 1 specimen.

(1) Interministerieel Committee voor Wetenschapsbeleid: Interdepartmental committee for SCIENCE POLICY.

The smallest specimen measured 2,6 mm, with 29 setigerous segments, the largest one 6,6 mm with 40 setigers. Pettibone (1963) and Hartmann-Schröder (1971) mention a length up to 8 mm and up to 60 segments. Colour of the in formalin preserved material: white to reddish-brown.

Prostomium rounded, antennae unfortunately broken off in all specimens. Palpae inarticulated, bearing transverse folds and ending in a distinct distal joint. Eyes lacking.

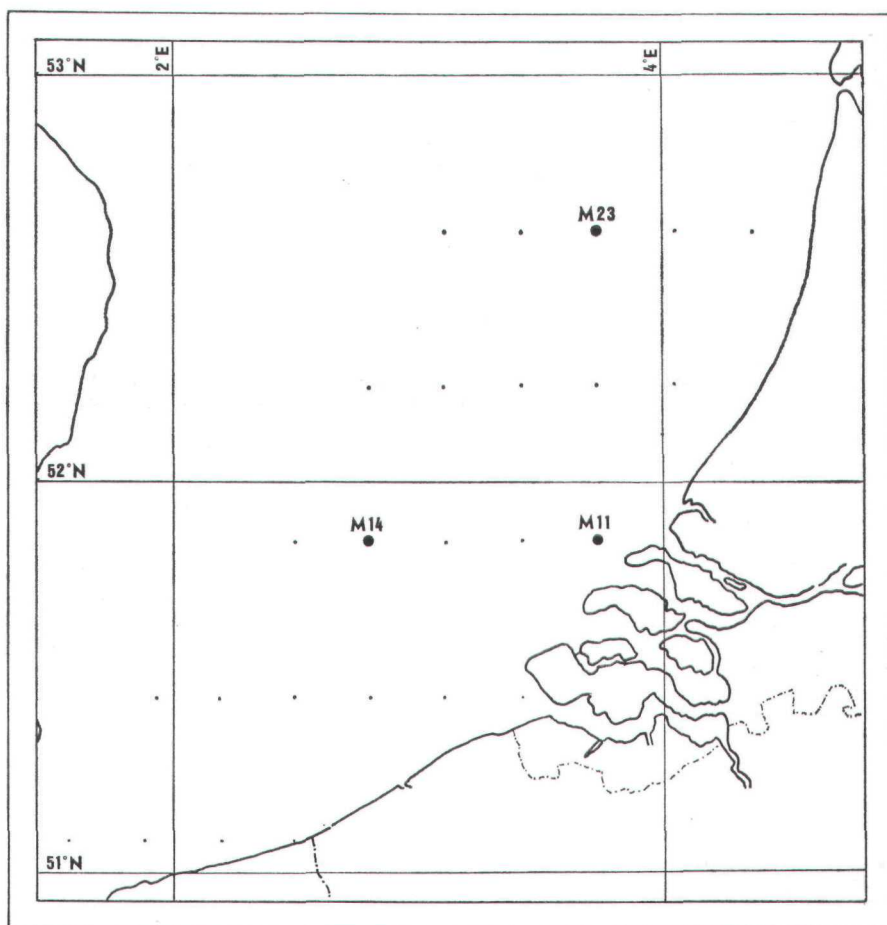


FIG. 1

Localities of *Stauronereis caecus* in the Southern Bight.

First two segments neither with parapodia nor with setae and as long as following segments. Anterior parapodia asymmetric; ventral cirrus inserted near tip (Fig. 2, j). Dorsal cirri with long cirrophore bearing a conical cirrostyle and supported by a fine aciculum of minute thickness, sometimes hardly visible. In the anterior segments the cirrophore is 1,5 times as long as the cirrostyle but in following segments it is twice as long as the cirrostyle and it has a wrinkled

appearance. Supra-acicular setae simple and of three types: (1) long, capilliform type, serrated on one side (Fig. 2, a, e); (2) shorter, slender, slightly curved type with serrated convex side (Fig. 2, b); (3) forked setae (Fig. 2, f, g, h) with unequal slender branches, serrated below the

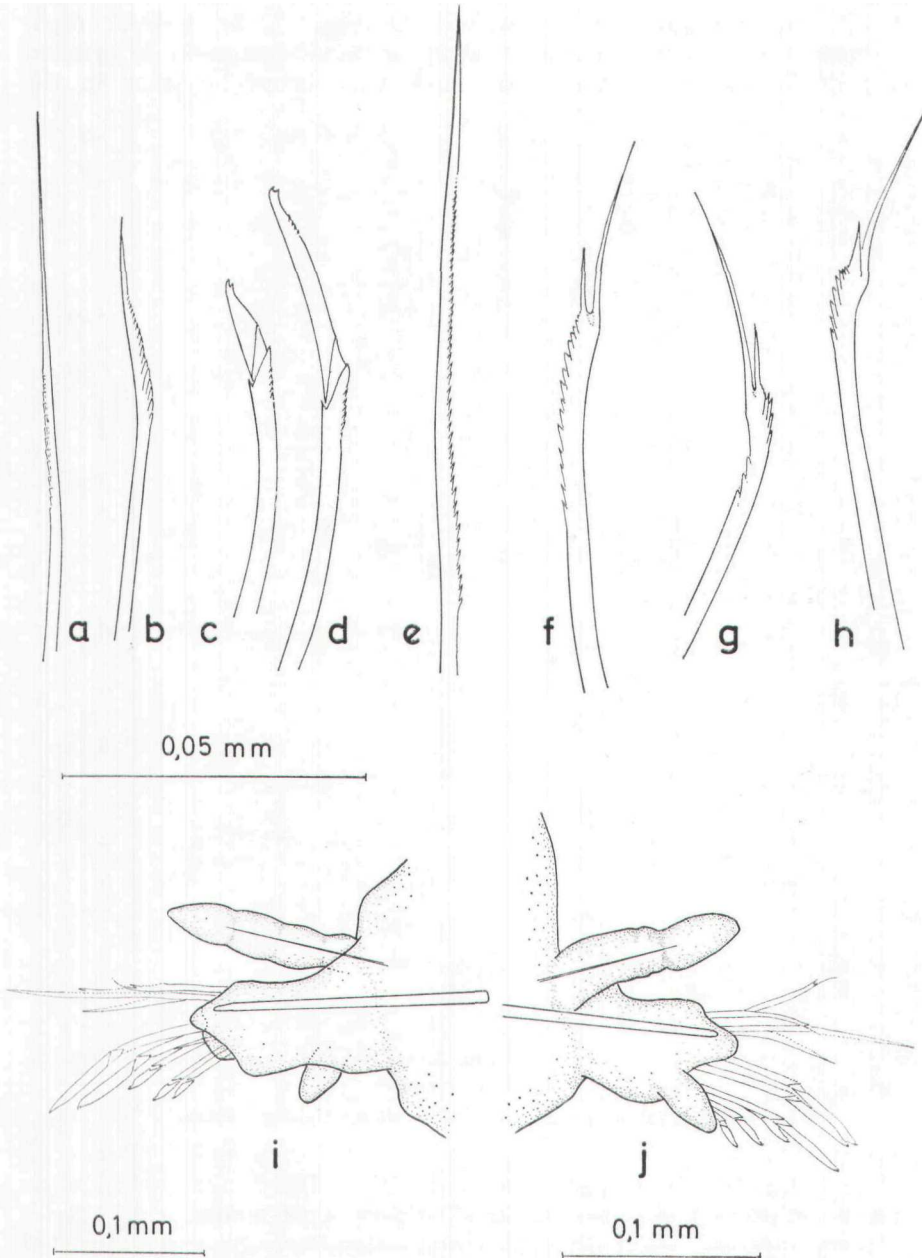


FIG. 2

*Stauronereis caecus*

a: long simple seta (setiger 1); b: short simple seta (setiger 1); c, d: compound setae (setiger 1); e: long simple seta (setiger 13); f: forked seta (setiger 13); g: (setiger 16); h: (setiger 23); i: setigerous parapodium 21; j: setigerous parapodium 4.

base of shorter branch, but sometimes also on the opposite side (Fig. 2, g). Number of setae in the upper bundle mostly 3, with non to 2 forked and 1-2 simple setae. Sub-acicular bundle composed of compound falcigers of two types: (1) 2-4 with short distal blade (Fig. 2, c), heterogomph, bidentate tip and shaft with minute subdistal denticulation; (2) 2-4 with long distal blade, heterogomph, bidentate tip, shaft and distal blade both subdistally denticulated (Fig. 2, d). The specimens examined usually have 5 setae in the

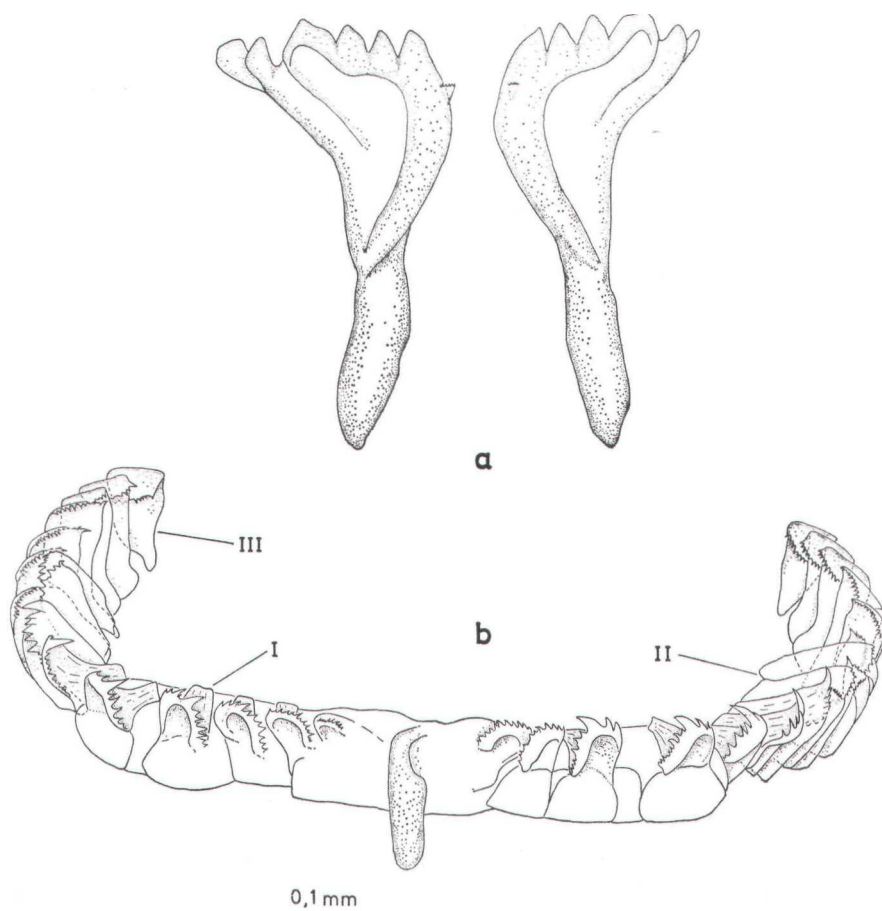


FIG. 3

*Stauronereis caecus*

a: mandibulae; b: maxilla (rear view, slightly ventral).

ventral bundle. In young individuals (20 setigers) the forked setae are only present in the first ten setigerous segments.

The armature of the proboscis has been described and depicted incompletely hitherto. Lower jaw (mandibula) consisting of two plates with 4 strong, darkly coloured teeth and 0-3 less developed teeth (Fig. 3,a). At the inner side of each mandibula a small cup-shaped projection with denticulated margin is present. The maxilla (Fig. 3,b) is a complex structure of chitinous plates, V-shaped,

connected posteriorly with a long odd piece. Three rows can be distinguished at each side of the maxillary apparatus: (1) a median row consisting of folded plates, with denticulated margin composed of small teeth and usually one larger tooth (Fig. 3, b I), diverging towards the lateral end of the maxilla into (2) a first row of thin plates with less prominent denticles (Fig. 3, b II) and (3) a second row of curved, minutely denticulated plates (Fig. 3, b III).

Number of maxillary plates at each side: median row: 6-14, first lateral row: 3-7 and second lateral row: 8-19. Maximum number of plates observed: 76 (both sides). A correlation exists between the number of plates and the body length.

Anal segment with 3 cirri, two long and one short (incomplete in all specimens studied).

### Discussion

No important differences with the earlier descriptions were found. The short simple setae in the upper bundle however have not been mentioned previously. Also were the maxilla and mandibulae not clearly depicted before this study, so a comparison of these structures with the literature is hardly possible.

### Distribution and ecological note

This species is known from Massachusetts (Webster and Benedict, 1884), Skagerrak and Northern Oresund (Eliason, 1962), Gulf of St Lawrence, Maine and Massachusetts (Pettibone, 1963), Northern part of Sea of Okhotsk, Bering Sea, Chukchee Sea, Murmansk Coast (Ushakov, 1955), continental shelf of British Columbia and Washington (Banse and Hobson, 1974).

Of the 11 specimens collected, three had diatoms in their gut. Since no data on feeding of *S. caecus* are available, it is not certain whether diatoms are really important as food organisms.

### Summary

*Stauronereis caecus* (Family Dorvilleidae) a new record for the Southern North Sea has been described and two figures given. Special attention has been paid to the armature of the proboscis.

### Samenvatting

*Stauronereis caecus*, nieuw gevonden in het zuidelijk gedeelte van de Noordzee, werd beschreven en twee figuren gegeven. Bijzondere aandacht werd besteed aan de bewapening van de proboscis.

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