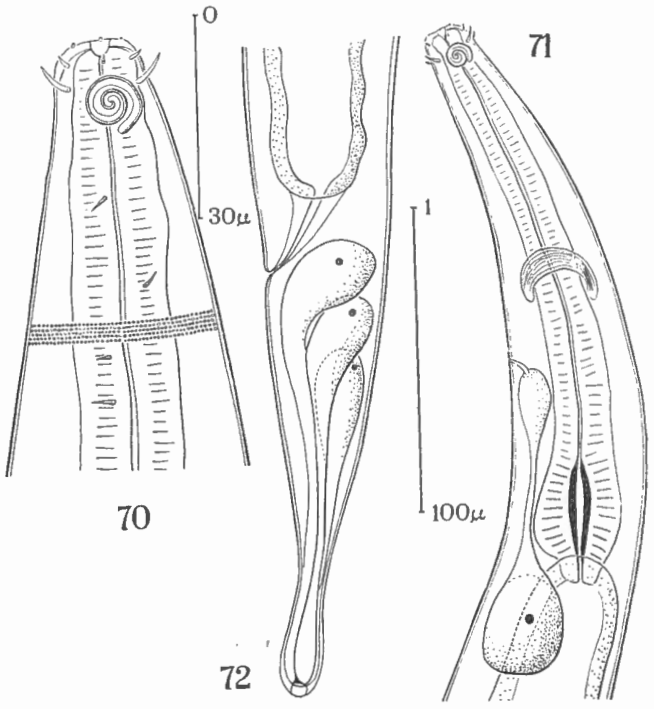
The species in question was discovered by Filipjev in the sea of Azov. Notwithstanding some small differences with the type specimen, e. g. the somewhat broader tail-end in the female, we are convinced that our specimen belongs to Filipjev's species. Filipjev has apparently overseen the cell body of the ventral gland which he described as tubular, whereas the broadest part of his ventral gland coincides with the ampulla of our specimen.

Habitus fusiform; confer the cobbian formula.

Cuticula more or less regularly dotted with points, without differentiation along the lateral fields; some scanty hairs are scattered over the body surface.



Sabatieria quadripapillata FILIPJEV.

70. Head end of a female.
71. Anterior end of a female.
72. Tail of a female.

Amphids with 2 ½ windings, paralleled by a faint line; 0,55 × corresponding body diameter.

Head obtusely rounded, with 6 labial papillae, 6 cephalic papillae and 4 cephalic setae, 0,4 × cephalic diameter.

Buccal cavity shallow, reaching slightly less than halfway the amphids, or 2/3 the distance to the first crown of cephalic papillae. A minute dorsal tooth is present.

Œsophagus with a bulb-like posterior swelling, more or less 0,2 × the œsophageal length. *Nervering* in the middle.

Ventral gland almost spherical, situated immediately behind the posterior end of the œsophagus, connected by a fine tube with the ampulla. *Excretory pore* on 0,6 × œsophageal length.

Tail containing the spinneret gland cells 3,6 anal diameters long. Width at the end 0,33 × anal diameter. Basal 3/4 conical, last 1/4 claviform.

Geographical distribution : North Sea and Black Sea.

VIII. — Family **MICROLAIMIDAE.**

A new family is proposed for the representants of the genus *Microlaimus* De Man and some related genera.

Filipjev (1930) places *Microlaimus* in the same subfamily as *Theristus* and *Monhystera*. According to our opinion, this cannot be justified, since there is a great difference in symmetry at the head end, in the structure of the amphids and of the genital armature between *Microlaimus* and *Theristus* c. s.

On the contrary *Microlaimus* shows a close relation with the *Chromadoridae*. In both forms we find the same arrangement of the labial papillae, the cephalic papillae and the cephalic setae, in three distinct successive crowns, in respective numbers of 6,6 and 4. In both there is a striated vestibulum oris, a more or less distinct bulbus œsophagi, whereas the spicula, as well as the gubernaculum are of the same type.

Therefore, *Chromadoridae* and *Microlaimidae* belong together and ought to be reckoned to the same order. Since the skin ornamentation of *Chromadora* and its consorts fails in *Microlaimus*, and the latter has a different amphidial structure, we are justified in creating a new family for the genus *Microlaimus*.

The genus *Prodesmodora* Micoletzky 1923 certainly belongs also to this family and possibly also the genus *Ethmolaimus* De Man 1885.

Diagnose. — Nemas of median-small size, with a transversly striated cuticula, a more or less distinctly set off, swollen cephalic end, 6 labial papillae, 6 cephalic papillae and 4 cephalic setae.

Amphids almost circular, a more or less distinct spiral, situated behind the head. Buccal cavity elongate with faintly striated vestibulum and small denticles. Œsophagus with a posterior bulb. Ventral gland present. Female genital tract paired, symmetrical. Ovaries outstretched or reflexed. Spicula comparatively short, arcuate, gubernaculum spoon-shaped.

Genus MICROLAIMUS De Man 1880.

The genus *Microlaimus* embraces at present 12 species of which 3 are doubtful.

True species of *Microlaimus* De Man :

1. *Microlaimus acuticaudatus* SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, p. 5, pl. III, fig. 1-3.
2. *Microlaimus borealis* STEINER 1916, p. 590, pl. XXVII, fig. 20*a-c*.
3. *Microlaimus cyatholaimoides* DE MAN 1922*c*, p. 118, fig. 1-1*f*.
4. *Microlaimus globiceps* DE MAN 1880, 1884, p. 52, pl. VI, fig. 24-24*e*.
5. *Microlaimus honestus* DE MAN 1922*b*, p. 241, fig. 30*a-c*.
6. *Microlaimus marinus* SCHULZ, 1932, p. 367, fig. 18*a-e*.
7. *Microlaimus robustidens* SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, p. 6, pl. III, fig. 4-7.
8. *Microlaimus tenuispiculum* DE MAN 1922*b*, p. 241, fig. 31*a-b*.
9. *Microlaimus zosterae* ALLGÉN 1930*a*, p. 62, fig. 5*a-c*.

Doubtful species :

10. *Microlaimus inermis* DITLEVSEN 1923, p. 179, fig. 1-4, possibly belongs to the genus *Paramonhystera* STEINER 1916. Certainly it is not a *Microlaimus*.
11. *Microlaimus problematicus* ALLGÉN 1932*b*, p. 181, fig. 41*a-b*, is indeed a problematical species. The shape of the head, the structure of the buccal cavity a. s. o. are so insufficiently characterised that no decision about the systematical position of this form is possible.
12. *Microlaimus tenuilaimus* ALLGÉN 1932*b*, p. 178, fig. 40*a-e*, is not a *Microlaimus* since the ovaries are reflexed. In other features it ressembles to *Microlaimus* but the form needs more careful illustrations.

Apart from the species 1 and 7 which were described in a former paper : Schuurmans Stekhoven & De Coninck 1933*a*, the present material contains specimens of *Microlaimus honestus* De Man and *Microlaimus marinus* Schulz, whereas De Coninck (1930, p. 125) mentions the presence of *Microlaimus globiceps* De Man in 't Zwyn.

Microlaimus menzeli HOFMÄNNER 1914 : 84, HOFMÄNNER & MENZEL 1915 : 135, pl. V, fig. 15-16 = *Prodesmodora circulata* (MICOLETZKY) 1913, p. 119.

KEY TO THE GOOD SPECIES OF THE GENUS MICROLAIMUS DE MAN

I. Buccal cavity with strongly cuticularised walls, wide; anterior portion of the œsophagus strongly muscularised, bulbiform :

Microlaimus robustidens SCHUURMANS STEKHOVEN & DE CONINCK.

II. Walls of the buccal cavity not so strongly cuticularised :

A. Œsophageal bulb 1/3 × œsophageal length. Tail conical, pointed at the tip :

Microlaimus acuticaudatus SCHUURMANS STEKHOVEN & DE CONINCK.

AA. Bulbus œsophagi 1/4-1/6 × œsophageal length :

a. Tail elongate conical, swollen at the end. Spicula very long and slender, 3/5 × the length of the tail :

Microlaimus tenuispiculum DE MAN.

aa. Tail never swollen at the end, rounded or more or less pointed. Spicula less than 1/2 × the length of the tail :

B. Submedian cephalic setae 2/3 × cephalic diameter long. Amphids large, 1/2 × corresponding body diameter, opposite to the bottom of the buccal cavity :

Microlaimus borealis STEINER.

BB. Submedian cephalic setae less than 1/2 × cephalic diameter :

b. Head distinctly swollen, broader than the neck :

c. Amphids 2 × cephalic diameter from the anterior end :

Microlaimus zosterae ALLGÉN.

cc. Amphids 1-1,7 × cephalic diameter from the anterior end :

Microlaimus globiceps DE MAN.

bb. Head not distinctly swollen :

D. Amphids opposite to the bottom of the buccal cavity :

Microlaimus cyatholaimoides DE MAN.

DD. Amphids behind the buccal cavity :

d. Submedian cephalic setae almost 0,5 × cephalic diameter. Spicula without longitudinal strengthening :

Microlaimus marinus SCHULZ.

dd. Submedian cephalic setae 0,33 × cephalic diameter. Spicula with median strengthening :

Microlaimus honestus DE MAN.

30. **Microlaimus honestus** DE MAN 1922.

Fig. 73-76.

REFERENCES :

ALLGÉN 1928*c*, p. 295.
ALLGÉN 1929*a*, p. 33.
ALLGÉN 1930*a*, p. 61, fig. 4*a-b*.
ALLGÉN 1931, p. 250.
DE MAN 1922*a*, p. 128.
DE MAN 1922*b*, p. 241, fig. 30*a-c*.

1 ♀ and 1 juv. from Heyst-Zeebrugge, 2.IX.1931.

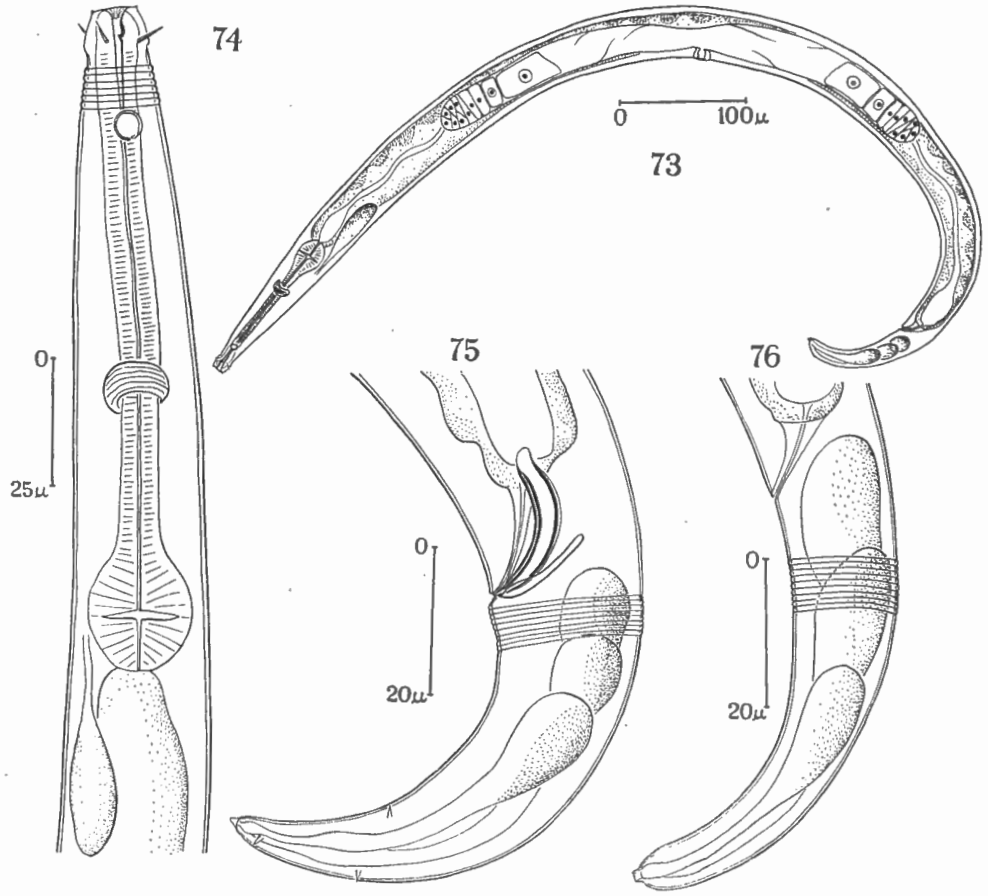
12 ♂♂, 3 ♀ ♀ and 7 juv. from Oostende, on a break-water, 18.XI.1931; NaCl : 30,77 ‰.

DIMENSIONS : ♂. L. : 0,600 mm.; α : 27,3; β : 8 ; γ : 12.
♂. L. : 0,707 mm.; α : 22,1; β : 8,03; γ : 10,5.
♀. L. : 0,710 mm.; α : 29,5; β : 8,05; γ : 10,3; V. : 49 %.
♀. L. : 1,170 mm.; α : 35,5; β : 9,8 ; γ : 11,8.

Habitus : Body elongate fusiform. *Cuticula* finely ringed, bare. *Amphids* 4μ in diameter = 0,29-0,33 × corresponding body diameter, on 1,64 cephalic diameters from the anterior end. They are almost circular, a one-looped spiral, situated behind the buccal cavity. Their foreborder on 15,6 % of the œsophageal length.

Head distinctly set off from the remainder of the body, a truncate cone with sligthly convex sides. Lips indistinct with 6 labial papillae (not depicted in fig. 74, since the lips were intruded in the specimen in question), 6 minute cephalic papillae and 4 cephalic setae, 0,35 × corresponding cephalic diameter long.

Buccal cavity elongate, narrow, with a distinct dorsal denticle; ventral denticle not seen. Vestibulum faintly striated.



Microlaimus honestus De Man.

73. General view of a female.
74. Anterior end of a female.
75. Spicular apparatus and tail of a male.
76. Tail of a female.

Œsophagus cylindrical; posterior bulb strong, occupying 0,18-0,20 × œsophageal length. *Nervering* on 57 % of the œsophageal length.

Ventral gland situated immediately behind the posterior end of the œsophagus. *Pore* not seen.

Female genital tract paired. Ovaries equal in length, outstretched, broadly rounded at their ends.

Spicula slightly curved with longitudinal cuticularised strengthenings, 21,3μ = more or less 1 × anal diameter long.

Gubernaculum spoon-shaped, 12,2μ = 0,6 × length of spicula.

Tail cylindroconical, with a broadly rounded tip in the female, slightly more attenuated in the male than in the female, with a short tubular outlet for the spinneret glands.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.

Remarks. — Allgén and De Man mention the presence of 2 small preanal papillae in the male sex; we apparently did oversee them.

31. **Microlaimus marinus** (SCHULZ) 1932.

Syn. : *Paracothonolaimus marinus* SCHULZ.

Fig. 77-81.

REFERENCES :

SCHULZ 1932, p. 367, fig. 18*a-e*.

2 ♂♂, 17 ♀♀ in 't Zwyn, sand and organic detritus, 28.XII.1931; NaCl : 21 ‰.

DIMENSIONS : ♂♂ (n. 2) :

L. : 1,321-1,400 mm.;
α : 48,9-50,3;
β : 8,6-8,8;
γ : 16,2-18,1.

♀♀ (n. 10) :

L. : 0,938-1,205 mm.;
α : 30-35-6;
β : 8,5-9,9;
γ : 8,8-14,1;
V. : 47-7-53,9 %.

Our specimens differ from those of Schulz by their α's only, an index which Schulz in different occasions as to our experience did not determine with sufficient accuracy.

DIMENSIONS :

♂ 1 L. : 1,321 mm.; α : 48,9; β : 8,8; γ : 18,1.

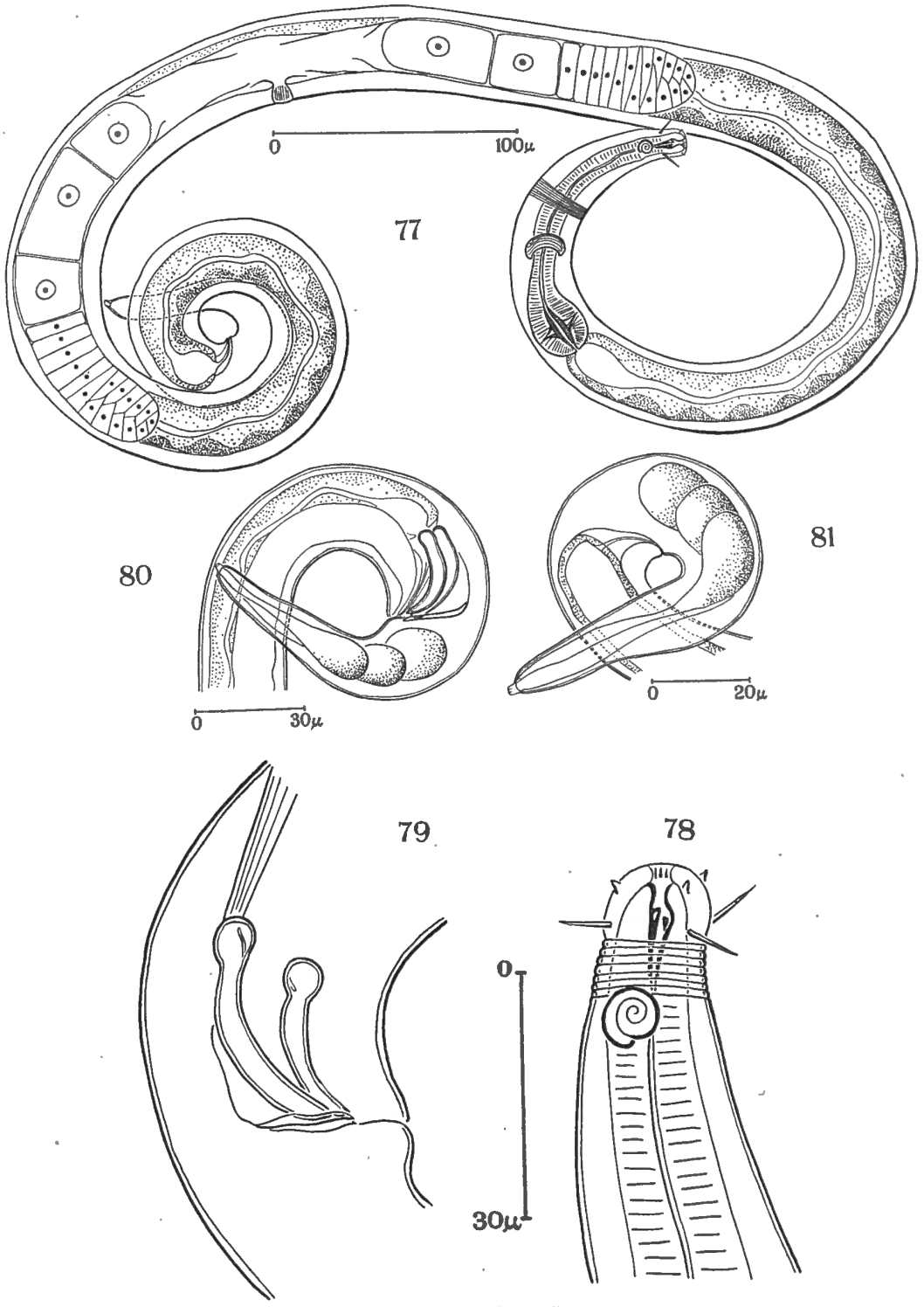
0	?	150	?	M	1250	1,321 mm.
10,8		27		27	21,6	

♂ 2 L. : 1,400 mm.; α : 50,3; β : 8,6; γ : 16,2.

0	130	160	500	M	1312	1,400 mm.
13 9		27,9		27,9	27,9	

♀ 1 L. : 0,938 mm.; α : 30,5; β : 9,08; γ : 10,06; V. : 47,7 %.

0	?	103	284	446	?	845	0,938 mm.
9,5		22,4		30,4		21	



Microlaimus marinus SCHULZ.

77. General view of a female.
78. Head end of a male.
79. Spicular apparatus of a male.
80. Posterior end of a male.
81. Posterior end of a female.

♀ 2 L. : 0,950 mm.; α : 31,1; β : 9,04; γ : 10,3; V. : 53,9 %.

0	?	101	?	512	?	858	0,950 mm.
10,4		25,6		30,4		21	

♀ 3 L. : 1,150 mm.; α : 34,5; β : 9,04; γ : 13,3; V. : 50,3 %.

0	97,5	122	?	616,6	885	1063	1,150 mm.
13,9		27,8		33	30,5	?	

♀ 4 L. : 1,152 mm.; α : 34,58; β : 9,9; γ : 8,8; V. : 49,6 %.

0	92	116	375	572	780	1012	1,152 mm.
12,5		27,8	33	30	30	25	

Habitus : Body distinctly narrowed anteriorly; head end 0,4 × width at the posterior border of the œsophagus.

Cuticle distinctly ringed, devoid of setae. *Amphids* distinctly spiral (one distinct and 2 faint loops); diameter 4,8μ = 0,42-0,45 × corresponding body diameter, situated caudad from the buccal cavity on 1,2 × cephalic diameter from the anterior end, or on 1/9 of the œsophageal length.

Head distinctly set off from the remainder of the body, slightly swollen; its length 0,75 × its width. Labial papillae not seen. Cephalic papillae setiform, very distinct. Cephalic setae 5,6μ long, about 0,5 × cephalic diameter.

Buccal cavity elongate, narrow; vestibulum with faint longitudinal striations. Dorsal tooth distinct, subventral tooth (teeth?) somewhat smaller, on a lower level.

Œsophagus cylindrical, with a strong bulb, occupying 1/4-1/6 of the œsophageal length. *Nervering* at 62 %. *Ventral gland nor pore* observed.

Female genital tract paired, symmetrical; ovaries outstretched.

Testis beginning at the end of the first third of the body length. Spicula short, strong, curved, with a proximal swelling, the distinctness of which depends upon the view under which the spicula are seen. Chord of the spicula 28,3μ or more or less 1 anal diameter long. Gubernaculum 20μ, tender.

Tail gradually tapering, with bluntly rounded tip and a short conical outlet for the spinneret glands. In the female the tail measures 3,13-5,2 anal diameters, in the male it is 3 anal diameters long.

Geographical distribution : North Sea and Baltic.

Remarks. — Schulz's figure 18*d* gives a rather schematical picture of the spicular apparatus. His fig. 18*c*, representing the tip op the tail, is very probably taken after a flattened specimen.

32. **Microlaimus acuticaudatus** Schuurmans Stekhoven & De Coninck 1933.

References :

Schuurmans Stekhoven & De Coninck 1933*a*, p. 5, pl. III, fig. 1-3.

Habitat : 2♀♀ from 't Zwyn, sand and organic detritus from a shallow channel, 28.XII.1931; NaCl : 21 ‰.

33. **Microlaimus robustidens** SCHUURMANS STEKHOVEN & DE CONINCK 1933.

REFERENCES :

SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, p. 6, pl. III, fig. 4-7.

Habitat : 2 ♂♂ from 't Zwyn, sand and organic detritus from a shallow channel, 28.XII.1931; NaCl : 21 ‰.

ORDER III : ARAEOLAIMOIDEA

We propose to bring together in a new order, that of the *Araeolaimoïdea*, all those genera which are characterised by a 4-radiate symmetry in the distribution of the cephalic setae, and the peculiar structure of the amphid which in principle spiral-shaped, may develop into a closed or open, sometimes elongate loop. In some genera this loop is situated on a lateral shield.

The following families ought to be reckoned to this order :

I. — The familly *Axonolaimidae* with the genera :

1. *Apodontium* COBB 1920, p. 277, n. 62.
2. *Araeolaimoides* DE MAN 1893, p. 86, syn. *Coinonema* COBB 1920, p. 259, n. 42.
3. *Araeolaimus* DE MAN 1888, p. 14, syn. *Parachromagaster* ALLGÉN 1929, p. 466 :
   Spira BASTIAN 1865, ex parte.
4. *Ascolaimus* DITLEVSEN 1919, p. 168, syn. *Anticoma* BASTIAN 1865, ex parte :
   Axonolaimus BUETSCHLI 1874, ex parte;
   Monhystera BASTIAN 1865, ex parte.
5. *Axonolaimus* DE MAN 1888, p. 19, syn. *Anoplostoma* BUETSCHLI 1874, ex parte.
6. *Cynura* COBB 1920, p. 262, n. 46.
7. *Margonema* COBB 1920, p. 248, n. 27.
8. *Odontophora* BUETSCHLI 1874, p. 49 :
   syn. *Conolaimus* FILIPJEV 1918-1921, p. 323;
   Trigonolaimus DITLEVSEN 1919, p. 177.
9. *Synodontium* COBB 1920, p. 280, n. 65.

II. — The family *Diplopeltidae* with the genera :

1. *Acmaeolaimus* FILIPJEV 1918-1921, p. 345.
2. *Didelta* COBB 1929, p. 252, n. 33.
3. *Diplopeltis* COBB 1905, p. 100 (STILES & HASSALL 1905) :
   syn. *Dipeltis* COBB 1891, p. 13;
   Discophora VILLOT 1875, p. 463.

APPENDIX : *Disconema* Filipjev 1918-1921, p. 305.

This genus possesses amphids which remember those of *Diplopeltis*, but it differs from the other representants of the group by its 6-radiate symmetry.

III. — The family *Camacolaimidae* with the genera :

1. *Acontiolaimus* FILIPJEV 1918-1921, p. 186.
2. *Camacolaimoides* DE CONINCK & SCHUURMANS STEKHOVEN 1933, see below, p. 00.
3. *Camacolaimus* DE MAN 1889*a*, p. 8, syn. *Ypsilon* COBB 1920, p. 314, n. 96.
4. *Digitonchus* COBB 1920, p. 314, n. 95.
5. *Onchium* COBB 1920, p. 303, n. 83.
6. *Onchulella* COBB 1920, p. 306, n. 87.

IV. — The family *Halaphanolaimidae*.

We propose to create the afore mentioned new family for a group of genera which show a close relation to the *Camacolaimidae* at the one side, and the *Plectidae* at the other side. They are characterised by :

1. The typical 4-radiate symmetry in the distribution of the cepalic setae;
2. The spiral amphid from which that of *Anaplectus* DE CONINCK & SCHUURMANS STEKHOVEN (see below), *Dermatolaimus* STEINER and *Plectus* BASTIAN may be derived;
3. The spicular apparatus of the male, which strongly ressembles that of *Camacolaimus* in certain genera, e. g. : *Halaphanolaimus*, *Deontolaimus*, *Dagda*, *Diodontolaimus*, and so on, and may easily be derived from this type in the other genera which belong to this family;
4. The preanal tubuli in the male, outlets of a series of preanal glands, typical for this family.

We reckon to this family the following genera :

1. *Anaplectus* DE CONINCK & SCHUURMANS STEKHOVEN nom. nov.
   The present genus is proposed for all those species, formerly reckoned to *Plectus* BASTIAN, which possess a crown of 4 cephalic setae and a set of preanal tubuli in the male sex. Type species : *Anaplectus granulosus* (BASTIAN).
2. *Aphanolaimus* DE MAN 1860, p. 5 and 1884, p. 34.
3. *Cricolaimus* SOUTHERN 1914, p. 29.
4. *Dagda* SOUTHERN 1914, p. 29.
5. *Deontolaimus* DE MAN 1880, p. 3 and 1884, p. 31.
6. *Dermatolaimus* STEINER 1916, p. 604.
7. *Diodontolaimus* SOUTHERN 1914, p. 31.
8. *Halaphanolaimus* SOUTHERN 1914, p. 11.
9. *Leptolaimus* DE MAN 1876, p. 169 and 1884, p. 81.
10. *Paraphanolaimus* MICOLETZKY 1923*a*, p. 25.

APPENDIX :

11. *Aegialoalaimus* DE MAN 1907*a*, p. 228 and 1907*b*, p. 35.
Aegialoalaimus DE MAN has (confer SCHUURMANS STEKHOVEN 1931, p. 649) a 4-radiate distribution of the cephalic setae, and amphids which at first sight circular, proove to be faintly spiral when studied accurately. The ornamentation of the skin presents rings demarcated by points. In his paper of 1931, Schuurmans Stekhoven shifted this genus from the *Monhysteridae* to the *Chromadoridae*. We believe that this genus is more closely allied to the *Halaphanolaimidae* (order *Araeolaimoidea*).
12. *Alaimella* COBB 1920, p. 233, n. 7*a-b*.
This genus is not sufficiently characterised. As far as may be concluded from Cobb's descriptions, the spicular apparatus shows much ressemblance with that of *Camacolaimus* and *Halaphanolaimus*. The distribution of the setae and the structure of the amphids point undoubtedly to this order.

In both genera *Aegialoalaimus* De Man and *Alaimella* Cobb the preanal tubules, characteristic for the other genera of the family, fail.

V. — The family *Plectidae*.

In this family remain :

1. *Haliplectus* COBB 1913, p. 443.
2. *Plectus* BASTIAN 1865, p. 118.
3. *Paraplectus* FILIPJEV 1930, p. 12.
4. *Pycnolaimus* COBB 1920, p. 258, n. 40 :
Closely allied with *Wilsonema* COBB 1913.
5. *Wilsonema* COBB 1913, p. 443 :
syn. *Bitholinema* DE CONINCK 1931*b*, p. 2.

APPENDIX : Insufficiently characterised and therefore of uncertain position :

6. *Aulolaimoides* MICOLETZKY 1915, p. 3-:
Shows great ressemblance with *Siphonolaimus* DE MAN 1893.
7. *Rhabdolaimus* DE MAN 1880, p. 59 and 1884, p. 125.

VI. — APPENDIX : The family *Tripyloidae*.

The family of the *Tripyloididae*, brought by Filipjev not without hesitation to the *Enoplidae*, certainly ought not to be reckoned to that order. The systematic position of this family is extremely difficult. Instead of a 4-radiate symmetry at the anterior end, a 6-radiate symmetry prevails. Therefore a close relation with the other families of the *Araeolaimoidea* seems rather doubtful, although the similar structure of the amphids points to that direction. At the other hand, there is a striking ressemblance between the genital armature of the *Tripyloidea* and that of the *Cyatholaimidae*.

Thus the systematic position of this family remains uncertain.

For us, the structure of the amphids is of primary value.

For that reason we place the family of the *Tripyloididae* into the order of the *Araeolaimoidea*, since it does not seem recommendable to us to base a new order on 2 or 3 genera only.

To this family we bring the following genera :

1. *Bathylaimus* Cobb 1894, p. 409 :
   (nec *Bathylaimus* Ditlevsen 1919, p. 168 = *Ascolaimus* Ditlevsen.
   Bathylaimus Filipjev 1922*a*, p. 107 and 1925, p. 198 = *Parabathylaimus* nov. gen.).
   syn. *Cothonolaimus* Ditlevsen 1919 : syn. *Macrolaimus* Ditlevsen 1919, p. 188, nec *Macrolaimus* Maupas 1900, p. 578.
2. *Parabathylaimus* De Coninck & Schuurmans Stekhoven 1933, nov. gen. (see below !)
3. *Tripyloides* De Man 1886, p. 60 :
   syn. *Tripyla* Buetschli 1874, p. 33, nec *Tripyla* Bastian 1865, p. 115.

Appendix : *Omicronema* Cobb 1920, p. 265, n° 50 strongly resembles *Parabathylaimus* De Coninck & Schuurmans Stekhoven, but since no figures of the spicular apparatus are given, no certain conclusion is possible.

Allgén's genus *Bathylaimella* Allgén 1930*c*, p. 257, is excluded from this family since there is no evidence for a relation with the genus *Bathylaimus* Cobb. The systematic position of this genus will remain uncertain till a more thorough description and more accurate figures will be given.

I. — Family **AXONOLAIMIDAE.**

Genus ARAEOLAIMOIDES De Man 1893.

Syn. : *Coinonema* Cobb 1920.

The following species belong to this genus :

1. *Araeolaimoides microphthalma* De Man 1893, p. 86, pl. V, fig. 4.
2. *Araeolaimoides punctatus* (Cobb) 1920, p. 259 :
   syn. *Coinonema punctatum* Cobb 1920.
3. *Araeolaimoides zosterae* Filipjev 1918, p. 326, pl. X, fig. 73*a-d*.

KEY TO THE SPECIES OF ARAEOLAIMOIDES

I. Amphids on 1 cephalic diameter from the anterior end :
   Araeolaimoides punctatus Cobb.

II. Amphids on 3 cephalic diameters from the anterior end :
   A. Amphids *Axonolaimus*-like; ocelli on 1/2 of œsophageal length :
      Araeolaimoides microphthalmus De Man.
   AA. Amphids *Araeolaimus*-like; ocelli on 1/3 of œsophageal length :
      Araeolaimoides zosterae Filipjev.

No representants of this genus are found hitherto along the Belgian Coast. *Araeolaimoides microphthalmus* De Man however very probably will be found in a near future, since it occurs also in the Channel and in Helgoland.

GENUS ARAEOLAIMUS DE MAN 1888.

Syn. : *Parachromagaster* ALLGÉN 1929.

Spira BASTIAN 1865 ex parte.

The following species of the genus *Araeolaimus* were described until the present moment.

1. *Araeolaimus bioculatus* (DE MAN) 1878 :
   syn. *Spira bioculata* DE MAN 1878, pp. 20-21, pl. VIII, fig. 13*a-d*.
2. *Araeolaimus cobbi* STEINER 1916, p. 637, pl. XVII, fig. 36*a-b*; pl. XXXII, fig. 36*c-e*, is no *Araeolaimus*. Probably a ***Phanodermatid*** of uncertain position.
3. *Araeolaimus cylindricauda* ALLGÉN 1931, p. 256, fig. 14*a-c* = ***A. longicauda*** ALLGÉN 1929.
4. *Araeolaimus ditlevseni* ALLGÉN 1928*a*, p. 287, fig. 19*a-d* = ***A. elegans*** DE MAN 1888.
5. *Araeolaimus dolichoposthius* SSAVELJEV 1912, p. 123 = ***A. elegans*** DE MAN 1888.
6. *Araeolaimus elegans* DE MAN 1888, p. 16, pl. I, fig. 9; pl. II, fig. 9*b* :
   syn. *A. ditlevseni* ALLGÉN 1928.
   A. dolichoposthius SSAVELJEV 1912.
   A. spectabilis DITLEVSEN 1921.
7. *Araeolaimus filipjevi* SCHUURMANS STEKHOVEN & ADAM 1931, p. 52, pl. X, fig. 10-12.
8. *Araeolaimus longicauda* ALLGÉN 1929*b*, p. 490, fig. 44*a-b* :
   syn. *A. cylindricauda* ALLGÉN 1931.
   A. tenuis (ALLGÉN) 1932.
9. *Araeolaimus macrocirculus* KREIS 1928, p. 185, pl. IX and XII, fig. 31.
10. *Araeolaimus mediterranea* (DE MAN) 1878, pp. 21-22, pl. IX, fig. 14*a-c* :
    syn. *Spira mediterranea* DE MAN 1878.
11. *Araeolaimus ponticus* FILIPJEV 1922*a*, p. 178, pl. IV, fig. 35*a-d*.
12. *Araeolaimus sabulicola* (ALLGÉN) 1929*b*, p. 466 :
    syn. *Parachromagaster sabulicola* ALLGÉN 1929, ? = ***A. steineri*** FILIPJEV 1922.
13. *Araeolaimus spectabilis* DITLEVSEN 1921, p. 8, fig. 3, pl. II, fig. 1; pl. III, fig. 3 and 9 = *A. elegans* DE MAN 1888.
14. *Araeolaimus steineri* FILIPJEV, 1922*a*, p. 177 :
    syn. *A. elegans* STEINER (nec DE MAN) 1916, pp. 634-636, pl. XVII, fig. 38*b* and pl. XXXIII, fig. 38*c-e*, nec pl. XVII, fig. 38*a*, nec pl. XXXIII, fig. 38*f*.
    A. sabulicola (ALLGÉN) 1929.
15. *Araeolaimus tenuis* (ALLGÉN) 1932*c*, p. 426, fig. 11*a-d* :
    syn. *Parachromagaster tenuis* ALLGÉN 1932 = ***A. longicauda*** ALLGÉN 1929.
16. *Araeolaimus tristis* ALLGÉN 1931, pp. 258-259, fig. 15*a-c*, a doubtful species; perhaps a synonym of *A. elegans* DE MAN.

KEY TO THE TRUE SPECIES OF ARAEOLAIMUS

(N^{os} 1, 6-11, 14 of the foregoing list.)

I. Nervering on 1/4 of the œsophageal length :

Araeolaimus macrocirculus KREIS.

II. Nervering at the middle or behind the middle of the œsophagus :

A. Cephalic setae 1 × cephalic diameter :

Araeolaimus longicauda ALLGÉN.

AA. Cephalic diameter at the utmost 0,65 × cephalic diameter :

a. Amphids opposite to the anterior portion of the buccal cavity; foreborder on 0,117 × the distance : anterior end-ocelli :

Araeolaimus steineri FILIPJEV.

aa. Amphids opposite to the posterior portion of the buccal cavity or behind it

B. Amphibial diameter 1/2 × corresponding body diameter or larger :

b. Foreborder of the amphids on 0,166 × the distance : anterior end-ocelli. Gubernaculum without a caudal apophysis :

Araeolaimus ponticus FILIPJEV.

bb. Foreborder of the amphids on 0,222 × the distance : anterior end-ocelli. Gubernaculum without a caudal apophysis :

Araeolaimus filipjevi SCHUURMANS STEKHOVEN & ADAM.

BB. Amphibial diameter less than 1/2 × corresponding body diameter :

c. Ocelli absent :

Araeolaimus mediterraneus (DE MAN).

cc. Ocelli present :

d. Ocelli on 4 × the distance : anterior end- foreborder of the amphids :

Araeolaimus elegans DE MAN.

dd. Ocelli on 3 × the distance : anterior end- foreborder of the amphids :

Araeolaimus bioculatus (DE MAN).

We found in the Belgian material 1 species only :

34. **Araeolaimus filipjevi** SCHUURMANS STEKHOVEN & ADAM 1931.

Fig. 82.

REFERENCES .

SCHUURMANS STEKHOVEN & ADAM 1931, p. 52, pl. X, fig. 10-12.

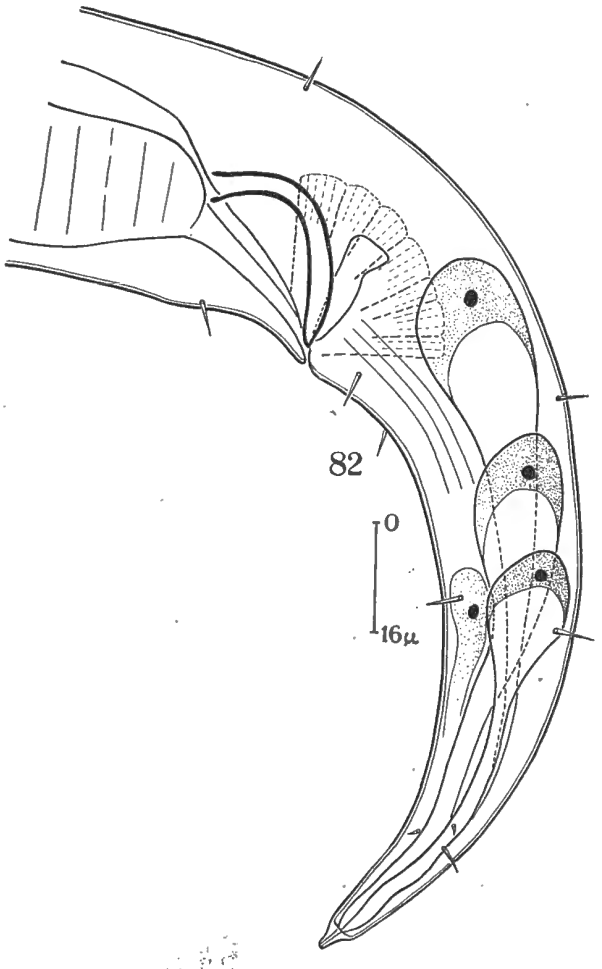
1 ♂, 1 ♀ and 5 juv. from Oostende, on a break-water, 18.XII.1931; NaCl : 30,77 ‰.

DIMENSIONS : ♂. L. : 1,165 mm.; α : 42,8; β : 7,6; γ : 13,7.

We may limit ourselves to some additional notes on the genital armature of the male. Schuurmans Stekhoven & Adam oversaw the tender gubernaculum which is plate-like and presents the indication of a caudal apophysis only.

Spicula strongly curved, not so slender as depicted by Schuurmans Stekhoven & Adam in their fig. 11, pl. 10. Tail 4 times as long as the chord of the spicula, beset with some short setae which occur in the subventral and subdorsal lines. Our fig. 82 is taken after a somewhat flattened individual, which naturally alters the relations.

GEOGRAPHICAL DISTRIBUTION : North Sea.



Araeolaimus filipjevi SCHUURMANS STEKHOVEN & ADAM.
82. Spicular apparatus and tail of a male.

GENUS ASCOLAIMUS DITLEVSEN 1919.

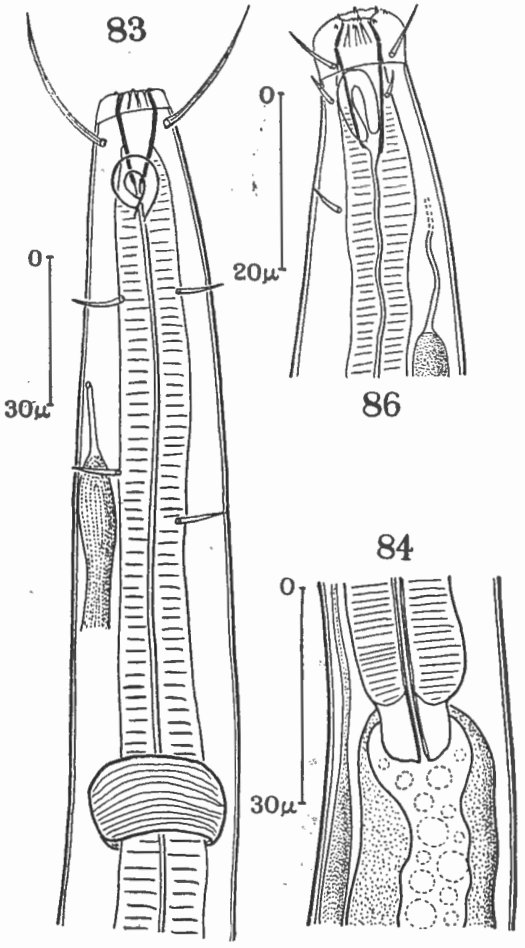
Syn. : *Anticoma* BASTIAN 1865, ex parte.
Axonolaimus BUETSCHLI 1874, ex parte.
Monhystera BASTIAN 1865, ex parte.

Up to this moment, only a single species represents this genus.

35. **Ascolaimus elongatus** (BUETSCHLI) 1874.

Fig. 83-84.

Syn : *Anticoma longisetosa* KREIS 1924.
Ascolaimus elongatus SKWARRA 1921.
Ascolaimus filiformis DITLEVSEN 1919.
Axonolaimus serpentulus DE MAN 1922.
Axonolaimus tenuis SCHULZ 1932.
Monohystera elongata BUETSCHLI 1874.



Ascolaimus elongatus (BUETSCHLI).
83. Anterior end of a male with partially expanded mouth.
84. Transition between œsophagus and intestine.

Axonolaimus paraspinosus SCHUURMANS STEKHOVEN & ADAM.
86. Head end of a male.

REFERENCES :

ALLGÉN 1929*c*, pp. 34-35, fig. 8*a-b*, *Ascolaimus filiformis* DITLEVSEN.
BUETSCHLI 1874, p. 26, pl. II, fig. 9*a-d*, *Monohystera elongata* BUETSCHLI.

DITLEVSEN 1919, pp. 168-169, pl. IV, fig. 2, 4, 8; pl. VI, fig. 6 *Ascolaimus filiformis* DITLEVSEN.

FILIPJEV 1930, pp. 51-52, fig. 34*a-c*, *Ascolaimus elongatus* SKWARRA.

KREIS 1924, pp. 4-6, pl. I, fig. 2-3, *Anticoma longisetosa* KREIS.

DE MAN 1922*c*, p. 117, *Axonolaimus serpentulus* nom. nudum.

SCHULZ 1932, pp. 411-412, fig. 45*a-c*, *Axonolaimus tenuis* SCHULZ.

SCHUURMANS STEKHOVEN 1931, p. 618, *Ascolaimus filiformis* DITLEVSEN.

SCHUURMANS STEKHOVEN & DE CONINCK 1932*a*, pp. 127-128, *Ascolaimus elongatus* (BUETSCHLI).

SCHUURMANS STEKHOVEN & DE CONINCK 1932*b*, pp. 149-163, fig. 1-8, *Ascolaimus elongatus* (BUETSCHLI).

SKWARRA 1921, p. 9, fig. 16*a-b*, *Ascolaimus elongatus* SKWARRA.

1 ♀ from Oostende, on a break-water, 18.XI.1931; NaCl : 30,77 ‰.

2 ♂♂, 4 ♀♀ and 1 juv. from Oostende, from a puddle on the strand, 18.XI.1931; NaCl : 29,3 ‰.

2 ♀♀ and 23 juv. from Heyst-Zeebrugge; strand, 2.IX.1931.

5 ♂♂, 6 ♀♀ and 9 juv. from 't Zwyn, sand and organic detritus, 28.XII.1931; NaCl: 21 ‰.

It may suffice to refer to our paper of 1932*b*, where an extensive discussion on its synonymy is given together with a new description of the species.

Here we will give only a figure of the œsophageal valve, and another of the anterior end of a male the buccal cavity of which is slightly protruded so that the vestibular cuticularisations may be confounded with small papillae. We once more call to the attention the variability of the absolute length and indices of this species and refer to what is said about this phenomenon on p. 18 in the general part.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.

GENUS AXONOLAIMUS DE MAN 1888.

Syn. : *Anoplostoma* BUETSCHLI 1874 ex parte.

Until now 16 species of *Axonolaimus* were described :

1. *Axonolaimus demani* nom. nov. :
   syn. *Axonolaimus* spec. DE MAN 1928, p. 97, fig. 1-7.
2. *Axonolaimus elegans* SCHULZ 1932, p. 412, fig. 46*a-e* = *Odontophora setosa* ALLGÉN 1929.
3. *Axonolaimus limalis* SSAVELJEV 1912, p. 118.
4. *Axonolaimus paraspinosus* SCHUURMANS STEKHOVEN & ADAM 1931, p. 50 pl. X, fig. 6-9 :
   syn. *Anoplostoma spinosum* DE MAN 1888 nec BUETSCHLI.
   Axonolaimus similis SCHULZ 1932.
5. *Axonolaimus ponticus* FILIPJEV 1918-1921, p. 322, pl. X, fig. 71*a-c*.

6. *Axonolaimus serpentulus* De Man 1922*c*, p. 117 = *Ascolaimus elongatus* (Buetschli) 1874.
7. *Axonolaimus setosus* Filipjev 1918-1921, p. 319, pl. X, fig. 70*a-c*.
8. *Axonolaimus setosus* Skwarra 1921, p. 9, fig. 15*a-b* = *Axonolaimus villosus* Skwarra 1922.
9. *Axonolaimus similis* Schulz 1932, p. 410, fig. 44*a-b* = *Axonolaimus paraspinosus* Schuurmans Stekhoven & Adam 1931.
10. *Axonolaimus spinosus* (Buetschli) 1874, p. 37, pl. IV, fig. 20*a*; pl. V, fig. 20*b-c* : syn. *Anoplostoma spinosum* Buetschli 1874, nec De Man 1888.
11. *Axonolaimus tenuis* Schulz 1932, pp. 411-412, fig. 45*a-c* = *Ascolaimus elongatus* (Buetschli) 1874.
12. *Axonolaimus typicus* De Man 1922*b*, p. 232, fig. 20*a-b*.
13. *Axonolaimus villosus* Skwarra 1922, p. 112.
syn. *Axonolaimus setosus* Skwarra 1921 nec Filipjev 1918.

Doubtful species :

14. *Axonolaimus filiformis* De Man 1889*a*, p. 3.
15. *Axonolaimus impar* Ssaveljev 1912, p. 119.
16. *Axonolaimus polaris* Cobb 1914, p. 30, n° 24 = *Odontophora polaris* (Cobb) 1914 (see below).

KEY TO THE TRUE SPECIES OF AXONOLAIMUS

(N^{s} 1, 3-5, 7, 10, 12-13 of the foregoing list.)

I. Amphids a closely pinched loop :

a. Body length less than 2 mm.; amphids 0,75 × length of buccal cavity; 4 × as long as wide :

Axonolaimus spinosus (Buetschli).

aa. Body length more than 3 mm.; amphids 0,66 × length of buccal cavity; 3 × as long as wide :

Axonolaimus setosus Filipjev.

II. Amphids an open loop :

A. Nervering in front of the middle of the œsophagus :

Axonolaimus limalis Ssaveljev.

AA. Nervering at 2/3-3/4 of the œsophageal length :

B. Cephalic setae 1,5 × as long as the cephalic diameter :

Axonolaimus villosus Skwarra.

BB. Cephalic setae less than 1 × cephalic diameter :

b. Amphids roundish, only slightly longer than wide :

c. Cephalic setae accompanied by minute bristles, which reach at the utmost 1/3 of the length of the longer cephalic setae :

Axonolaimus typicus De Man.

cc. Cephalic setae not accompanied by minute bristles :

Axonolaimus demani nom. nov.

bb. Amphids elongate, at least 2 × as long as wide :

d. On a level with the middle of the amphids small setae are to be seen :
Axonolaimus paraspinosus SCHUURMANS STEKHOVEN & ADAM.

dd. No such setae on a level with the amphids :
Axonolaimus ponticus FILIPJEV.

Along the Belgian Coast **2** species of *Axonolaimus* were found :

1. *Axonolaimus paraspinosus* SCHUURMANS STEKHOVEN & ADAM.
2. *Axonolaimus spinosus* (BUETSCHLI).

36. **Axonolaimus paraspinosus** SCHUURMANS STEKHOVEN & ADAM 1931.

Fig. 85-88.

Syn. : *Axonolaimus similis* SCHULZ 1932.
Axonolaimus spinosus DE MAN 1888 nec BUETSCHLI 1874.

REFERENCES :

DE MAN 1888, p. 19, pl. II, fig. 11-11*b*, *Anoplostoma spinosum* (BUETSCHLI).

SCHNEIDER, G. 1926*b*, p. 38, fig. 2, *Axonolaimus spinosus* (BUETSCHLI).

SCHULZ 1932, p. 410, fig. 44*a-b*, *Axonolaimus similis* SCHULZ.

SCHUURMANS STEKHOVEN & ADAM 1931, p. 50, pl. X, fig. 6-9, *Axonolaimus paraspinosus* SCHUURMANS STEKHOVEN & ADAM.

1 ♂, 2♀♀ and 4 juv. from Oostende, on a break-water, harbour entrance, IX.1931: DE SAEDELEER.

DIMENSIONS :

♂ L. : 1,675 mm.; α : 29,9; β : 8,04; γ : 10,5.

0	20	?	208	358	M	1516		
12			38		56	40	8	1,675 mm.

♀ L. : 1,710 mm.; α : 31,6; β : 7,6 ; γ : 10,2; V. : 53,6 %.

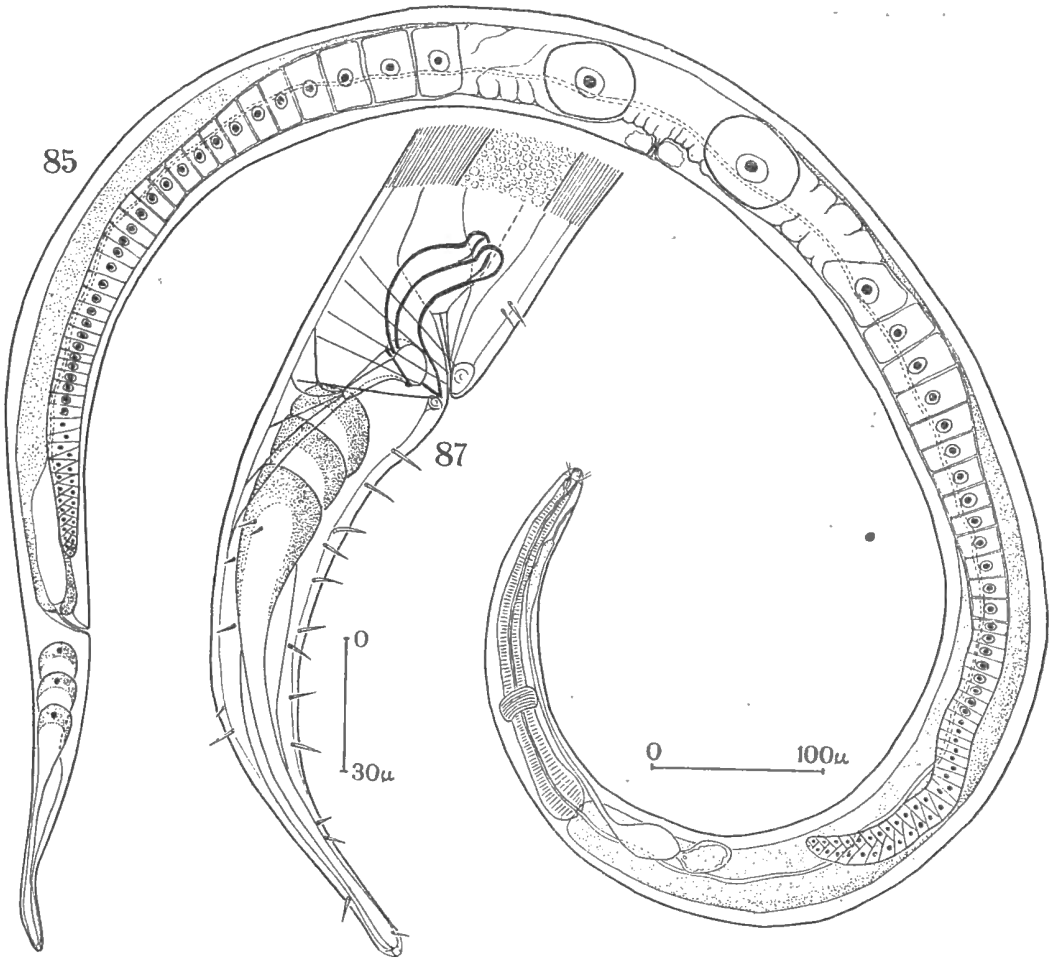
0	?	?	225	416	916	1375	1542	
13			38		54		36	8	1,710 mm.

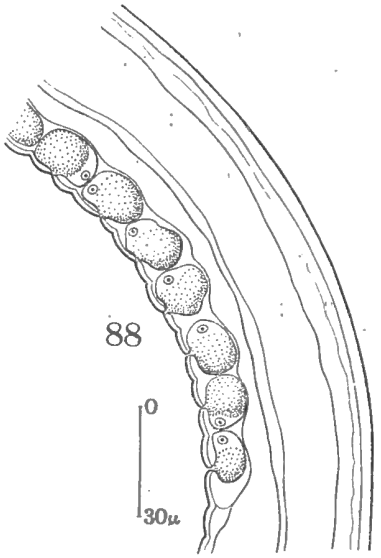
♀ L. : 1,790 mm.; α : 27,7; β : 7,8 ; γ : 9,1; V. : 53,6 %.

0	17,8	153	226	382	960	1550	1595	
15,5			38		64,4		37,3	9	1,790 mm.

Habitus elongate fusiform, tapering conspicuously towards both ends. Confer fig. 85 and the cobbian formula's.

Cuticle smooth, with some short hairs, especially in the neckregion and along the tail. The lateral fields are very broad, 0,44 × corresponding body diameter.





Axonolaimus paraspinosus Schuurmans Stekhoven & Adam.

85. General view of a female.
87. Spicular apparatus of a male.
88. Preanal glands in a male.

Amphids loop-shaped, open, 10μ long and 4,6μ broad, 0,30 × corresponding body diameter, situated just behind the cephalic suture, opposite to the second portion of the buccal cavity, accompanied by 2 small setae.

Head distinctly set off from the remainder of the body, somewhat swollen. There is a crown of labial papillae, a crown of minute cephalic papillae and a crown of 4 cephalic setae 0,66 × cephalic diameter.

Buccal cavity 20μ deep, 1,60-1,65 × cephalic diameter; vestibular portion with 8 longitudinal cuticularisations. Second portion 4-5 × as long as the vestibular portion.

Œsophagus gradually swelling towards the base. Nervering on 66 % of its length.

Ventral gland on 33 % of the length of the œsophagus behind the base of the latter, with a large appendant cell. *Excretory pore* immediatly behind the buccal cavity. Ampulla on 2 buccal cavities from the anterior end.

Female genital tract paired, symmetrical; ovaries outstretched, reaching in adult females almost to the base of the ventral gland on the one side, to the anal opening on the other side.

Testis very long, beginning at 21 % of the body length. *Spicula* arcuate, strong, with a proximal knob-like swelling; pointed at the distal end. Chord of spiculum 39μ, or 1 × anal diameter long. *Gubernaculum* anvil-shaped, with a 16μ long dorsal apophysis. There is a preanal row of 17 unicellular glands which open by small ducts and are situated close together. G. Schneider 1926 found similar preanal glands in a male *Axonolaimus spinosus*. On a level with the proximal end of the spicula there are 2 pairs of subventral setae.

Tail of the same shape in both sexes, gradually tapering, last 1/5 cylindrical, slightly swollen at the end. In the male, short setae are scattered along the subventral lines. Irregularly distributed setae occur along the subdorsal lines.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.

37. **Axonolaimus spinosus** (BUETSCHLI) 1874.

Syn. : *Anoplostoma spinosum* BUETSCHLI 1874.

REFERENCES :

ALLGÉN 1927*a*, pp. 57-58.
ALLGÉN 1929*a*, p. 47.
ALLGÉN 1929*c*, pp. 33-34.
BUETSCHLI 1874, *p.* 37, pl. 4, fig. 20*a;* pl. 5, fig. 20*b-c*.
FILIPJEV 1930, p. 50.
DE MAN 1922*b*, p. 233, fig. 21*a-c*.
SCHNEIDER, G. 1906, p. 39, pl. 2, fig. 18*a-b*.
SCHNEIDER, G. 1927, pp. 38-40, fig. 2.
Nec DE MAN 1888, pp. 50-51, pl. 10, fig. 6-9.

1 ♂ and 2 juv. from Oostende on a break-water, 18.XI.1931; NaCl : 30,77 ‰.

GEOGRAPHICAL DISTRIBUTION : Channel, North Sea and Baltic.

Remarks. — G. Schneider's *Axonolaimus spinosus* (Buetschli) possesses a similar row of preanal ventral glands as *Axonolaimus paraspinosus* Schuurmans Stekhoven & Adam, whereas the pilosity at the anterior end, especially that along the œsophagus, is similar in both species.

38. **Axonolaimus demani** nom. nov.

Syn. : *Axonolaimus* spec. De Man 1928.

References :

De Man 1928, pp. 97-101, fig. 1-7

We propose to name *Axonolaimus demani* nom. nov. the specimens from the Canal de Caen described by De Man as *Axonolaimus* spec., since it prooves to be a good species, which may be easily recognized from the nearly related *Axonolaimus typicus* of the same author by the absence of the small setae which accompany the larger cephalic setae in *Axonolaimus typicus*.

Genus ODONTOPHORA Buetschli 1874.

Syn. : *Axonolaimus* De Man 1888 ex parte.
Conolaimus Filipjev 1918-1921.
Trigonolaimus Ditlevsen 1919.

In 1929*d* Allgén pointed to the fact that Buetschli's *Odontophora marina* Buetschli 1874 belongs to the same genus as the species lateron described as representants of the genera *Conolaimus* Filipjev 1918 and *Trigonolaimus* Ditlevsen 1919. Filipjev is of the same opinion; confer Allgén's footnote on page 309 of his paper of 1929. This opinion is also confirmed by our observations. In accordance with the rules of priority Buetschli's name must be retained, although Buetschli's *Odontophora marina* is a doubtful one and cannot be recognised with certainty after the description.

The genus *Odontophora* embraces the following species :

1. *Odontophora angustilaima* (Filipjev) 1918, p. 324, pl. X, fig. 72 :
   syn. *Conolaimus angustilaimus* Filipjev 1918.
2. *Odontophora armata* (Ditlevsen) 1919, p. 178, pl. VIII, fig. 1, 4, 6, 7 :
   syn. *Trigonolaimus armatus* Ditlevsen 1919.
   Trigonolaimus intermedius Allgén 1929.
   Trigonolaimus minor Ditlevsen 1919.
3. *Odontophora intermedia* (Allgén) 1929*b*, p. 487, fig. 42*a-b* :
   syn. *Trigonolaimus intermedius* Allgén 1929.
   = *Odontophora armata* (Ditlevsen) 1919.
4. *Odontophora longicaudata* Schuurmans Stekhoven & De Coninck 1933, p. 8, pl. IV, fig. 3-4.

5. *Odontophora longisetosa* (ALLGÉN) 1928*c*, p. 303, fig. 4*a-b* :
   syn. *Conolaimus longisetosus* ALLGÉN 1928.
6. *Odontophora minor* (DITLEVSEN) 1919, p. 180, pl. VIII, fig. 5, 9, pl. IX, fig. 4, 5 :
   syn. *Trigonolaimus minor* DITLEVSEN 1919.
   = *Odontophora armata* (DITLEVSEN) 1919.
7. *Odontophora setosa* (ALLGÉN) 1929*c*, p. 37, fig. 9*a-b* :
   syn. *Trigonolaimus setosus* ALLGÉN 1929.
   Axonolaimus elegans SCHULZ (confer above, p. 101).
   ? *Odontophora marina* BUETSCHLI 1874 (see below).
   Odontophora longisetosa SCHUURMANS STEKHOVEN 1931. nec ALLGÉN.

Doubtful species :

8. *Odontophora marina* BUETSCHLI 1874, p. 49, pl. III, fig. 13; it is very probably that this species is synonym with *O. setosa* (ALLGÉN); a comparison of Allgén's and Schulz's figures of *O. setosa* (ALLGÉN) with Buetschli's figure of *O. marina* shows a striking similarity in the pilosity at the anterior end. The fact that Buetschli and Schulz studied specimens of the same habitat (Kiel) speaks also in favour of a possible synonymy.
9. *Odontophora parasetosa* (ALLGÉN) 1929*b*, p. 489, fig. 43*a-b* :
   syn. *Trigonolaimus parasetosus* ALLGÉN 1929.
10. *Odontophora polaris* (COBB) 1914, p. 30 :
    syn. *Axonolaimus polaris* COBB 1914.

KEY TO THE SPECIES OF THE GENUS ODONTOPHORA

I. Tail elongate, almost cylindrical, 10 anal diameters long; amphids large, 1 cephalic diameter long :
   Odontophora longicaudata SCHUURMANS STEKHOVEN & DE CONINCK.

II. Tail clumsy, conical, at the utmost 5 anal diameters long :
   A. Cephalic and cervical setae very long : cephalic setae 2,2 × cephalic diameter, cervical setae 1 × body diameter; amphids very large, 1 cephalic diameter long :
      Odontophora longisetosa (ALLGÉN).
   AA. Cephalic setae less than 1,5 × cephalic diameter :
      a. Amphids roundish; cephalic setae 1,1 × cephalic diameter, subcephalic setae as long as 2/3 cephalic setae :
         Odontophora angustilaima (FILIPJEV).
      aa. Amphids elongate; length of the subcephalic setae less than 1/2 × that of the cephalic ones :
         b. Excretory pore opposite to the posterior end of the buccal cavity, on 1,5 × cephalic diameter from the anterior end :
            Odontophora setosa (ALLGÉN).
         bb. Excretory pore far behind the buccal cavity on 4,4 cephalic diameters from the anterior end :
            Odontophora armata (DITLEVSEN).

39. **Odontophora armata** (DITLEVSEN) 1919.

Fig. 89-95.

Syn. : *Trigonolaimus armatus* DITLEVSEN 1919.
Trigonolaimus intermedius ALLGÉN 1929.
Trigonolaimus minor DITLEVSEN 1919.

REFERENCES :

ALLGÉN 1929*d*, p. 305, fig. 2*a-b*, *Trigonolaimus armatus*.

ALLGÉN 1929*b*, p. 487, fig. 42*a-b*, *Trigonolaimus intermedius*.

ALLGÉN 1930*b*, p. 204, *Conolaimus armatus*.

ALLGÉN 1931, p. 254, *Conolaimus armatus*.

DITLEVSEN 1919, p. 178, pl. VIII, fig. 1, 4, 6, 7, *Trigonolaimus armatus*.

DITLEVSEN 1919, p. 180, pl. VIII, fig. 5, 9; pl. IX, fig. 4, 5, *Tr. minor*.

SCHUURMANS STEKHOVEN & DE CONINCK 1932, p, 129, fig. 1*a-c*, *Conolaimus armatus*.

1 ♂ and 1 juv. from Oostende, on a break-water, harbour entrance, IX.1931; DE SAEDELEER.

1 ♂, 1 ♀ and 11 juv. from Heyst-Zeebrugge, 2.IX.1931.

DIMENSIONS :

♂ L. : 2,83 mm.; α : 73,6; β : 14,84; γ : 21,77.

0	25	133	190	?	M	2700	2,83 mm.
	10,8		33.6		38,4	28,8	

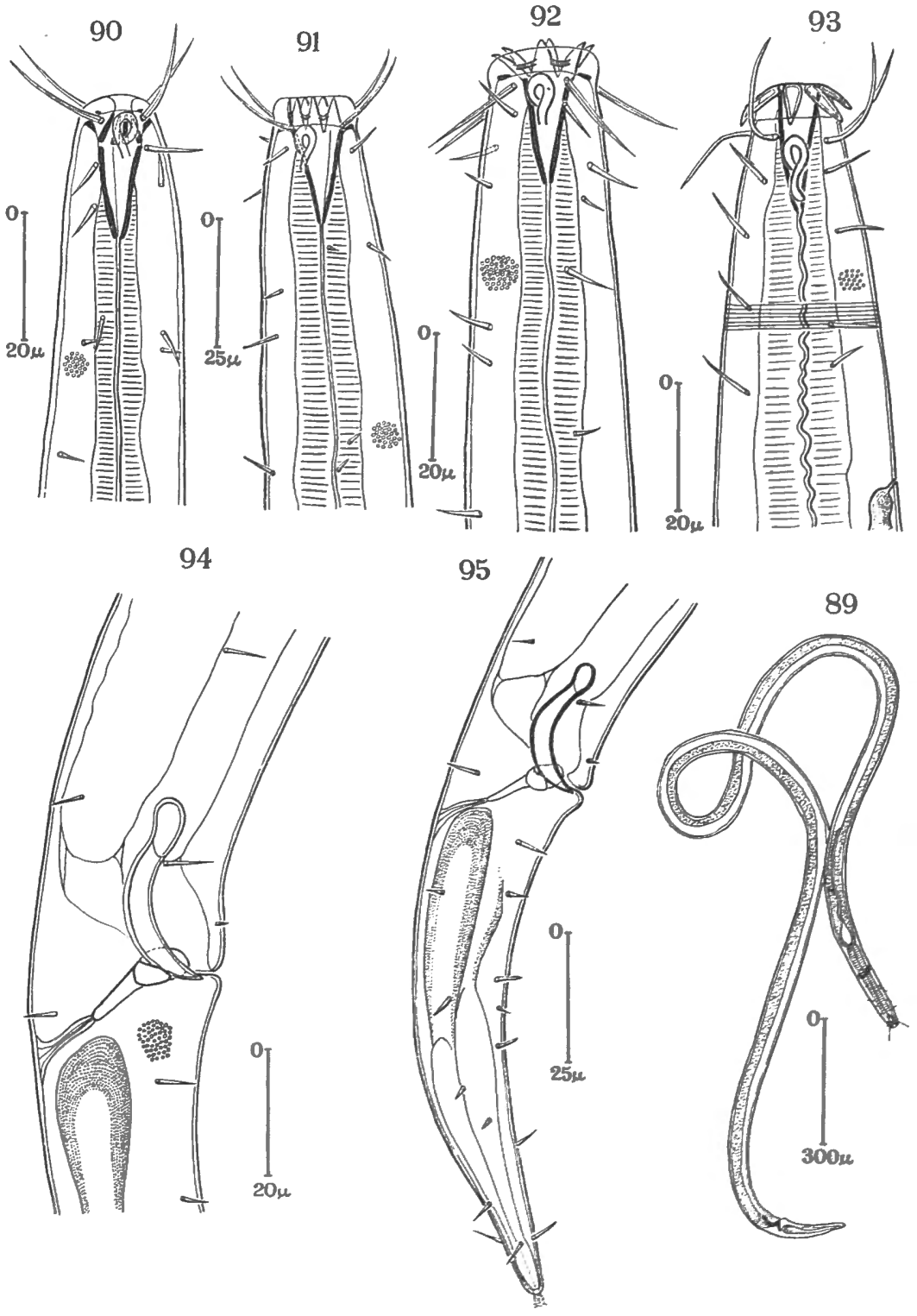
♀ L. : 4 mm.; α : 85; β : 21,34; γ : 29,2; V. : 53,1 %.

0	21,6	133	187	?	2125	2575	3860	4 mm.
			36		50,4		32,4	

Body almost cylindrical. *Cuticle* very finely and faintly ringed, with a dot-like inner structure (confer the dotted spots in fig. 90-92). Short setae are scattered along the submedian lines. *Amphids* loop-shaped, ressembling a tennis-racket, situated just behind the cephalic suture, its anterior border on a level with the implantation of the cephalic setae. Its place in relation with the buccal cavity varies according to the state of the buccal cavity; it is situated opposite to the vestibular indentition when the lips are intruded; in the case of total extrusion the amphids are shifted opposite to the posterior end of the buccal cavity (fig. 90-93).

Head truncate at the anterior end. Lips fused, without labial papillae; 4 cephalic setae 1-1,4 × cephalic diameter long. Subcephalic setae short, inconspicuously longer than the other bristles distributed along the œsophageal portion.

Buccal cavity typical. Vestibular portion with 6 protrusible teeth linked together by striated elastic (?) ligaments. OEsophageal portion simply funnel-shaped.



Odontophora armata (DITLEVSEN).

89. General view of a male.
90. Head end of a juvenile, intruded.
91. Head end of a male, opened.
92. Head end of a female, slightly extruded.
93. Head end of a male, totally extruded.
94. Spicular apparatus of a male.
95. Spicular apparatus and tail of a male.

Œsophagus cylindrical, slightly broadening towards the base.

Nervering on 70 % of the œsophageal length.

Ventral gland post-œsophageal; *excretory pore* on 4,5 cephalic diameters from the anterior end.

Female genital tract paired, symmetrical; ovaries outstretched.

Spicula strong, arcuate; proximal end knobbed, distal end pointed; chord 1 anal diameter long. Gubernaculum anvil-shaped with a distinct dorsal apophysis.

Tail elongate; basal 2/3 almost cylindrical; apical 1/3 conical with bluntly rounded apex. Short stiff bristles are placed in subventral and subdorsal lines along the male tail. Relations in the male tail : length 4,2 × anal diameter.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.

40. **Odontophora longicaudata** SCHUURMANS STEKHOVEN & DE CONINCK 1933.

REFERENCES :

SCHUURMANS STEKHOVEN & DE CONINCK 1933, p. 8, pl. IV, fig. 3-4.

1 juv. from Oostende, from a puddle on the strand, 18.XI.1931; NaCl : 29,3 ‰.

It is not impossible that this species will proove to be only a juvenile *Odontophora longisetosa* Allgén, but for the moment this cannot be stated. Although the relations of the tail will change with age, it seems improbable that they will diminish so far that the taillength in adult specimens equals 4 anal diameters only.

GEOGRAPHICAL DISTRIBUTION : North Sea.

III. — FAMILY **CAMACOLAIMIDAE.**

GENUS CAMACOLAIMUS DE MAN 1889.

Syn. : *Ypsilon* COBB 1920.

In his paper of 1922, Filipjev brought together the genera *Acontiolaimus* Filipjev and *Camacolaimus* De Man. We cannot follow him in this synonymisation, since the distal portion of the dorsal spear protrudes free into the vestibulum in *Acontiolaimus*, whereas the same structure lies quite imbedded in the œsophageal wall in *Camacolaimus*. This feature must be considered as of generic value. Confer our diagnose of *Camacolaimoides* De Coninck & Schuurmans Stekhoven.

The following species of *Camacolaimus* were described :

1. *Camacolaimus australis* ALLGÉN 1932*b*, p. 125, fig. 17*a-c*.
2. *Camacolaimus bathycola* FILIPJEV 1922*a*, p. 111, pl. I, fig. 8*a-b* = *Acontiolaimus bathycola* (FILIPJEV) 1922.

3. *Camacolaimus dolichocercus* FILIPJEV 1922*a*, p. 112, pl. I, fig. 9*a-c* = *Acontiolaimus dolichocercus* (FILIPJEV) 1922.
4. *Camacolaimus exilis* (COBB) 1920, p. 314, n° 96 :
   syn. *Ypsilon exile* COBB 1920.
5. *Camacolaimus longicauda* DE MAN 1922*a*, p. 124, and 1922*b*, p. 225, fig. 11*a-c*.
6. *Camacolaimus praedator* DE MAN 1922*a*, p. 125 and 1922*b*, p. 225, fig. 12*a-b* = *Camacolaimoides praedator* (DE MAN) (see below).
7. *Camacolaimus tardus* DE MAN 1889*a*, p. 8 and 1889*b*, p. 3, pl. V, fig. 2-2*e*.
8. *Camacolaimus zostericola* (FILIPJEV) 1918-1921, p. 187, pl. VI, fig. 36 = *Acontiolaimus zostericola* FILIPJEV 1918.

Doubtful species :

9. *Camacolaimus propinquus* ALLGÉN 1929*b*, p. 446, fig. 11*a-d*, may be a synonym of *Camacolaimus longicauda* DE MAN; needs further examination.

KEY TO THE SPECIES OF CAMACOLAIMUS

I. Cephalic setae very short, 1/7 × cephalic diameter :
   A. Tail 2,5-3 anal diameters long. Ventral gland posterior to the œsophagus :
      Camacolaimus tardus DE MAN.
   AA. Tail 4 anal diameters long. Ventral gland opposite to the base of the œsophagus :
      Camacolaimus australis ALLGÉN.

II. Cephalic setae 1 × cephalic diameter or longer :
   a. Tail 5-6 anal diameters long :
      Camacolaimus longicauda DE MAN.
   aa. Tail 2,5 anal diameters long :
      Camacolaimus exilis (COBB).

41. Camacolaimus longicauda DE MAN 1922.

Fig. 96-99.

REFERENCES :

DE MAN 1922*a*, p. 124.
DE MAN 1922*b*, p. 225, fig. 11*a-c*.
2 ♀♀ from Heyst-Zeebrugge, 2.IX.1931.
1 ♂ and 1 ♀ from Oostende, sand, 28.XII.1931.

DIMENSIONS :

♂ L. : 1,400 mm.; α : 87,4; β : 6,8; γ : 17,9.

0	7	100	203	273	M	1320	1,4 mm.
	7,8		12,5		14	16	

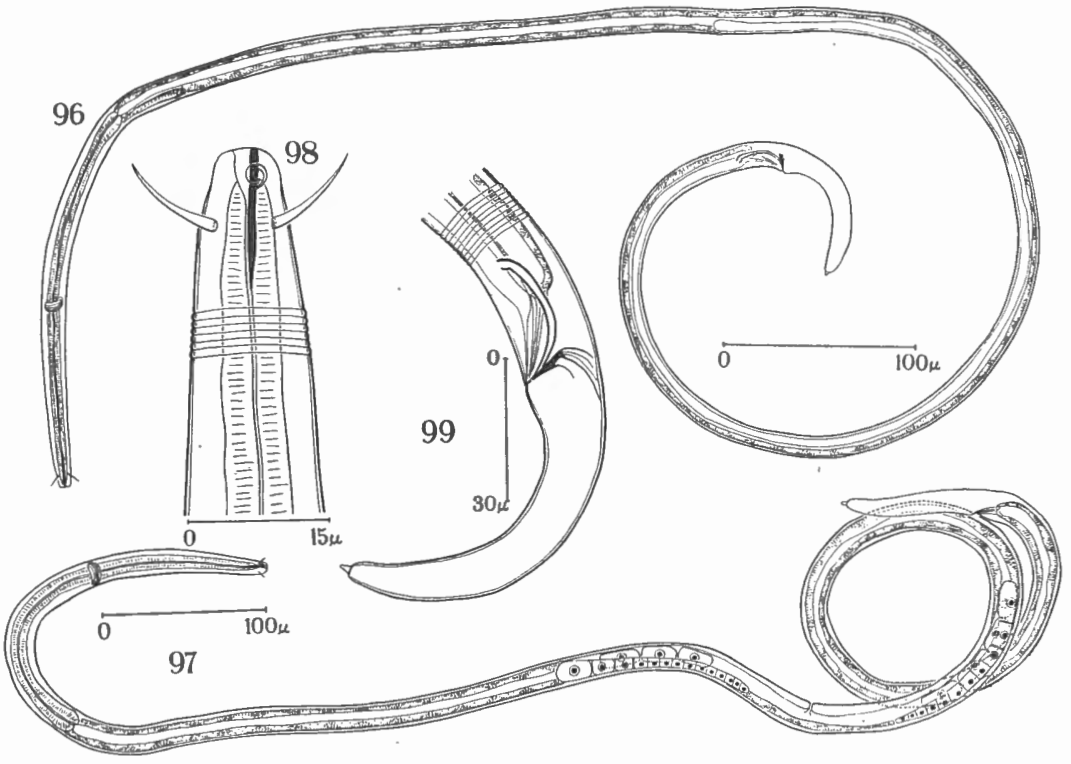
♀ L. : 1,430 mm.; α : 72,7; β : 6 ; γ : 17,7; V. : 49,3 %.

0	?	100	237	?	?	703	758	884	1340	1,43 mm.
	7,1	17	18,5			19			15	

Body filiform, cylindrical. *Cuticle* very finely ringed, 12-14 rings on 10μ, bare.

Amphids spiral-shaped, 1 winding, 2,2μ in diameter, 1/3 × corresponding body width.

Head end bluntly conical, 6,7μ high, reckoned from the base of the cephalic setae. Length of the head = 0,77 × base (at the implantation of the setae). 4 cephalic setae of 10μ = 1,2 × cephalic diameter long.



Camacolaimus longicauda De Man.

96. General view of a male.
97. General view of a female.
98. Head end of a male.
99. Spicular apparatus and tail of a male.

Buccal cavity irregular funnel-shaped, with a strong dorsal spear-shaped cuticularisation which is 15μ long or 2/27 × œsophageal length.

Œsophagus gradually broadening towards the posterior end.

Nervering at or in front of the middle of the œsophageal length.

Ventral gland long, just posterior to the œsophagus. *Excretory pore* not observed.

Female genital tract paired, symmetrical; ovaries reflexed.

Spicula very slender, slightly curved, with at the proximal end a swollen nod, pointing ventrad. Apex sharply pointed. Chord 26,9μ or 1,66 anal diameters long. Gubernaculum minute, 6,9μ long; median portion linear, with lateral alae.

Tail in both sexes almost cylindrical, in the male 5 anal diameters, in the female 6 anal diameters long, with a conical outlet for the spinneret glands.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.

GENUS CAMACOLAIMOIDES nov. gen.

Syn. : *Camacolaimus* DE MAN ex parte.

This new genus, closely related to *Acontiolaimus* and *Camacolaimus* is characterised by the fact that the dorsal spear of the *Camacolaimidae* has almost completely lost its intimate connection with the buccal and œsophageal wall and has become a needle-shaped onchium. There is a crown of 4 cephalic papillae (absent in *Camacolaimus*) and a crown of 4 cephalic setae, homologous with those of *Camacolaimus*. Amphids spiral-shaped. Genital armature of the male like in *Camacolaimus*.

42. Type species : **Camacolaimoides praedator** (DE MAN) 1922.

Syn. : *Camacolaimus praedator* DE MAN 1922.

REFERENCES :

DE MAN 1922*a*, p. 125.

DE MAN 1922*b*, p. 225, fig. 12*a-b*.

IV. — FAMILY HALAPHANOLAIMIDAE

GENUS DERMATOLAIMUS STEINER 1916.

Until now 4 species of this genus were described :

1. *Dermatolaimus ditlevseni* STEINER 1916, pp. 604-606, pl. XXVII, fig. 21*a-d*.
2. *Dermatolaimus elegans* SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, pp. 7-8, pl. II, fig. 3-5.
3. *Dermatolaimus steineri* FILIPJEV 1922*a*, pp. 109-110, pl. I, fig. 7*a-b*.
4. *Dermatolaimus trichodes* KREIS 1929, pp. 42-43, pl. I, fig. 12*a-c*, pl. III, fig. 12*d*.

KEY TO THE SPECIES

I. Amphidial diameter about 0,5 × corresponding body diameter :

A. Tail somewhat swollen at the end, bluntly rounded :
Dermatolaimus trichodes KREIS.

AA. Tail not swollen at the end :
Dermatolaimus steineri FILIPJEV.

II. Amphidial diameter about 0,33 × corresponding body diameter, or less :

a. Head long, 6/9 × cephalic diameter at the base of the cephalic setae; a truncate cone :

Dermatolaimus ditlevseni STEINER.

aa. Head short, 4/9 × cephalic diameter at the base of the cephalic setae :

Dermatolaimus elegans SCHUURMANS STEKHOVEN & DE CONINCK 1933.

43. **Dermatolaimus elegans** SCHUURMANS STEKHOVEN & DE CONINCK 1933.

REFERENCES :

SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, pp. 7-8, pl. II, fig. 3-5.

1 ♀ from Heyst-Zeebrugge.

Remark. — When one compares the different species of the genus *Dermatolaimus*, one could wonder why we did not use the difference in length of the buccal cavity in the different species as a specific characteristic in the key.

We did not do that because the data in the literature about this feature do not seem to be absolutely reliable, since between the walls of the buccal cavity and those of the œsophagus there is no sharp demarcation, by which the definition of the length of the buccal cavity remains more or less arbitrary.

GENUS HALAPHANOLAIMUS SOUTHERN 1914.

44. **Halaphanolaimus pellucidus** SOUTHERN 1914.

REFERENCES :

ALLGÉN 1928*c*, p. 285.

ALLGÉN 1925, p. 25.

SOUTHERN 1914, p. 11, pl. I, fig. 2*a-f*.

1 ♂ and 1 juv. from a break-water, harbour entrance Oostende, IX.1931; DE SAEDELEER.

It is questionable if *Halaphanolaimus longisetosus* Allgén 1928*c*, p. 287, fig. 2*a-b*, belongs to this genus.

GEOGRAPHICAL DISTRIBUTION : Atlantic, North Sea.

GENUS LEPTOLAIMUS DE MAN 1876.

From this genus, until now only 2 species are known :

1. *Leptolaimus papilliger* DE MAN 1876, pp. 169-171, pl. X, fig. 42*a-b*, pl. XI, fig. 42*c-e*.
   DE MAN 1884, pp. 81-82.
   DE MAN 1922*b*, p. 226, fig. 13*a-b*.
2. *Leptolaimus setiger* SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, p. 8, pl. IV, fig. 1-2.

KEY TO THE SPECIES

I. Head with a crown of 4 long submedian setae. Amphidial diameter larger than 0,5 × corresponding body diameter, on 3 × cephalic diameter from the anterior end :

Leptolaimus setiger SCHUURMANS STEKHOVEN & DE CONINCK.

II. Head without cephalic setae, with a crown of labial papillae and a crown of 4 submedian cephalic papillae. Amphidial diameter 0,33 × corresponding body diameter on 1,5 × cephalic diameter from the anterior end :

Leptolaimus papilliger DE MAN.

The only species that was found along the Belgian Coast is :

45. **Leptolaimus setiger** SCHUURMANS STEKHOVEN & DE CONINCK 1933.

REFERENCES :

SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, p. 8, pl. IV, fig. 1-2.

1 juvenile female specimen from a puddle on the strand at Oostende, 18.XI.1931; NaCl : 29,3 ‰.

Some corrections may be given to our original description. The length of the cephalic setae is 6μ instead of 4,6μ, but the relation to the cephalic diameter remains 1,66.

The length of the buccal cavity is 20μ. The cobbian formula in absolute measures becomes :

0	12,5	82,5	140	360	460	540	785	0,950 mm.
3,6	7,3		19		19		12,5	

For further information, confer the original description.

VI. — FAMILY **TRIPYLOIDIDAE.**

The representants of the genus *Cothonolaimus* Ditlevsen answer quite to Cobb's diagnose of his genus *Bathylaimus*. Both genera show a buccal cavity which is divided into 2 portions of unequal size. So we may go safe in saying that *Cothonolaimus* Ditlevsen is a synonym of *Bathylaimus* Cobb.

Some species ascribed to the genus *Bathylaimus* Cobb by Filipjev so, for instance, *B. poncticus* Filipjev and *B. profundus* Filipjev possess a voluminous buccal cavity which is not subdivided and lips of minor development as in the typical species of *Bathylaimus*. These species belong to another genus for which we propose the name *Parabathylaimus* nov. gen.

GENUS BATHYLAIMUS COBB 1894.

Syn. : *Cothonolaimus* DITLEVSEN 1919.
nec *Bathylaimus* DITLEVSEN 1919.
nec *Bathylaimus* FILIPJEV 1922 & 1925 ex parte.
nec *Bathylaimus* VON DADAY 1905.

The following species were described until now :

1. *Bathylaimus assimilis* DE MAN 1922*c*, pp. 119-120, pl. I, fig. 2-2*e*.
2. *Bathylaimus australis* COBB 1894, pp. 409-410, fig. 9.
3. *Bathylaimus cobbi* FILIPJEV 1922*a*, pp. 106-107, pl. I, fig. 5*a-b*.
4. *Bathylaimus denticaudatus* ALLGÉN 1930*a*, pp. 60-61, fig. 3*a-b* = *Parabathylaimus ponticus* (FILIPJEV) 1922.
5. *Bathylaimus filicaudatus* SCHUURMANS STEKHOVEN & ADAM 1931, p. 27, pl. VI, fig. 1-3 :
   syn. *Cothonolaimus filicaudatus* SCHUURMANS STEKHOVEN & ADAM 1931.
6. *Bathylaimus gracilis* (DITLEVSEN) 1919, pp. 190-191, pl. IX, fig. 3; pl. X, fig. 4 :
   syn. *Cothonolaimus gracilis* DITLEVSEN 1919.
   = *Tripyloides septentrionalis* DE CONINCK & SCHUURMANS STEKHOVEN nom. nov.
7. *Bathylaimus inermis* (DITLEVSEN) 1919, p. 189, pl. IX, fig. 1, 6, 8, 9 :
   syn. *Cothonolaimus inermis* DITLEVSEN 1919.
8. *Bathylaimus longisetosus* (ALLGÉN) 1929*c*, pp. 16-17, fig. 2*a-d* :
   syn. *Cothonolaimus longisetosus* ALLGÉN 1929.
9. *Bathylaimus maculatus* VON DADAY 1905, p. 59 = *Dadaya maculata* MICOLETZKY 1925.
10. *Bathylaimus macramphis* SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, pp. 1-2, pl. I, fig. 1-3.
11. *Bathylaimus mirabilis* HOFMÄNNER & MENZEL 1905, p. 162, pl. V, fig. 13-14 = *Dadaya mirabilis* MICOLETZKY 1925.
12. *Bathylaimus paralongisetosus* SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, pp. 2-3, pl. I*bis*, fig. 4-6.
13. *Bathylaimus ponticus* FILIPJEV 1922*a*, pp. 107-108, pl. I, fig. 6*a-b* = *Parabathylaimus ponticus* (FILIPJEV) 1922 :
   syn. *Bathylaimus denticaudatus* ALLGÉN 1930.
14. *Bathylaimus profundus* FILIPJEV 1925, p. 198, pl. V, fig. 74*a-b* = *Parabathylaimus profundus* (FILIPJEV) 1925.
15. *Bathylaimus sabulicolus* (SCHULZ) 1932, p. 364, fig. 17 :
   syn. *Cothonolaimus sabulicolus* SCHULZ 1932.
   = *Bathylaimus inermis* (DITLEVSEN) 1919.
16. *Bathylaimus septentrionalis* (FILIPJEV) 1925, p. 197, pl. V, fig. 73*a-b* :
   syn. *Cothonolaimus septentrionalis* FILIPJEV 1925.
   Cothonolaimus similis ALLGÉN 1931.
17. *Bathylaimus similis* (ALLGÉN) 1931, pp. 231-233, fig. 6*a-c* :
   syn. *Cothonolaimus similis* ALLGÉN 1931.
   = *Bathylaimus septentrionalis* (FILIPJEV) 1925.
18. *Bathylaimus stenolaimus* SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, p. 4, pl. II, fig. 1-2.
19. *Bathylaimus tenuis* (KREIS) 1924, p. 7, pl. I, fig. 4*a-b* :
   syn. *Cothonolaimus tenuis* KREIS 1924.
   = *Sphaerolaimus tenuis* (KREIS) 1924

KEY TO THE TRUE SPECIES OF THE GENUS BATHYLAIMUS

(Foregoing list, nrs 1-3, 5, 7-10, 14 & 16.)

I. Tail greatly filiform :

A. Tail gradually tapering :

Bathylaimus filicaudatus (SCHUURMANS STEKHOVEN & ADAM).

AA. Tail narrowing abruptly on 1/3 of its length :

Bathylaimus cobbi FILIPJEV.

II. Tail much more clumsy, with blunt apex :

a. Amphidial diameter 0,44 × corresponding body diameter :

Bathylaimus paralongisetosus SCHUURMANS STEKHOVEN & DE CONINCK.

aa. Amphidial diameter 0,35 × corresponding body diameter :

Bathylaimus macramphis SCHUURMANS STEKHOVEN & DE CONINCK.

aaa. Amphidial diameter 0,25 × corresponding body diameter or less :

B. Lips with setiform papillae, 0,11-0,143 × length of the longer cephalic setae :

Bathylaimus septentrionalis (FILIPJEV).

BB. Lips with distinct setae :

b. Amphids situated distinctly behind the buccal cavity :

Bathylaimus stenolaimus SCHUURMANS STEKHOVEN & DE CONINCK.

bb. Amphids situated opposite to the posterior half of the first portion of the buccal cavity :

c. Second portion of the buccal cavity without ? teeth :

Bathylaimus australis COBB.

cc. Second portion of the buccal cavity with teeth :

Bathylaimus assimilis DE MAN.

bbb. Amphids situated opposite to the second portion of the buccal cavity or opposite to the limit between this portion and the œsophagus :

d. Tail of the male club-shaped; adults longer than 2 mm. :

Bathylaimus inermis (DITLEVSEN).

dd. Tail of the male digitiform. Adults shorter than 1,5 mm. :

Bathylaimus longisetosus (ALLGÉN).

46. **Bathylaimus assimilis** DE MAN 1922.

Fig. 100-109.

REFERENCES :

DE MAN 1922*c*, pp. 119-120, pl. I, fig. 2-2*e*.

79 ♂♂, 168 ♀♀ and 25 juv. from 't Zwyn, between sand and organic detritus, 28.XII.1931; NaCl :·21 ‰. 62,4 % of the nema-population of this locality.

DIMENSIONS :

♂ L. : 2,115 mm.; α : 44,5; β : 5,23; γ : 17,8.

33,25	47,5	?	405	?	M	1995	2,155 mm.
28,5			42,75		47,75	42,75	

♂ L. : 2,200 mm.; α : 42,4; β : 6,02; γ : 17,6.

36,5	50	?	365	?	M	2075		2,2 mm.
28,8			52		52	36,5	17,25	

♀ L. : 1,900 mm.; α : 33,3; β : 5,33; γ : 14,8; V. : 48,7 %.

38	47,5	125	355	785	925	1075	1770	1,9 mm.
28,5			52,25		57	38	14,25	

♀ L. : 2,075 mm.; α : 30,8; β : 5,4 ; γ : 12,7; V. : 51,8 %.

38,4	52	125	384	900	1075	1275	1910	2,075 mm.
30,7			65,3		67,2	46,2	17,2	

Habitus : Body strong, almost cylindrical, inconspicuously tapering at both ends.

Cuticule smooth, with scanty, minute hairs.

Amphids spiral-shaped, and not circular like De Man depicted them (cf. his fig. 2, pl. V). Amphidial diameter in a male 7,5μ or 2,9 × corresponding body diameter; opposite to the posterior half of the first portion of the buccal cavity.

Head rounded, with 3 voluminous lips, each with 2 labial setae, 6μ long in the male, 4,8μ long in the female; a crown of 10 cephalic setae in both sexes; the 6 longer ones reach 23,3μ or 0,81 × correspoding cephalic diameter in the male, 20,2μ or 0,9 × corresponding cephalic diameter in the female; the shorter submedian setae are respectively 10μ and 7,7μ long.

Buccal cavity subdivided, spacious, more or less 50μ long; first division wide, toothless, second division much smaller, 0,4 × the width of the first division, with a least 2 subequal teeth (De Man depicts 2 pairs of 2 teeth each).

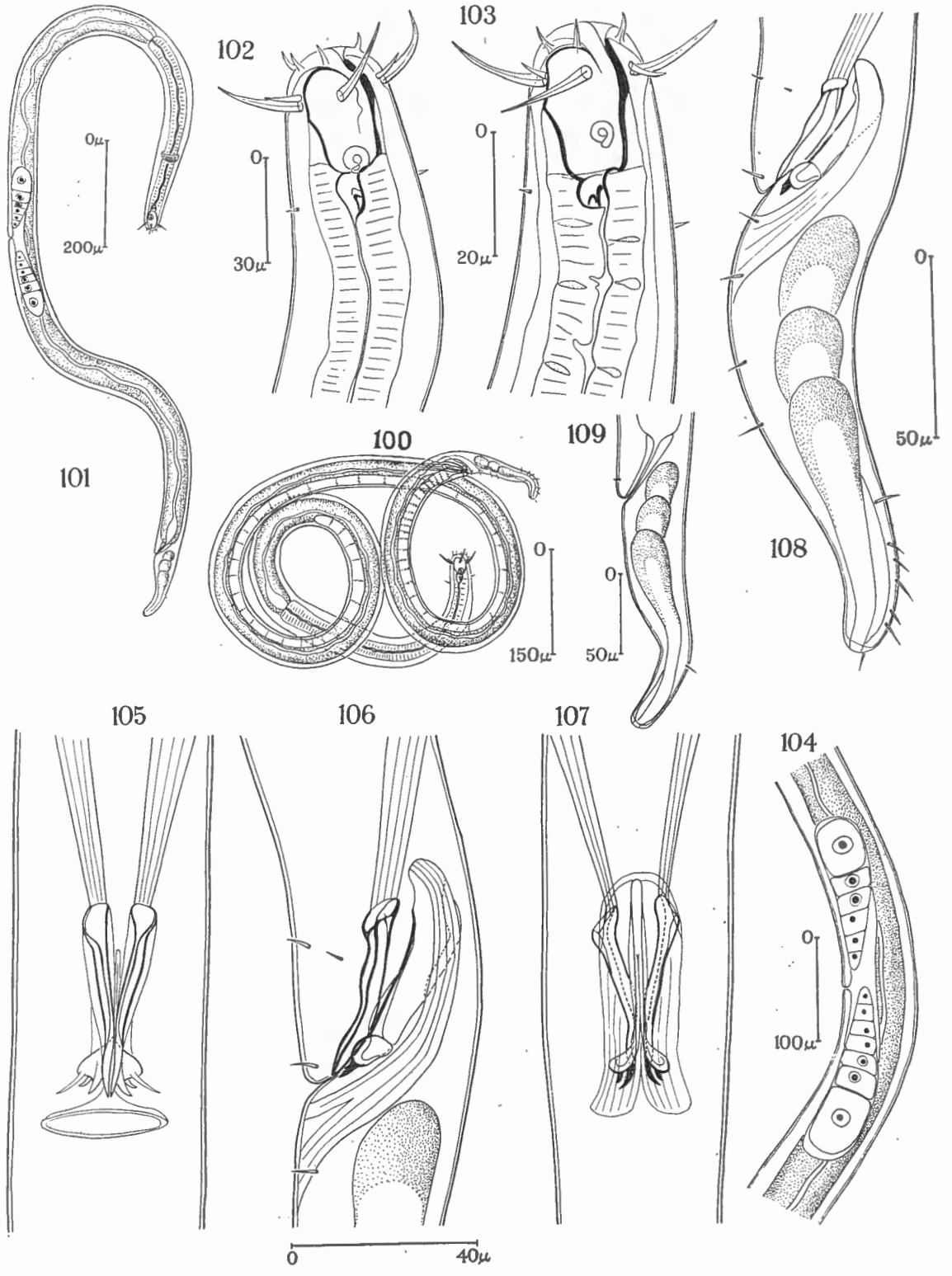
Œsophagus cylindrical. *Nervering* on 1/3 of the œsophageal length.

$$\frac{\text{Length of portion I}}{\text{Length of portion II}} = \frac{2{,}6 - 4}{1}$$

Female genital tract paired, symmetrical, ovaries reflexed.

Testis very long, showing the same regular division as depicted by Cobb. *Spicula* strong, 45μ long = 1,1 anal diameter, swollen at their proximal end, pointed at their distal end, with longitudinal median strengthenings. *Gubernaculum* very intricate, showing striking ressemblances with that of *Cyatholaimus* and *Paracanthonchus*, consisting of 2 large, median, solded pieces, bearing at their distal end a lateral expansion with 2 teeth pointing in ventral direction.

Tail elongate, conical, with bluntly rounded apex. Male tail 3,5 anal diameters long; width at the end 0,33 × anal diameter. Female tail of almost the same shape, last 1/3 cylindrical, not swollen at the end; length : 3,9 anal



Bathylaimus assimilis De Man.

100. General view of a male.
101. General view of a female.
102. Head end of a male.
103. Head end of a young female.
104. Genital apparatus of a young female.
105. Spicular apparatus of a male in ventral view.
106. Id. in lateral view.
107. Id. in dorsal view.
108. Spicular apparatus and tail of a male.
109. Tail of a female.

diameters; width at the end : 0,33 anal diameters. The male tail possesses 2 subventral rows of setae and a group of subdorsal setae along the apical third. Spinneret glands present.

GEOGRAPHICAL DISTRIBUTION : North Sea.

47. **Bathylaimus macramphis** SCHUURMANS STEKHOVEN & DE CONINCK 1933.

REFERENCES :

SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, pp. 1-2, pl. I, fig. 1-3.

3 ♂♂ from Heyst-Zeebrugge, 2.IX.1931.

48. **Bathylaimus paralongisetosus** SCHUURMANS STEKHOVEN & DE CONINCK 1933.

REFERENCES :

SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, pp. 2-3, pl. I*bis*, fig. 4-6.

1 ♂ from a puddle on the strand at Oostende, 18.XI.1931; NaCl : 29,3 ‰.

49. **Bathylaimus stenolaimus** SCHUURMANS STEKHOVEN & DE CONINCK 1933.

REFERENCES :

SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, p. 4, pl. II, fig. 1-2.

1♂ from a puddle on the strand at Oostende, 18-XI-1931; NaCl : 29,3 ‰.

GENUS PARABATHYLAIMUS nov. gen.

Syn. : *Bathylaimus* COBB 1894 ex parte.

On page 115 we have pointed to the fact that the former genus *Bathylaimus* ought to be subdivided into the genera *Bathylaimus* Cobb and *Parabathylaimus* De Coninck & Schuurmans Stekhoven.

The genus *Parabathylaimus* is characterised especially by its simple, undivided, unarmed buccal cavity. As to all other features it agrees with *Bathylaimus*.

To *Parabathylaimus* the following species belong :

1. *Parabathylaimus denticaudatus* (ALLGÉN) 1930, p. 60, fig. 3*a-b* :
   syn. *Bathylaimus denticaudatus* ALLGÉN 1930.
   = *Parabathylaimus ponticus* (FILIPJEV) 1922.
2. *Parabathylaimus ponticus* (FILIPJEV) 1922*a*, p. 107, pl. I, fig. 6*a-h* :
   syn. *Bathylaimus ponticus* FILIPJEV 1922.
   Bathylaimus denticaudatus ALLGÉN 1930.
3. *Parabathylaimus profundus* (FILIPJEV) 1925, p. 198, pl. V, fig. 74*a-b* :
   syn. *Bathylaimus profundus* FILIPJEV 1925.

GENUS TRIPYLOIDES DE MAN 1886.

Syn. : *Tripyla* BUETSCHLI 1874 nec BASTIAN 1865.
Cothonolaimus DITLEVSEN 1919 ex parte.

Tripyloides De Man embraces the following species :

1. *Tripyloides gracilis* (DITLEVSEN) 1919, p. 190, pl. IX, fig. 3; pl. X, fig. 4 :
   syn. *Cothonolaimus gracilis* DITLEVSEN 1919.
   Tripyloides septentrionalis DE CONINCK & SCHUURMANS STEKHOVEN nom. nov.
2. *Tripyloides marinus* (BUETSCHLI) 1874, p. 33, pl. III, fig. 12*a-d* :
   syn. *Tripyla marina* BUETSCHLI 1874.
   Tripyloides vulgaris DE MAN 1886.
3. *Tripyloides omblaica* MICOLETZKY 1923*b*, p. 257.
4. *Tripyloides septentrionalis* nom. nov. :
   syn. *Tripyloides marinus* DE MAN 1922*b*, p. 229, fig. 18.
   Cothonolaimus gracilis DITLEVSEN 1919.
5. *Tripyloides vulgaris* DE MAN 1886, pp. 61-66, pl. XI, fig. 1-11 = *Tripyloides marinus* (BUETSCHLI) 1874.

DOUBTFUL SPECIES

6. *Tripyloides demani* FILIPJEV 1918, p. 181, pl. VI, fig. 35.

KEY TO THE TRUE SPECIES

I. Amphids 0,5 × corresponding body diameter :
   Tripyloides omblaica MICOLETZKY.

II. Amphids 0,33 × corresponding body diameter, or less :
   A. Apart from the vestibulum 4 divisions of the buccal cavity, the most caudal one with distinct teeth :
      Tripyloides marinus (BUETSCHLI).
   AA. Buccal cavity with 3 indistinct divisions, the most caudal one without distinct teeth :
      Tripyloides septentrionalis DE CONINCK & SCHUURMANS STEKHOVEN.

50. **Tripyloides marinus** (BUETSCHLI) 1874.

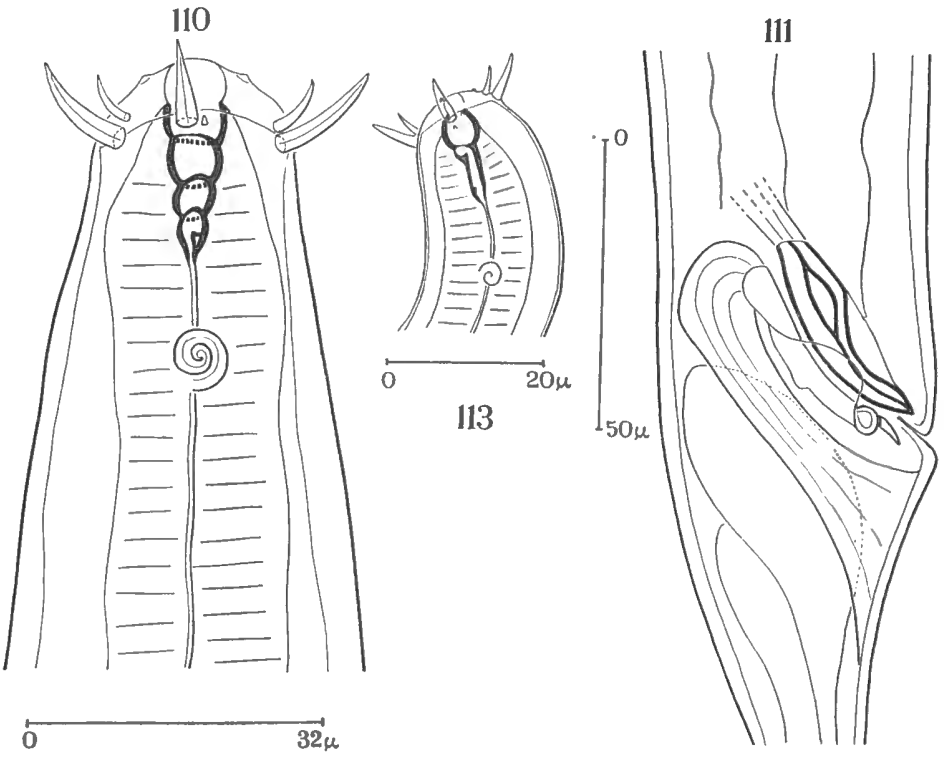
Fig. 110-112.

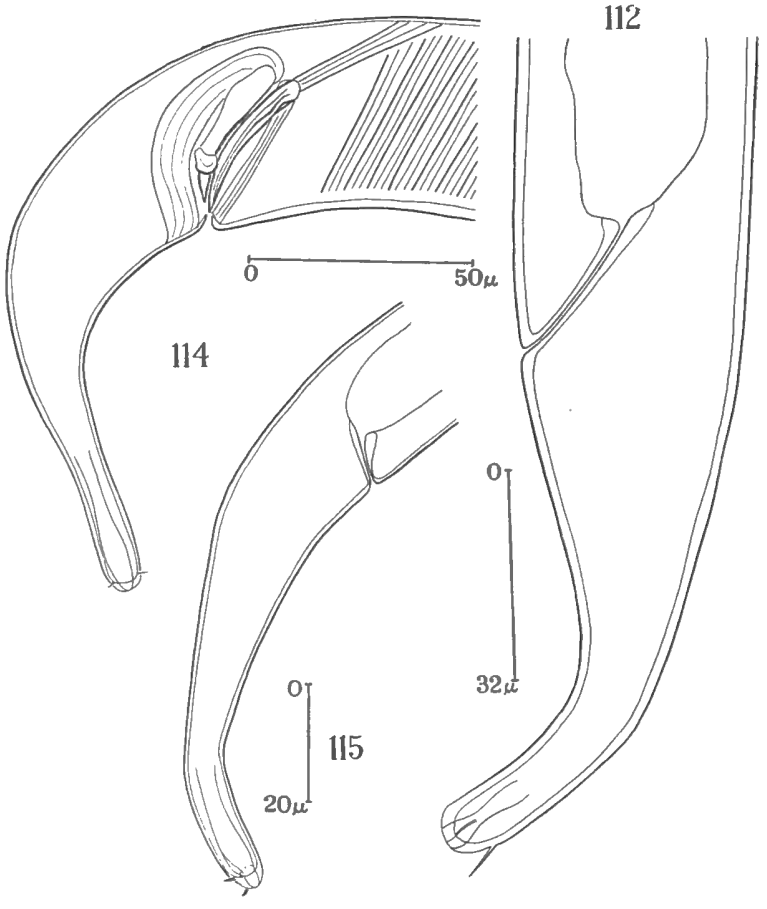
Syn. : *Tripyla marina* BUETSCHLI 1874.
Tripyloides vulgaris DE MAN 1886.

REFERENCES

BUETSCHLI 1874, p. 33, pl. III, fig. 12*a-d*, *Tripyla marina*.
DE MAN 1886, p. 61, pl. XI, fig. 1-11, *Tripyloides vulgaris*.
SSAVELJEV 1912, p. 119, *Tripyloides vulgaris*.
? SCHNEIDER, G. 1926*b*, p. 12, *Tripyloides marinus*.

3 ♂♂, 1 ♀ and 2 juv. on a break-water, Oostende, 18.XI.1931; NaCl : 30,77 ‰.





Tripyloides marinus (BUETSCHLI).

110. Head end of a male.
111. Spicular apparatus of a male.
112. Tail of a female.

Tripyloides septentrionalis DE CONINCK & SCHUURMANS STEKHOVEN.

113. Head end of a female.
114. Spicular apparatus and tail of a male.
115. Tail of a female.

DIMENSIONS : ♂. L. : 2,380 mm.; α : 45 ; β : 7,7 ; γ : 19.
♀. L. : 1,945 mm.; α : 33,75; β : 7,71; γ : 18,6; V.: 53,3 %.

We will give only some additional notes.

Amphids a twice looped spiral, 0,2 × corresponding body diameter, on 1,3 × cephalic diameter, behind the buccal cavity.

Head rounded, with a crown of 6 labial papillae and 10 stout cephalic setae, the longer ones being 0,6 × cephalic diameter long, the shorter submedian ones 0,35 × cephalic diameter.

Buccal cavity 1 × cephalic diameter deep, with strongly cuticularised walls, divided by distinct transversal strengthenings into 4 successive portions; the last of these possesses 2 distinct subventral teeth.

Male genital armature. Spicula rather short and strong, only slightly curved, distally pointed, proximally with an inconspicuous swelling, strengthened by longitudinal cuticularisations. Their length equals that of the gubernaculum and reaches 0,8 × anal diameter. Gubernaculum typical with a large median piece, bearing lateral expansions at its distal end. Here one finds a strong prong that points to the ventral side.

Tail almost of equal size in both sexes. Basal 2/3 conical, apical 1/3 cylindrical. In a female it is 2,8 × anal diameters long; the width at the apex 0,275 × anal diameter.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.

Remarks. — A conscientious comparison of the data of Buetschli and De Man brought us to the conviction that *Tr. marinus* (Buetschli) and *Tr. vulgaris* De Man are synonymous, whilst *Tr. marinus* De Man is not identical with *Tr. marinus* (Buetschli). Therefore we brought *Tr. vulgaris* De Man to *Tr. marinus* Buetschli, and we propose to name *Tr. marinus* De Man : *Tripyloides septentrionalis* nom. nov.

51. **Tripyloides septentrionalis** nom. nov.

Fig. 113-115.

Syn. : *Tripyloides marinus* DE MAN 1922 nec BUETSCHLI.
Cothonolaimus gracilis DITLEVSEN 1919.

REFERENCES :

ALLGÉN 1927*a*, p. 52, *Tr. marinus*.
ALLGÉN 1929*c*, p. 14, *Tr. marinus*.
ALLGÉN 1931, p. 230, *Coth. gracilis*.
DITLEVSEN 1919, p. 190, pl. IX, fig. 3; pl. X, fig. 4, *Coth. gracilis*.
FILIPJEV 1930, p. 9, *Tr. marinus*.
DE MAN 1922*b*, p. 229, fig. 18, *Tr. marinus*.
SCHNEIDER, G. 1906, p. 14, pl. I, fig. 8, *Tr. marinus*.
SCHUURMANS STEKHOVEN, 1931, p. 618, *Tr. marinus*.
SCHUURMANS STEKHOVEN & ADAM 1931, p. 26, ? *Tr. marinus*.

1 ♀ and 2 juv. from 't Zwyn, on *Enteromorpha* between poles, 28.XII.1931; NaCl : 27,2 ‰.
4 ♂♂, 4 ♀♀ and 3 juv. from 't Zwyn, sand and organic detritus, 28.XII.1931; NaCl : 21 ‰.

DIMENSIONS :

♂ L. : 1,51 mm.; α : 24,2; β : 7; γ : 15,7.

0	?	120	216	?	M	1415	1,510 mm.
28,8			48		62,5	43	

♀ L. : 1,31 mm.; α : 34 ; β : 7; γ : 15,1; V. : 55 %.

0	14,4	?	192	?	720	?	1225	1,310 mm.
19,2			33,6		38,4		28,8	

Cuticle with punctation of the inner layers like in *Ascolaimus* and *Odontophora.*

Amphids in a female 0,166 × corresponding body diameter, on 1,7 × cephalic diameter from the anterior end, 1 ½ windings; in a male 0,2 × corresponding body diameter on 1 × cephalic diameter from the anterior end.

Head, with 10 cephalic setae, the longer ones 0,33 × cephalic diameter in a male, 0,5 × cephalic diameter in a female.

Buccal cavity 1,1 × cephalic diameter long, with 3 divisions, with a small tooth in the anterior portion, and possibly also in both following divisions.

Nervering on 55 % of the œsophageal length.

Male genital armature. Spicula more feeble than in *Tripyloides marinus* (Buetschli), 1 anal diameter long, longer than the gubernaculum which is typical in shape and structure.

Tail in the male 3,3 anal diameters long, the width on the end 0,26 × anal diameter. In the female 4,4 anal diameters long, the width at the end 0,31 × anal diameter.

The tail is distinctly more slender than in *Tripyloides marinus* (Buetschli). Its last 1/3 is cylindrical like in the latter species, but its apex is more or less swollen and bears a couple of short bristles.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.

ORDER IV : MONHYSTEROIDEA

To this order, representants of the following families belong :

1. *Monhysteridae = Monhysterinae.*
2. *Sphaerolaimidae = Sphaerolaiminae.*
? 3. *Siphonolaimidae = Siphonolaiminae.*

We exclude from this order the :

1. *Comesomidae* = *Comesominae*, which are brought to the *Chromadoroidea.*
2. *Axonolaimidae* = *Axonolaiminae*, which are shifted to a new order, the *Araeolaimoidea.*
3. *Diplopeltidae* = *Diplopeltinae*, which are shifted to the same order as the *Axonolaimidae.*

Along the Belgian Coast, representants of the first **2** families occur.

I. Family **MONHYSTERIDAE.**

Genus THERISTUS Bastian 1865.

Syn. : *Monhystera* Bastian pro parte.

8 species of the Genus *Theristus* were found in the present material. They may be identified by means of the following Key.

KEY

I. Head bluntly conical, sharply set off from the remainder of the body. Lips indistinct, more or less fused. Cephalic setae 0,5 × cephalic diameter :
Theristus tenuispiculum (Ditlevsen).

II. Head with distinct lips, obtusely rounded, more or less continuous with the remainder of the body. Cephalic setae much longer :

A. Postamphidial cervical setae twice as long as the body diameter; tail elongate conical with blunt apex :
Theristus parasetosus (Allgén).

AA. Postamphidial cervical setae shorter than 1,5 × body diameter, tail more attenuated :

a. Spicula forked at the distal end :

B. Gubernaculum with a large dorsal apophysis. Numerous ± 1 body diameter long setae all over the body :
Theristus setosus (Buetschli).

BB. Gubernaculum wanting. Body setae 0,5 × body diameter :
Theristus acrilabiatus n. sp.

aa. Spicula pointed at the distal end :

b. Amphids more than 2,5 cephalic diameters from the anterior end; body with numerous, 1 body diameter long, tender setae :
Theristus longisetosus Schuurmans Stekhoven & De Coninck.

bb. Amphids at about 1 cephalic diameter from the anterior end :

c. Spicula distinctly knobbed at the proximal end; gubernaculum with a small dorsal apophysis :
Theristus normandicus (De Man).

cc. Spicula not knobbed a the proximal end :

d. Tail elongate conical, gradually tapering till to the end. Gubernaculum with a large plate-like dorsal apophysis :
Theristus acer BASTIAN.

dd. Tail with a distal cylindrical portion. Gubernaculum calceolate, without a dorsal apophysis :
Theristus calceolatus n. sp.

52. Theristus setosus (BUETSCHLI) 1874.

Fig. 116-120.

Syn. · *Monhystera setosa* BUETSCHLI 1874.

REFERENCES :

ALLGÉN 1927*a*, p. 56.
ALLGÉN 1929*c*, p. 27.
ALLGÉN 1929*a*, p. 41.
BUETSCHLI 1874, p. 29, pl. II, fig. 11*a*; pl. III, fig. 11*b*.
DITLEVSEN 1919, p. 151.
FILIPJEV 1930, p. 44, fig. 31*a-c*.
FILIPJEV 1930, p. 46, fig. 32*a-b*, var. *izhorica*.
KREIS 1929, p. 66, pl. VI, fig. 27*a-b*.
DE MAN 1888, p. 9, pl. I, fig. 5-5*a*.
DE MAN 1922*b*, p. 220, fig. 5*a-b*.
MICOLETZKY 1925, p. 230.
SCHNEIDER, G. 1906, p. 11, pl. I, fig. 3*a-c*.
SCHNEIDER, G. 1926, p. 33.
SCHNEIDER, G. 1927, p. 23.
SCHNEIDER, W. 1924, p. 210, fig. 1*b-c*, 2*a-b*.
SKWARRA 1922, p. 111.

3 ♂♂ and 3 ♀♀ from Heyst-Zeebrugge, 2.IX.1931.
1 ♂ from 't Zwyn, on *Enteromorpha* between poles, 28.XII.1931; NaCl : 27,2 ‰.
1 ♂ from Oostende, on a break-water, 18.XI.1931; NaCl : 30,77 ‰.
1 ♀ from Oostende, on a break-water, harbour entrance, IX.1931; DE SAEDELEER.

DIMENSIONS : ♂. L. : 1,520 mm.; α : 22,7; β : 4 ; γ : 6.
♀. L. : 1,570 mm.; α : 22 ; β : 4,1; γ : 6; V. : 66,6 %.

Body clumsy, confer fig. 116.

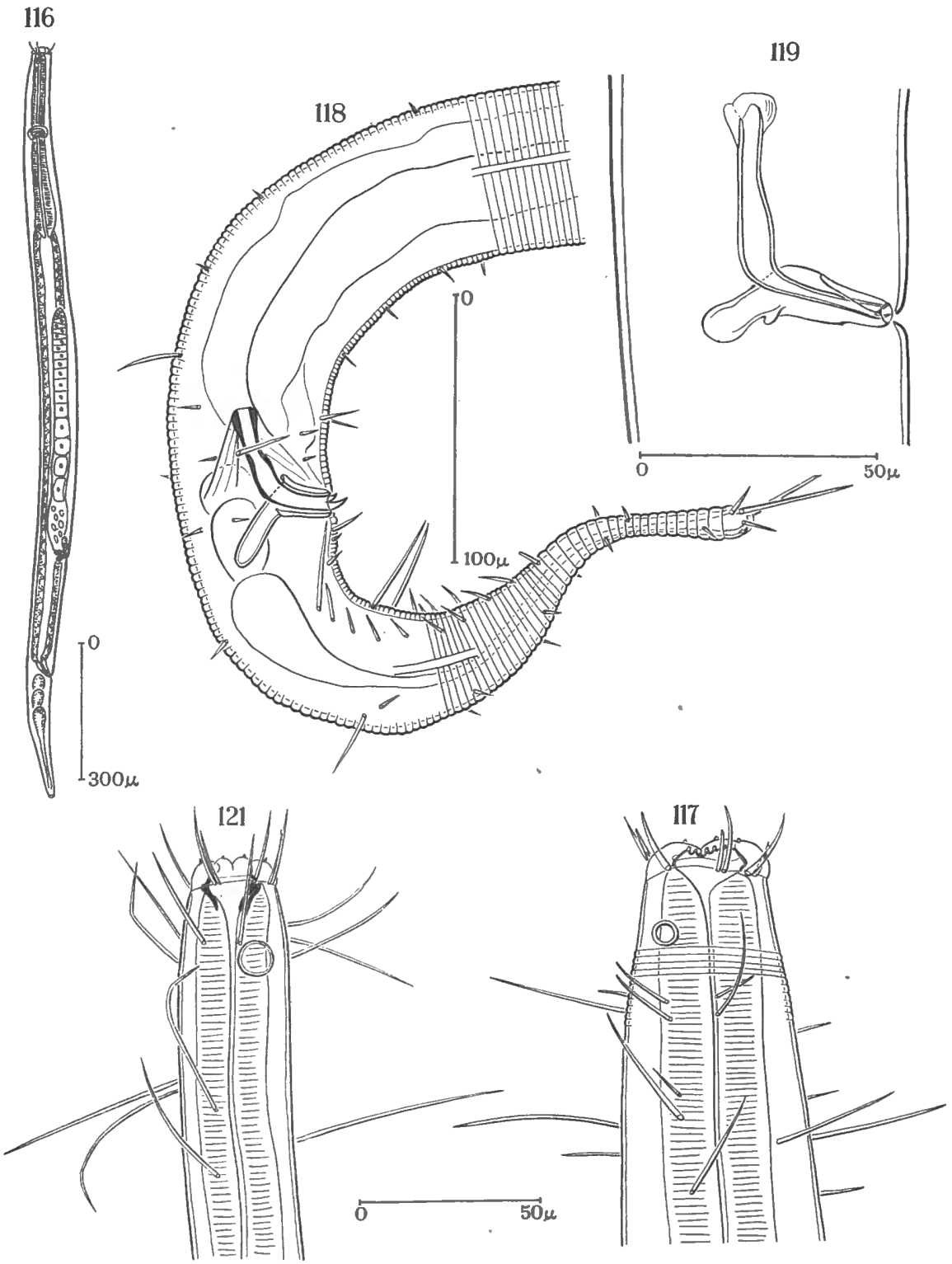
Cuticle transversely striated, covered with many setae of variable length, the longer ones reaching a length of 1 body diameter. In the male they may depass this dimension a little.

Lateral fields very narrow, 1/20 × corresponding body diameter.

Amphids in the male 0,23 × corresponding body diameter, situated on 0,7 × cephalic diameter from the anterior end. In the female they are 0,15 × corresponding body diameter and situated on 0,9 × cephalic diameter from the anterior end.

Head with 6 broad lips, crowned each by a minute labial papilla. Male with 12, female with 10 cephalic setae. Those of the male 0,5 × those of the female 0,6 × cephalic diameter long.

The shorter hairs reach a length of 0,33 × cephalic diameter in both sexes.



Theristus setosus (BUETSCHLI).

116. General view of a female.
117. Head end of a female.
118. Spicular apparatus and tail of a male.
119. Spicular apparatus of a male.

Theristus parasetosus ALLGÉN.

121. Head end of a female.

Buccal cavity typical. Vestibulum characterised by irregular cuticularised reinforcements.

Nervering at 45 % of the œsophageal length.

Male genital armature. *Spicula* curved; chord 1 anal diameter long; knobbed at the proximal end, swollen near the middle and forked at the distal end. *Gubernaculum*, chord 0,75 anal diameter long, with a long dorsal apophysis. The shape as well as the size of the accessory pieces vary in relation with the angle under which they are observed. Confer fig. 118 and 119. This misled apparently Filipjev and induced him to make a new variety of this species : var. *izhoricus*, for a specimen in which the gubernaculum was observed under such an angle that it showed a very long dorsal apophysis.

Tail in the male 4,3 anal diameters long; width at the end 0,2 anal diameter. In the female the respective relations are 5,6 × and 0,2 × anal diameter. The male tail presents some long and many short bristles placed in subventral and subdorsal rows. Apical end with 2 long setae, being 4 times as long as the body width at the tail end.

GEOGRAPHICAL DISTRIBUTION : Channel, North Sea, Baltic.

53. Theristus parasetosus (ALLGÉN) 1928.

Fig. 121-122.

Syn. : *Monohystera parasetosa* ALLGÉN 1928.

REFERENCES :

ALLGÉN 1928*c*, p. 300.

ALLGÉN 1929*a*, p. 41.

1 ♀ from Heyst-Zeebrugge, littoral, 2.IX.1931.

DIMENSIONS : ♀. L. : 1,312 mm.; α : 28,1; β : 4,32; γ : 8,26; V. : 70 %.

Habitus admost cylindrical; width at the anterior end 0,7, at the beginning of the intestine 0,8, at the anal opening 0,9 × maximal width.

Cuticula transversely ringed, with many long setae towards the anterior end, *twice* as long as the corresponding body-diameter.

Amphids circular, 0,3 × corresponding body diameter, at 1 cephalic diameter from the anterior end.

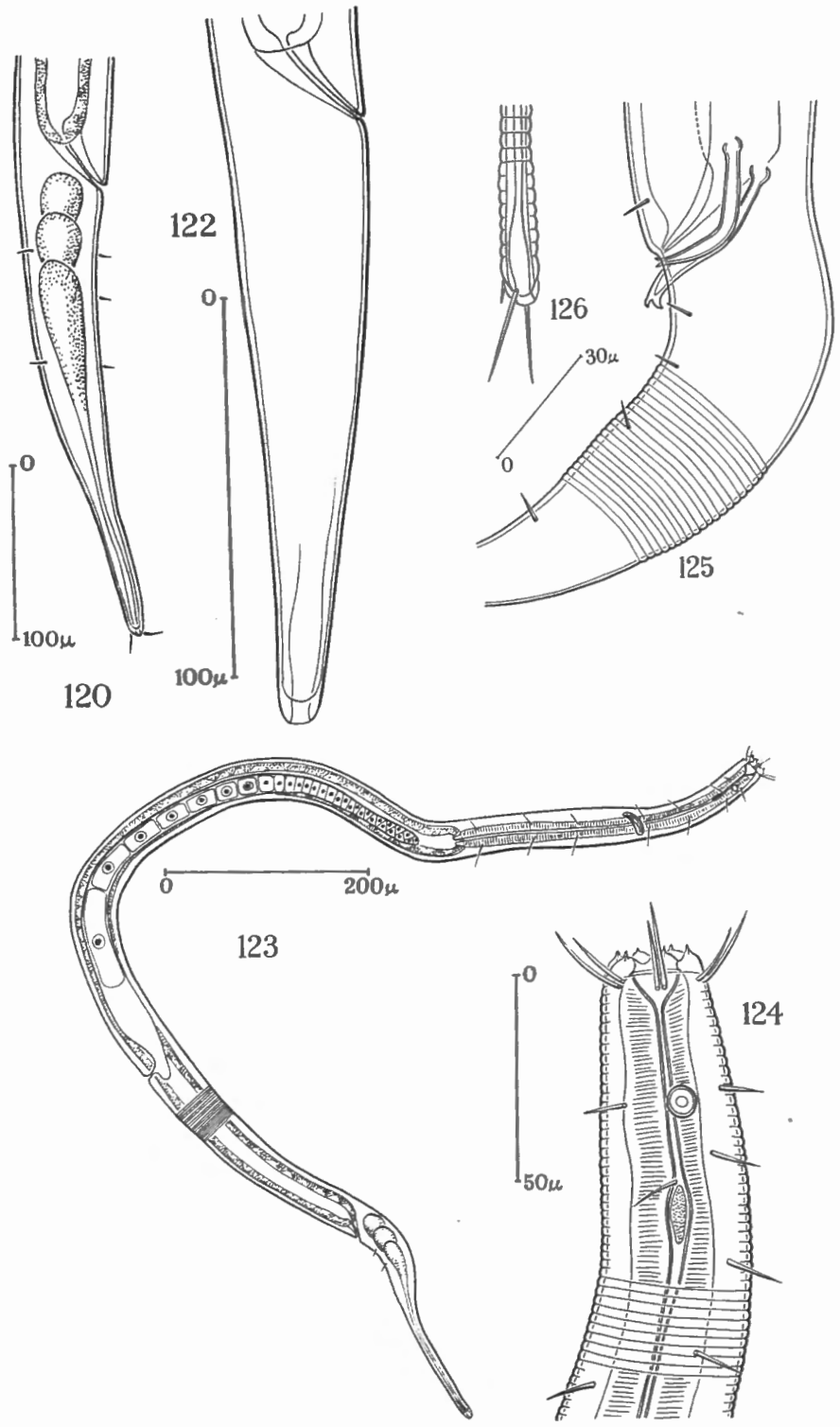
Head obtusely rounded, with 6 small distinct lips and high, conspicuous labial papillae; 10 cephalic setae, the 6 longer ones 0,9, the 4 shorter, submedian ones 0,6 × cephalic diameter.

Buccal cavity with strong cuticularised walls.

Female genital tract single, praevulvar. Vulva with small vulvar glands.

Tail conical, with obtusely rounded tip, 4,3 anal diameters long and 0,33 anal diameter wide at the tip.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.



Theristus setosus (BUETSCHLI).

120. Tail of a female.

Theristus parasetosus ALLGÉN.

122. Tail of a female.

Theristus acrilabiatus DE CONINCK & SCHUURMANS STEKHOVEN

123. General view of a female.
124. Head end of a female.
125. Spicular apparatus of a male.
126. Tip of tail of a male.

Remarks. — Our specimen differs from that of Allgén, who gives no figures, by its smaler size and by its comparatively larger amphids. Nevertheless we think that our specimen is conspecific with Allgén's form. *Theristus parasetosus* Allgén may be distinguished from *Theristus setosus* (Buetschli) by the stronger cuticularisation of the buccal walls, by the more distinct and longer cephalic setae and labial papillae, by the much longer setae on the body surface and by the conical tail.

54. **Theristus acrilabiatus** nov. spec.

Fig. 123-126.

1 ♂, 2 ♀♀ and 2 juv. from 't Zwyn, sand and organic detritus, 28.XII.1931; NaCl : 21 ‰.

DIMENSIONS :

♂ L. : 1,785 mm.; α : 47,6; β : 6,8 ; γ : 10,2.

	?	260	590	M	1610		
15		30		30	27,5	5,5	1,785 mm.

♀ L. : 1,270 mm.; α : 33,4; β : 5,03; γ : 7,21; V. : 64,7 %.
♀ L. : 1,400 mm.; α : 29 ; β : 4,5 ; γ : 6 ; V. : 65,3 %.

	138	310	345		915	1170		
20	31	35		48		31	10	1,400 mm.

Habitus : Body slender, not much narrowed anteriorly. Width at the anterior end 0,5, at the nervering 0,71, at the anal opening 0,71 × maximal width.

Cuticula transversely striated, bearing comparatively long setae, placed in submedian rows.

Amphids in the female 0,20 × corresponding body diameter, at 1,45 × cephalic diameter from the anterior end, with a median elevation.

Head obtusely rounded, with 6 very distinct lips, separated by deep interlabial rims, each with a spiniform labial papilla; 12 cephalic hairs, the larger ones 0,9 × the shorter ones 0,66 × cephalic diameter.

Œsophagus cylindrical; *nervering* at 45 %. Neither *ventral gland* nor *excretory pore* observed.

Female genital tract praevulvar, unpaired, reaching almost to the base of the œsophagus (25 % of the body length).

Testis beginning at 1/3 of the body length. ♂ genital armature composed of 2 curved spicula, knobbed at the proximal end, forked at their distal end, more or less 1 anal diameter long. No gubernaculum could be observed.

Tail gun-shaped in the female; base cylindro-conical, suddenly attenuated at the end of the first 1/3; last half cylindrical, not swollen at the apex; 6 anal

diameters long; width at the apex 0,22 × anal diameter. Male tail similar, with 2 long setae at the end, which are 2,6 × as long as the width at tip of tail. Some short hairs along the subventral lines.

55. **Theristus normandicus** De Man 1890.

Fig. 127-129.

References :

Allgén 1929*c*, p. 28.
Allgén 1931, p. 247.
De Man 1890, p. 169, pl. II, fig. 1-1*d*.
De Man 1922*b*, p. 222, fig. 7.
Southern 1914, p. 13.

1 juv. ♂ on a break-water Knokke-Zoute, 28.XII.1931; NaCl : 31,6 ‰.
3 ♂♂ from Heyst-Zeebrugge, 2.IX.1931.
1 ♀ on a break-water at Oostende, 31.XII.1931.

Dimensions :

♂ L. : 0,970 mm.; α : 26,2; β : 5,1 ; γ : 6,06.

?	?	190	?	M	810	
15		30		37	30	6,5

0,970 mm.

♂ L. : 1,340 mm.; α : 37,2; β : 6,53; γ : 8,2.

16	144	205	240	M	1177	
14,4		32,4		36	29	6,4

1,340 mm.

♀ L. : 1,080 mm.; α : 28,1; β : 5 ; γ : 6,75; V. : 58 %.

19,2	120	216	232	696	920	
20,8		35,2		38,4	27,2	6

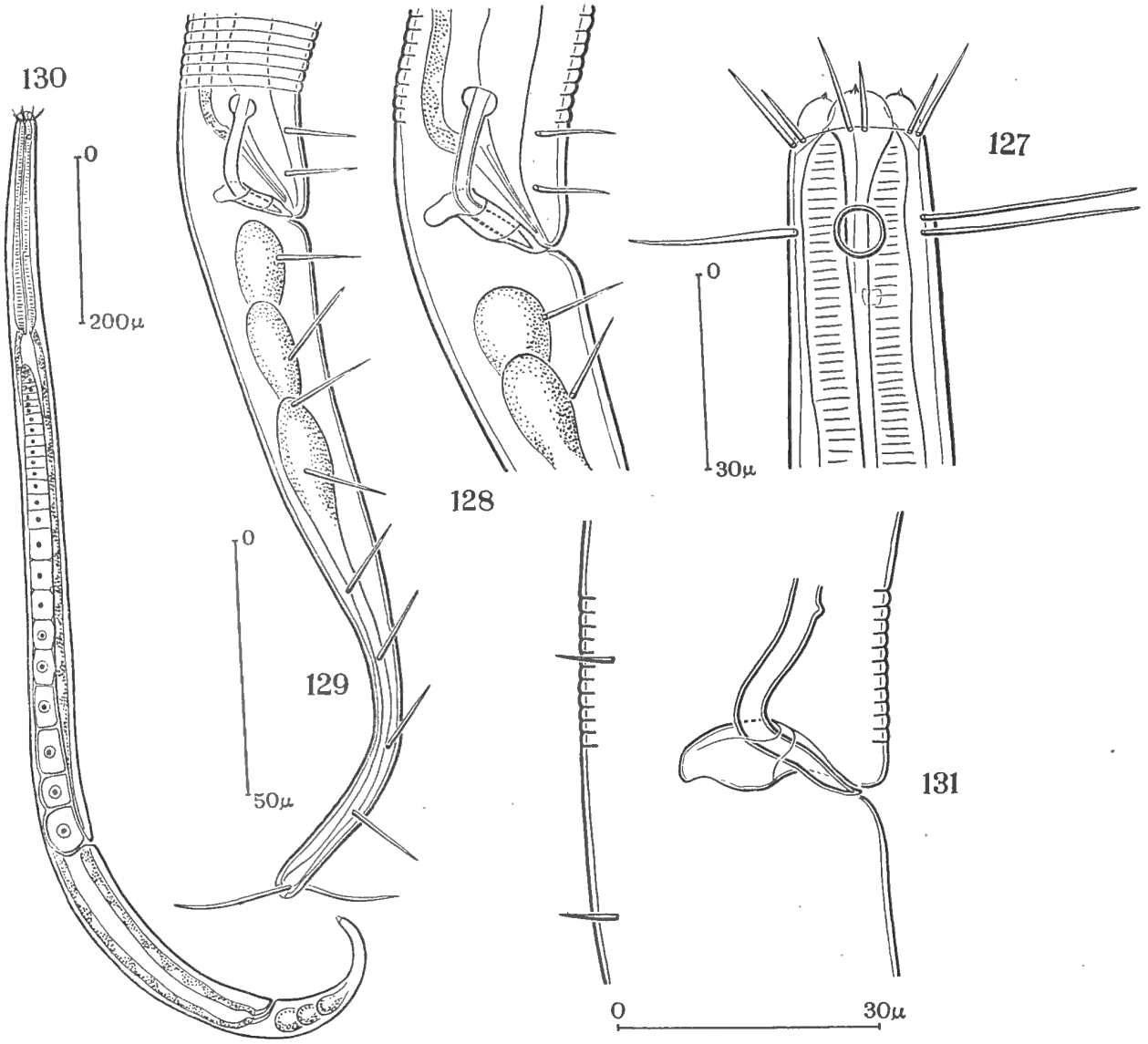
1,080 mm.

Body slender; width at the anterior end in the male 0,4 × at the anal opening 0,8 × maximal width, in the female respectively 0,54 × and 0,7 maximal width.

Cuticle transversely striated, bearing rather numerous hairs in submedian longitudinal rows. In the female these are comparatively short, whereas they are conspicuously longer in the male and reach their maximal length on the level of the amphids where they measure 1,4 × corresponding body diameter. Corresponding hairs on the female : 0,5 × corresponding body diameter. A male presented a square refringent body a little caudad from the amphids (ocellus?).

Amphids circular, sometimes with a distinct median elevation, distinctly larger in the male than in the female. In the male their diameter is 0,35 × corresponding body diameter, and they are situated at 0,9 × cephalic diameter from the anterior end. In the female the diameter reaches 0,31 × corresponding body diameter and the distance from the anterior end is 0,8 × cephalic diameter.

Head rounded, with 6 spherical lips, beset with distinct labial papillae; 12 cephalic setae; in the male the longer measure 0,7 ×, the shorter ones 0,45 × cephalic diameter, whereas the respective relations in the female are 1 × and 0,68 × cephalic diameter.



Theristus normandicus (DE MAN).

127. Head end of a male.
128. Spicular apparatus of a male.
129. Spicular apparatus and tail of a male.

Theristus acer BASTIAN.

130. General view of a female.
131. Spicular apparatus of a male.

Buccal cavity typical. *Œsophagus* slightly broadening towards the base. *Nervering* at 55 % of the œsophageal length.

Female genital tract unpaired, prevulvar, reaching almost to the base of the œsophagus. The same may be said of the male *testis*.

Male genital armature composed of 2 curved spicula, conspicuously swollen at the proximal end and pointed at the distal end. Chord or spiculum 1,1 × anal diameter long. *Gubernaculum* 0,8 × anal diameter, surrounding the spicula like a ruffle, and bearing a small, blunt, dorsal apophysis.

Tail in the male gradually tapering, last 1/3 cylindrical, 6 anal diameters long, 0,23 × anal diameter wide at the apex, with subventral rows of conspicuously long setae, those at the tip 4,6 × the width at tip of tail. Female tail identical in shape, but without the conspicuously long setae. Some short bristles are found at the tip; the relations are : length 7,2 ×, width at the end 0,25 × anal diameter.

GEOGRAPHICAL DISTRIBUTION : Atlantic, Channel and North Sea.

56. **Theristus acer** BASTIAN 1865.

Fig. 130-131.

Syn. · *Theristus velox* SCHUURMANS STEKHOVEN & ADAM nec BASTIAN.
Theristus velox STEINER 1916 nec BASTIAN.

REFERENCES :

ALLGÉN 1927*a*, p. 56.
ALLGÉN 1928*a*, p. 291.
ALLGÉN 1929*c*, p. 28.
ALLGÉN 1929*a*, p. 41.
ALLGÉN 1931, p. 246.
BASTIAN 1865, p. 156, pl. XIII, fig. 187-188.
DE MAN 1889*b*, p. 1, pl. V, fig. 1-1*d*.
DE MAN 1928, p. 97.
SCHUURMANS STEKHOVEN & ADAM 1931, p. 48, pl. IX, fig. 13; pl. X, fig. 1-3, *Th. acer*.
SCHUURMANS STEKHOVEN & ADAM 1931, p. 47, pl. X, fig. 4-5, *Th. velox*.
SOUTHERN 1914, p. 12.
STEINER 1916, p. 645, pl. 17, fig. 42*a*, *c*; pl. 34, fig. 42*b*, *d*, *f*, *Th. velox*.

1 ♂ from Heyst-Zeebrugge, littoral, 2.IX.1931.

9 ♂♂, 28 ♀♀ and 23 juv. on a break-water at Oostende, IX.1931, DE SAEDELEER; 14 % of the nemic fauna at this locality.

29 ♂♂, 48 ♀♀ and 83 juv. on a break-water at Oostende, 18.XI.1931; NaCl : 30,77 ‰; 43 % of the nemic fauna at this locality.

2 ♂♂ and 4 ♀♀ from Oostende, littoral, 18.XI.1931; NaCl : 29,3 ‰.

2 ♀♀ and 1 juv. on a break-water at Knokke-Zoute, 28.XII.1931; NaCl : 31,6 ‰.

9 ♂♂, 11 ♀♀ and 26 juv. in sand and organic detritus from 't Zwyn, 28.XII.1931; NaCl : 21 ‰; 7,7 % of the nemic fauna at this locality.

DIMENSIONS : ♂. L. : 1,370 mm.; α : 34,5; β : 5,06; γ : 8,4.
♀. L. : 1,320 mm.; α : 26,1; β : 5,22; γ : 7,8; V. : 64,5 %.
♀. L. : 1,680 mm.; α : 26,7; β : 5,35; γ : 8,9; V. : 68,2 %.
♀. L. : 1,500 mm.; α : 36 ; β : 6,66; γ : 7,5; V. : 64 %.

For *habitus* confer fig. 130.

The *spicula* are strongly curved, not knobbed at the proximal end, but here they present at the ventral side a little notch; distal end pointed. Gubernaculum embracing the spicula like a ruffle, presenting a large dorsal plate-like apophysis.

Remarks. — The figures of *Theristus acer* and *Theristus velox* given by Schuurmans Stekhoven & Adam are, according to our present experience, not quite correct. So for instance is the proximal portion of the spicula of *Th. acer* (pl. X, fig. 1) depicted too short, whereas the gubernaculum in pl. X, fig. 5 is somewhat distorted. We believe therefore that both mentioned species in reality are conspecific and ought to be brought to *Theristus acer* Bastian.

GEOGRAPHICAL DISTRIBUTION : Atlantic, Channel, North Sea and Baltic.

57. **Theristus calceolatus** nov. spec.

Fig. 132-136.

2 ♂♂, 3♀♀ and 5 juv. on a break-water at Oostende, 18.XI.1931; NaCl : 30,77 ‰.

203 ♂♂, 310♀♀ and 236 juv. from Heyst-Zeebrugge, littoral, 2.IX.1931; 79 % of the nemic fauna at this locality.

1 ♂ and 3 juv. from Knokke-Zoute, on stones along the littoral, 28.XII.1931; NaCl · 31,6 ‰.

DIMENSIONS :

♂ L. : 1,215 mm.; α : 44,1 ; β : 4,48; γ : 7,9.

22	?	271	332	M	1060		1,215 mm.
20		27,5		27,5	20	7.3	

♂ L. : 1,267 mm.; α : 44 ; β : 4,71; γ : 8.

?	115	270	?	M	1108		1,267 mm.
16,8	24	26,4		28,8	19,2	7,2	

♂ L. : 1,270 mm.; α : 44,5 ; β : 4,85; γ : 8,3.

?	125	264	?	M	1128		1,270 mm.
16,8	26,4	26,4		28,8	19,2	6,25	

♂ L. : 1,228 mm.; α : 51,2 ; β : 4,65; γ : 7,3.
♀ L. : 1,495 mm.; α : 29,9 ; β : 4,04; γ : 7,47; V. : 72,9 %.

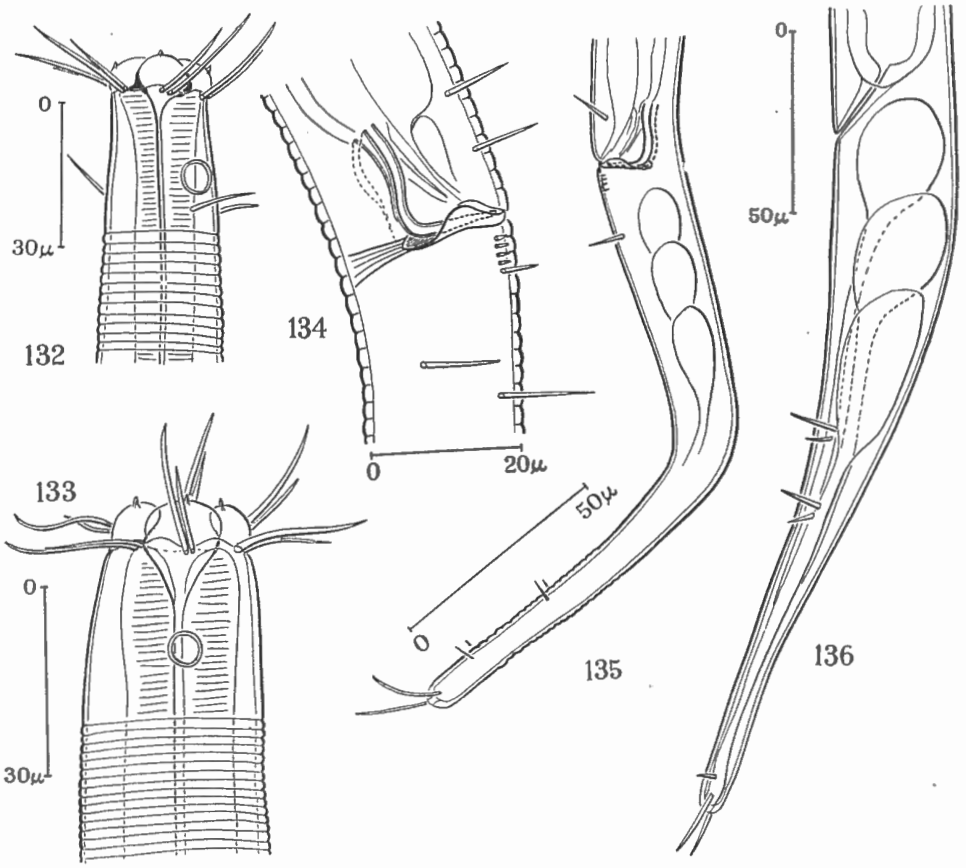
27	?	370	?	1090	1296		1,495 mm.
28,8		43,2		50,4	32,4	10,8	

♀ L. : 1,548 mm.; α : 30,96; β : 4,39; γ : 7,54; V. : 70,9 %.

27	141	377	432	1098	1343		
28,8		46,8		50,4	32,4	10,8	1,548 mm.

♀ L. : 1,566 mm.; α : 29 ; β : 4,19; γ : 7,67; V. : 72,09 %.

27	?	373	418	1130	1362		
28,8		43,2		54	32,4	10,8	1,566 mm.



Theristus calceolatus De Coninck & Schuurmans Stekhoven.

132. Head end of a male.
133. Head end of a female.
134. Spicular apparatus of a male.
135. Spicular apparatus and tail of a male.
136. Tail of a female.

Habitus : Body much more slender in the male than in the female. In the male not much, in the female comparatively much narrowed anteriorly, 0,6 ×. maximal width on the level of the amphids. This depends upon the filling of the ovaries and the swelling of the uterus.

Cuticle distinctly ringed; rings in the male 1,77μ apart in the middle of the body. Comparatively short and scanty hairs are irregularly scattered over the body surface.

Amphids in the male 0,29 × corresponding body diameter, in the female 0,20 × corresponding body diameter. In the male it is situated on 1 ×, in the female on 0,9 × cephalic diameter from the anterior end.

Head rounded with 6 large lips, each with a conical papilla; 12 cephalic setae, the larger ones in the male 20μ or 1,2 ×, in the female 1 × cephalic diameter, the shorter ones in both sexes 2/3 of the longer ones.

Buccal cavity typical, with an annular reinforcement at the limit of the vestibulum and the œsophagus.

Œsophagus with nervering on about 40 % of the length.

Neither *ventral gland* nor *excretory pore* were seen.

Female genital tract unpaired, almost reaching the base of the œsophagus. The same fits for the *testis*.

Male genital armature : 2 slender, curved spicula, much ressembling those of *Theristus acer*, but missing the proximal notch. Chord of spiculum 19-22μ or 1 anal diameter long. Gubernaculum calceolate, baboosh-shaped, 0,6-0,7 anal diameters long or 14,4μ. In the neighbourhood of the cloacal opening a few large bristles are found, next to 4 minute postcloacal setiform papillae.

Tail of the male elongate cylindrical, 7,2-8 × anal diameters long; width at the end 0,32-0,36 × anal diameter. Female tail 6,2-6,3 ×, width at the end 0,33 × anal diameter.

The apical setae in the male tail measure 18-20μ = 1 anal diameter; in the female the same setae are 25μ long.

58. **Theristus longisetosus** Schuurmans Stekhoven & De Coninck 1933.

References :

Schuurmans Stekhoven & De Coninck 1933*a*, p. 12, pl. VI, fig. 1-5.

Apart from the habitat mentioned in the above-named paper this species was also found in 't Zwyn, on *Enteromorpha* between poles (1 ♂ and 1 ♀), 28.XII.1931; NaCl : 27,2 ‰.

For description, consult the cited literature.

Unpublished figures found in the bequest of the late helminthologist Dr. J. G. De Man proove that he also has seen this species at Veere. His figures show the typical sudden attenuation of the body at about the level of the *excretory pore;* this attenuation is a feature more especially characteristic for the male sex.

59. **Theristus tenuispiculum** (DITLEVSEN) 1919.

Syn. : *Monhystera tenuispiculum* DITLEVSEN 1919.
Monhystera demani SCHUURMANS STEKHOVEN 1931 nec DE ROUVILLE 1904.

Fig. 137-140.

REFERENCES :

ALLGÉN 1928*c*, p. 300.
ALLGÉN 1929*a*, p. 42.
ALLGÉN 1932*c*, p. 423.
DITLEVSEN 1919, p. 150, pl. I, fig. 3, 6, 10.
SCHUURMANS STEKHOVEN 1931, p. 654.

5 ♂♂, 2 ♀♀ and 1 juv. from Heyst-Zeebrugge, 2.IX.1931.

1 ♂, 2 ♀♀ and 1 juv. from 't Zwyn, on *Enteromorpha* between poles, 28.XII.1931; NaCl : 27,2 ‰.

DIMENSIONS : ♂. L. : 0,890 mm.; α : 20,66; β : 4,65; γ : 6,4.
♀. L. : 0,950 mm.; α : 22 ; β : 4,7 ; γ : 6,38; V.: 66,6%.

Habitus rather clumsy, distinctly narrowed at the extreme anterior end, where it measures 0,45 × the width at the base of the œsophagus.

Cuticle coarsely striated transversely, almost devoid of setae.

Lateral fields wide.

Amphids : In the male 0,23 × corresponding body diameter on 1,2 × cephalic diameter from the anterior end; in the female 0,25 × corresponding body diameter from the anterior end.

Head bluntly conical, distinctly set off from the remainder of the body, with 6 inconspicuous lips and as many minute labial papillae. Cephalic setae small, in both sexes 0,5 × cephalic diameter (at the base of the lips).

Buccal cavity funnel-shaped, with tender linings in the upper portion of the vestibulum.

Œsophagus almost cylindrical. *Nervering* on 0,5 × œsophageal length in the male, on 0,43 × the same length in the female.

Neither *ventral gland* nor *pore* observed.

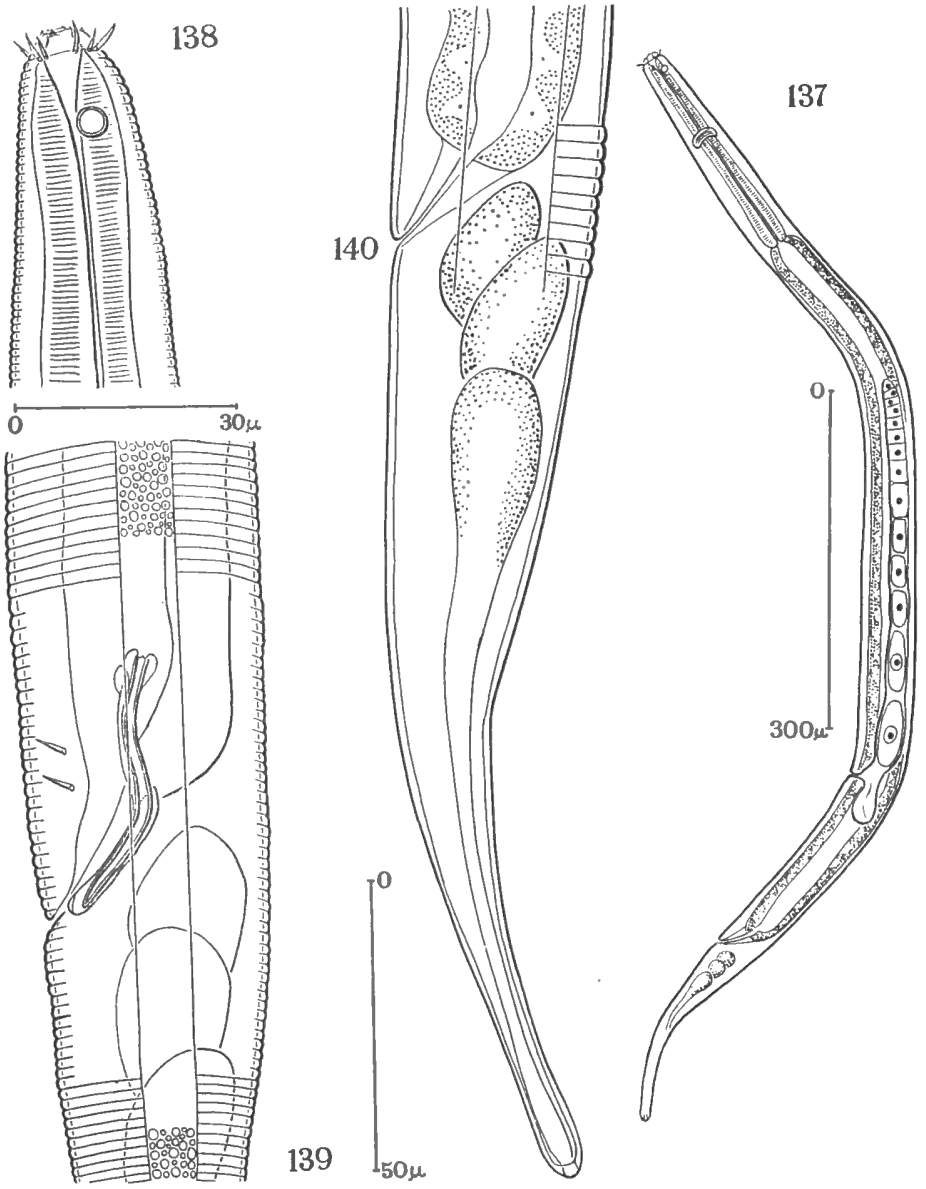
Female genital tract unilateral, prevulvar, outstretched, with a postvulvar receptaculum seminis.

Male genital armature. Spicula slender, curved, distinctly winged at the proximal end; distal end pointed; more or less 1,15 × anal diameter long, 16 times as long as they are wide. Acessory pieces gutter-shaped, forming 2 grooves in which the spicula slide, rounded at the distal end, 0,66 anal diameter long.

Tail in the male sex 4,14 ×, in the female 6,1 × anal diameters long; width at the apex 0,2 × anal diameter.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.

Remarks. — Ditlevsen's male measured 1,3 mm., was therefore somewhat larger than our specimens. The general shape of the spicula is in accordance with our findings, however Ditlevsen did not distinguish clearly spicula and accessory pieces, thus giving an incorrect impression of the relations at the distal end of the spicula. A comparison of our specimens with new Zuiderzee-material



Theristus tenuispiculum (DITLEVSEN).

137. General view of a female.
138. Head end of a male.
139. Spicular apparatus of a male.
140. Tail of a female.

prooved the synonymity of Schuurmans Stekhoven's *M. demani* with *Theristus tenuispiculum* Ditlevsen.

Monhystera spec. 8 De Man 1922, which Schuurmans Stekhoven thought to be conspecific with his *M. demani*, is very closely allied with our form but may be distinguished from it by the larger size of its amphids.

GENUS STEINERIA MICOLETZKY 1921.

Syn. : *Monhystera* BASTIAN 1865 ex parte.

60. Steineria mirabilis SCHUURMANS STEKHOVEN & DE CONINCK 1933.

REFERENCES :

SCHUURMANS STEKHOVEN & DE CONINCK 1933*a*, p. 9, pl. IV, fig. 5; pl. V, fig. 1-3.

Habitat : coarse sand of the littoral, Oostende, 18.XI,1931; NaCl : 29,3 ‰.

GENUS MONHYSTERA BASTIAN 1865.

Syn. : *Tachyhodites* BASTIAN 1865 ex parte.

Three *Monhystera*-species were found in the present material :

1. *Monhystera microphthalma* DE MAN.
2. *Monhystera disjuncta* BASTIAN.
3. *Monhystera parva* (BASTIAN).

61. Monhystera microphthalma DE MAN 1884.

Fig. 141-144.

REFERENCES :

DE CONINCK 1930, p. 114.
DE MAN 1884, p. 38, pl. II, fig. 8.
DE MAN 1922*b*, p. 218, fig. 3*a-c*.
SCHNEIDER, G. 1906, p. 10.
SCHNEIDER, G. 1916, p. 21.
SCHNEIDER, G. 1927, p. 13.

11 ♂♂, 20 ♀ ♀ and 9 juv. on a break-water at Oostende, 18.XI.1931; NaCl : 30,77 ‰.
1 ♀ from 't Zwyn, on *Enteromorpha* between poles, 28.XII.1931; NaCl : 27,2 ‰.
1 ♂ from 't Zwyn, in sand and organic detritus, 28.XII.1931; NaCl : 21 ‰.

DIMENSIONS :

♂ L. : 0,856 mm.; α : 53,3 ; β : 6,69; γ : 3,82.

13,6	72	128	208	M	632	0,856 mm.
9,6	12,8	14,4		16	14,4	

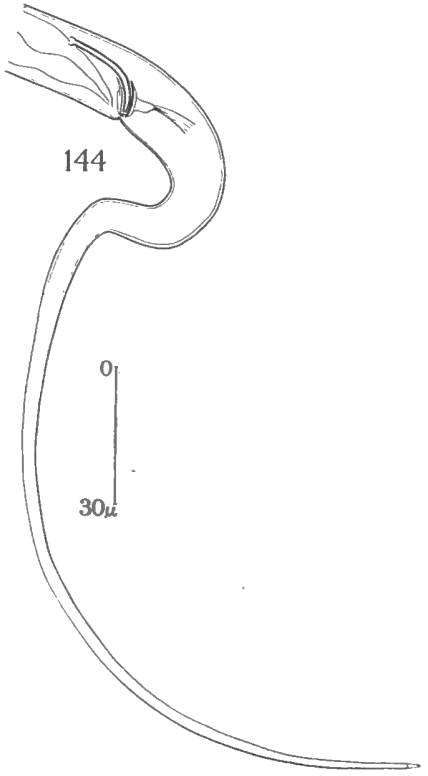
♀ L. : 0,580 mm.; α : 40,33; β : 6,36; γ : 3,18; V. : 48 %.

?	61	91,2	120	280	397	0,580 mm.
9,6		14,4		14,4	9,6	

The species may be distinguished at once by its long, filiform tail and by its violet ocelli, very distinct in living specimens but inconspicuous in fixed material.

Cuticle smooth, bare.

Amphids circular, 0,3 × corresponding body diameter in the female on 1,5 × cephalic diameter from the anterior end. *Ocelli* immediately behind the amphids.



Monhystera microphthalma De Man.

144. Spicular apparatus and tail of a male.

Head set off, with 6 lips and 6 small labial papillae; 6 cephalic setae, 0,4 × cephalic diameter long.

Buccal cavity typical.

Œsophagus distinctly swollen at the base. *Nervering* on 55-66 % of the œsophageal length.

Ventral gland situated immediately behind the base of the œsophagus.

Excretory pore not found.

Female genital tract unpaired, outstretched, prevulvar, reaching to the base of the ventral gland, beginning at 20 % of the body length.

Testis long, beginning at 25 % of the body length. *Spicula* slender, slightly curved, 1,57 × anal diameter long, with a proximal knobbed and a distal pointed end. *Accessory* pieces anvil-shaped, 0,5 × anal diameter long, with distinct dorsal apophysis.

Tail very long, tapering gradually, the last 2/3 almost filiform. In the male, the tail is frequently knee-like curved (fig. 144). The relations are : in the male, length 15,5 ×, width at the end 0,073 × anal diameter; in the female, length 19 ×, width at the end 0,14 × anal diameter.

The tail ends in an elongate, conical outlet for the spinneret glands.

GEOGRAPHICAL DISTRIBUTION : North Sea and Baltic.

62. **Monhystera disjuncta** BASTIAN 1865.

Fig. 145-150.

Syn. : *Monhystera ambigua* BASTIAN 1865.
Monhystera ambiguoides BUETSCHLI 1874.

REFERENCES :

ALLGÉN 1931, p. 247, *M. ambigua.*
ALLGÉN 1932*b*, p. 166, *M. ambigua.*
ALLGÉN 1932*c*, p. 422, *M. ambigua.*
BASTIAN 1865, p. 98, pl. IX, fig. 12-13, *M. disjuncta.*
BASTIAN 1865, p. 99, pl. IX, fig. 14-15, *M. ambigua.*
BUETSCHLI 1874, p. 27, pl. II, fig. 7*a*, *M. ambiguoides.*
DE MAN 1888, p. 7, fig. 4-4*c*.

8 ♂♂, 8 ♀♀ and 10 juv. on a break-water at Oostende, harbour entrance, IX.1931; DE SAEDELEER.

1 ♂ and 3 juv. on stones along the littoral, Knokke-Zoute, 28.XII.1931.

DIMENSIONS :

♂ L. : 0,628 mm.; α : 36,9 ; β : 5,9 ; γ : 10,46.

14	?	106	212	M	566	0,628 mm.
9,3		14		17	16	

♂ L. : 1,200 mm.; α : 32,8 ; β : 7,5 ; γ : 11,42.

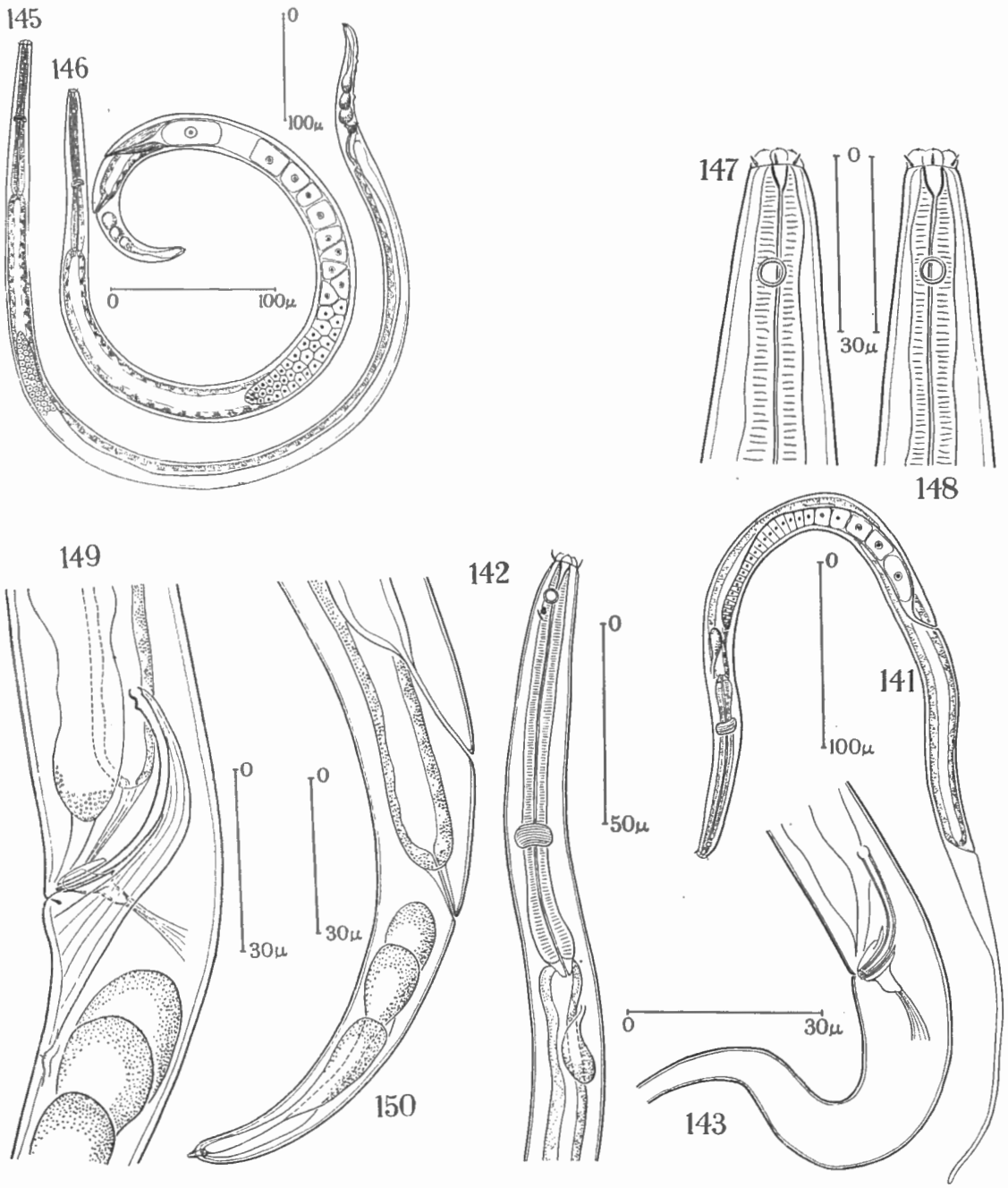
18	80	160	300	M	1095	1,200 mm.
13,7		27,5		36,5	25 6,8	

♀ L. : 0,635 mm.; α : 24,4 ; β : 6,35; γ : 9,77; V. : 85,8 %.

14	60	100	280	545	570	0,635 mm.
9,3		16	26		12	

♀ L. : 0,645 mm.; α : 24,25; β : 6,9 ; γ : 10,2; V. : 85,2 %.

	14	57	93	265	550	580	0,645 mm.
5,3	9,3		14,6	26		14	



Monhystera microphtalma DE MAN.

141. General view of a female.
142. Anterior end of a female.
143. Spicular apparatus of a male.
145. General view of a male.
146. General view of a female.

Monhystera disjuncta BASTIAN.

147. Head end of a male.
148. Head end of a female.
149. Spicular apparatus of a male.
150. Posterior end of a female.

Habitus : Body tapering gradually towards both ends. Confer figures and formulas.

Cuticle smooth, bare.

Amphids circular, in a male 0,3 ×, in a female 0,33 × corresponding body diameter, on 2 × cephalic diameter from the anterior end in both sexes.

Head bluntly rounded, with 6 round lips, each with a small labial papillae; 6 cephalic setae measuring in the male 0,2 ×, in the female 0,25 × cephalic diameter.

Buccal cavity elongate, with distinct, although faintly cuticularised walls, 1 × cephalic diameter long.

Œsophagus gradually widening towards the base. *Nervering* in a male at 50 %, in a female at 60 % of the œsophageal length.

Female genital tract unpaired, prevulvar.

Testis long, outstretched, beginning at 25 %-33 % of the body length. *Spicula* very slender, 26 × as long as they are wide, 1,55 × anal diameter, proximal end knobbed, distal end sharply pointed. *Gubernaculum* anvil-shaped, of the same type as in *M. microphthalma* and *M. parva.*

Tail gradually tapering, broadly rounded with a nipple-like outlet for the spinneret glands. The male tail presents a pair of small ventral setae on the lower lip of the cloaca, 1 pair of mamelliform papillae with a short setum at the apex on 1/3, a second pair at the beginning of the distal 1/3. This last pair is preceded by 2 pairs of minute setae.

Geographical distribution : Channel, North Sea, Baltic, Campbell-islands.

Remarks. — Bastian, misled by the posterior position of the vulva in the female of *ambigua,* described his female specimen as a male; confer pl. IX, fig. 15.

Our material, containing males as well as females of the said species, prooves that Bastian's *M. ambigua* and *M. disjuncta* are conspecific. Since *M. disjuncta* was described prior to *M. ambigua,* the first name prevails.

The shape of the tail in both figures (13 and 15, pl. IX) has been depicted as pointed too much, as in so many other figures of Bastian.

As for *M. ambiguoides* Buetschli, we can only confirm De Man's opinion that it is a synonym of *M. ambigua* Bastian, and therefore also of *M. disjuncta* Bastian

63. **Monhystera parva** (BASTIAN) 1865.

Fig. 151-160.

Syn. : *Tachyhodites parvus* BASTIAN 1865.
Monhystera heteroparva MICOLETZKY 1924.
Monhystera parva var. *meridiana* MICOLETZKY 1922.

REFERENCES :

ALLGÉN 1927*a*, p. 57.
ALLGÉN 1928*c*, p. 298.
ALLGÉN 1929*a*, p. 42.
ALLGÉN 1932*c*, p. 422.
BASTIAN 1865, p. 165, pl. XIII, fig. 185, *Tachyhodites parvus*.
DE MAN 1888, p. 7, pl. I, fig. 3-3*b*.
DE MAN 1922*b*, p. 219, fig. 4*a-c*.
MICOLETZKY 1922*c*, p. 4, var. *meridiana*.
MICOLETZKY 1924, p. 169, *M. heteroparva*.

9 ♂♂, 15 ♀♀ and 7 juv. on a break-water at Oostende, harbour entrance, IX.1931; DE SAEDELEER.

8♂♂, 17 ♀♀ and 15 juv. from 't Zwyn, sand and organic detritus, 28.XII.1931; NaCl : 21 ‰.

DIMENSIONS :

♂ L. : 0,500 mm.; α : 27,4; β : 5,55; γ : 5,55.

12,7	?	90	118	M	410	0,500 mm.
10		16,6		18,2	13,6	

♂ L. : 0,610 mm.; α : 25,4; β : 7,6 ; γ : 6,1.

?	?	80	?	M	510	0,610 mm.
		18		24	18	

♂ L. : 0,645 mm.; α : 26,4; β : 5,1 ; γ : 6,1.

?	75	126	155	M	540		0,645 mm.
12,5		20		24	19,5	4	

♀ L. : 0,600 mm.; α : 25,4; β : 5,9 ; γ : 5,2 ; V. : 59,1 %.

13,6	?	104	165	355	485	0,600 mm.
12,7		20		23,6	13,6	

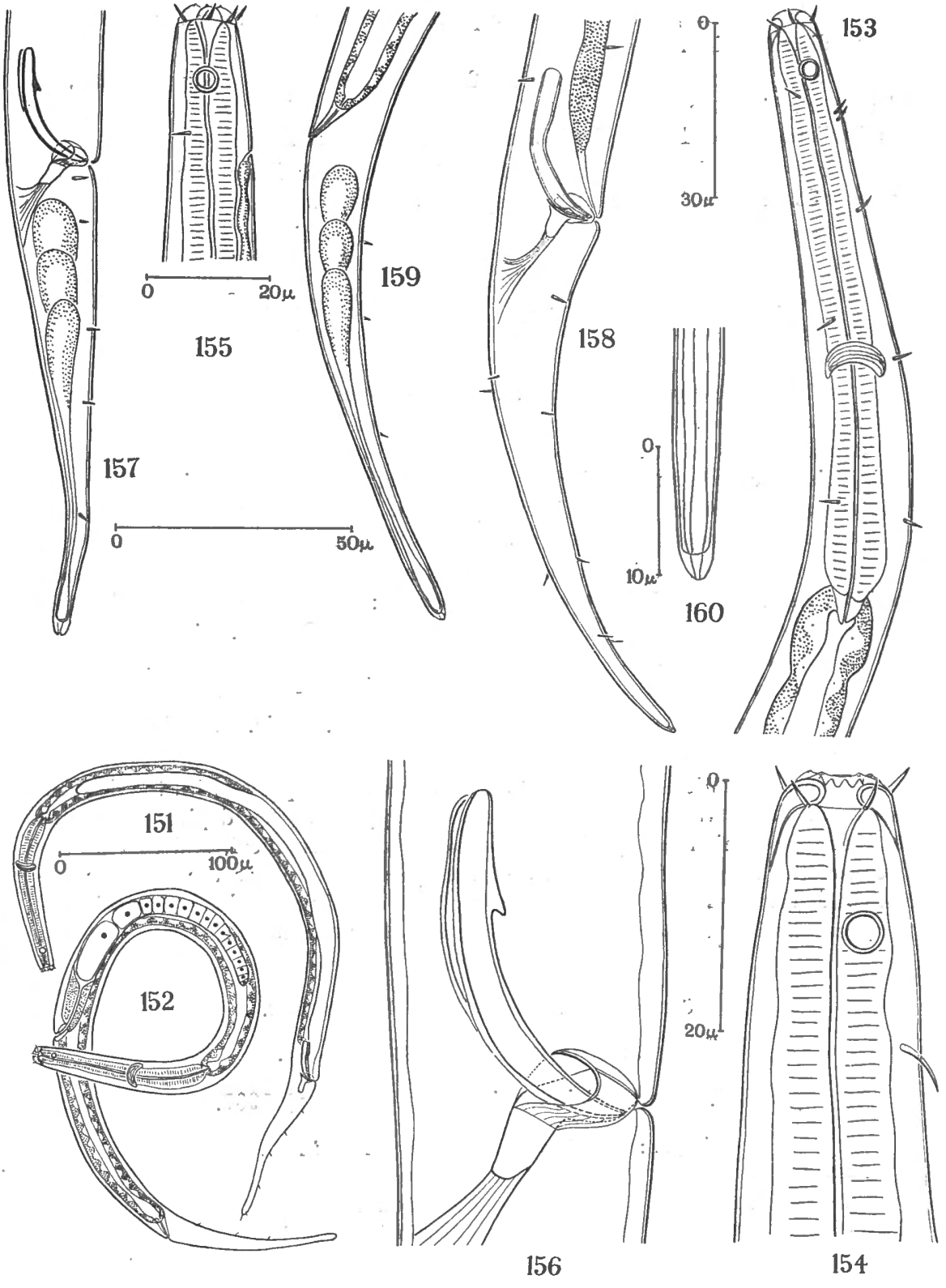
♀ L. : 0,660 mm.; α : 25,3; β : 5,5 ; γ : 6,2 ; V. : 59,1 %.

?	?	119	140	390	555		0,660 mm.
11,5		18	26		15	4,5	

♀ L. : 0,760 mm.; α : 25,3; β : 6,33; γ : 6,33; V. : 55,4 %.

?	?	120	155	422	640		0,760 mm.
13,5		22,5	30		19,5	5	

Habitus : Body small; tail conspicuously more narrowed than the head end; confer the cobbian formulas and the figures.



Monhystera parva (BASTIAN).

151. General view of a male.
152. General view of a female.
153. Anterior end of a female.
154. Head end of a female.
155. Head end of a male.
156. Spicular apparatus of a male.
157. Spicular apparatus and tail of a male.
158. Id. of another male.
159. Tail of a female.
160. Tip of tail in a male.

Cuticle smooth, with short setae placed more or less along the submedian lines, distributed all over the body.

Amphids circular, in the male 0,315 × corresponding body diameter, on 1 cephalic diameter from the anterior end. In the female 0,26 × corresponding body diameter, on 1,15 cephalic diameters from the anterior end.

Head with 6 low lips, each with a minute papilla; 6 cephalic setae, in the male 0,33 ×, in the female 0,28 × cephalic diameter long.

Buccal cavity typical, with very faint cuticularisation of the vestibulum.

Œsophagus embraced by the nervering at 60 % of its length.

Female genital tract unpair, prevulvar, beginning at 20-27,5 % of the body length, growing in length and shifted more and more forwards, relative with age.

Testis beginning at the end of the first 1/4 of the body length. *Spicula* 1,5 anal diameters long, slightly curved, broadened in their proximal third, with a ventral denticle at the distal end of the mentioned broadening, the denticle being visible clearly only in slightly dorso-lateral view, becoming invisible when the animal is seen in strictly lateral position. *Accessory pieces* of the same type as in *M. microphthalma* and *M. disjuncta* but not so massive.

Tail gradually tapering towards the cylindrical endportion which occupies more or less the last third of the tail. Relations : in the male, length 6,1-8,4 ×, width at the end 0,12-0,21 ×, in the female, length 5,3-6,6 ×, width at the end 0,2-0,3 × anal-diameter.

The tail ends with a conical outlet for the spinneret-glands.

Geographical distribution : Channel, North Sea, Baltic, Atlantic (Sargasso-sea), Mediterranean.

Remarks. — Micoletzky points to differences of his species with the description of De Man. We must admit that De Man apparently has depicted the genital armature of his male specimens somewhat too schematical, and that he has overseen the characteristic denticle of the spicula as well as the setae on the body surface. Now it seems not necessary to us to bring Micoletzky's specimens to a new species, unless other differences should be found.

Genus ELEUTHEROLAIMUS Filipjev 1922.

Syn. : *Monhystera* Bastian 1865 ex parte.

64. **Eleutherolaimus stenosoma** (De Man) 1907.

Syn. : *Monohystera stenosoma* De Man 1907.

References :

Allgén 1928*c*, p. 298.
Allgén 1929*a*, p. 42.
Allgén 1929*c*, p. 28.
Allgén 1932*c*, p. 423.

DE MAN 1907*a*, p. 229.
DE MAN 1907*b*, p. 36, pl. I, fig. 3-3*e*.
DE MAN 1922, p. 223, fig. 9*a-c*.
SCHNEIDER, G. 1927, p. 14.

1 ♂ and 2 juv. from Heyst-Zeebrugge, 2.IX.1931.
5 juv. from 't Zwyn, between sand and organic detritus, 28.XII.1931; NaCl : 21 ‰.

The present specimens are typical representants of the species.

Cuticle smooth with rare setae.

Amphids circular, with a median elevation, 0,53 × corresponding body diameter, on 1,5 × cephalic diameter from the anterior end. When fresh material is examined with great care, the amphids proove to be faintly spiral, and not circular.

Head with (?) lips, each with a small labial papilla and an anterior crown of labial setae (4 setae) 0,53 × cephalic diameter long, and a second crown of 4 cephalic setae 1 × cephalic diameter long.

Tail tapering gradually to the bluntly rounded tip. Length : 7-8 ×, width at the end 0,2 × anal diameter.

GEOGRAPHICAL DISTRIBUTION : Channel, North Sea and Baltic.

ORDER VI : ANGUILLULOIDEA

FAMILY ANGUILLULIDAE.

GENUS RHABDITIS DUJARDIN 1845.

65. Rhabditis marina BASTIAN 1865.

Fig. 161-163.

REFERENCES :

ALLGÉN 1931, p. 191.
BASTIAN 1865, p. 129, pl. X, fig. 60-62.
DITLEVSEN 1911, p. 240, pl. II, fig. 1-5, 7
SCHULZ 1932, p. 419, fig. 49*a-e*.
STEINER 1916, p. 518, pl. 18, fig. 1*a-g*.
STEINER 1922, p. 9, pl. 1, fig. 1*a-b*.

1 ♂, 1 ♀ and 17 juv. from break-water, Oostende, 18.XI.1931; NaCl : 30,77 ‰.
1 ♂, 1 ♀ and 10 juv. from a puddle on the strand at Oostende, 18.XI.1931; NaCel : 29,3 ‰; 27,9 % of the nemic fauna at this locality.

DIMENSIONS :

♂ L. : 1,420 mm.; α : 21,8; β : 6,4; γ : 28,4.

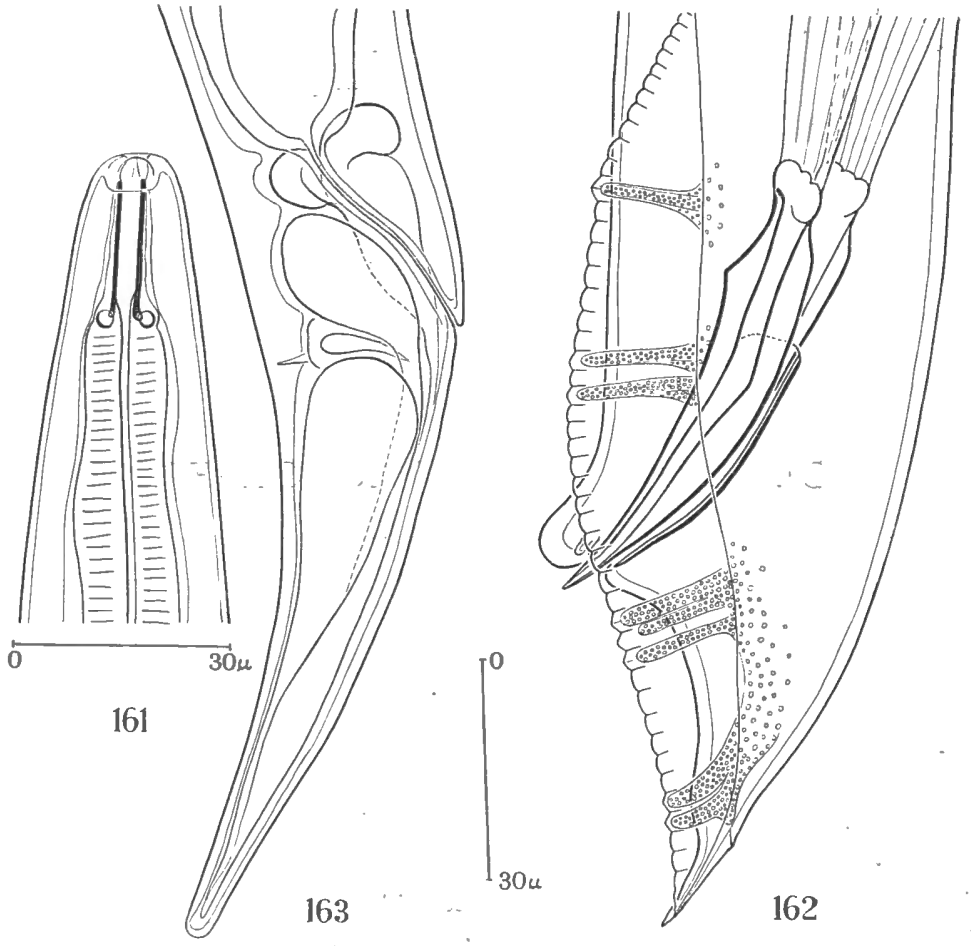
17	150	205	295	500	M	1370	1,420 mm.
15	40	45			65	24	

♀ L. : 1,010 mm.; α : 37,3; β : 4,9; γ : 11,8; V. : 53,9 %.

20	150	205	?	355	545	735	925	1,010 mm.
14	32	37			37		24	

It is not certain whether the species *Rhabditis marina* Bastian does not embrace two different species corresponding with Steiner's division in *Rh. marina typ.* and *Rh. marina* var. *septentrionalis*, but a conclusion was not possible after the present, comparatively scanty material.

It is highly probable that Schulz's var. *kieliensis* falls into the mode of variability of the var. *septentrionalis* Steiner, to which our specimens also belong.



Rhabditis marina BASTIAN.

161. Head end of a juvenile.
162. Copulatory apparatus and tail of a male.
163. Tail of a female.

The *buccal cavity* of a young female prooved to be 2 cephalic diameter long.

Male genital armature. *Spicula* long and strong, 1,87 × anal diameter or 1,23 × length of tail. Proximal end swollen, distal end pointed. *Gubernaculum* 1 anal diameter long.

Bursa 3,42 × anal diameters long, embracing the whole male tail, with 1 + 2 preanal + 3 + 2 $^1/_3$ postanal pairs of bursal papillae. (Cf. fig. 162.)

Immediately in front of the anal opening there are two small papillae on each side of the midventral line. Another small papilla (phasmid) is found on the dorsal side of the tail near to the apex.

Male *tail* 1,52 × anal diameter long. Female *tail* conical, with the indication of a cylindrical end-portion, which was more distinctly visible in the specimens of Ditlevsen and Steiner 1916, whereas the female tail of Bastian's animals was effilate and pointed.

Our specimens, as those of Ditlevsen and Steiner 1916 have a tail with a rounded tip. Relations of the tail : length, 3,2 ×, width at the end 0,127 × anal diameter. Non functional spinneret glandcells are present.

GEOGRAPHICAL DISTRIBUTION : Channel, North Sea and Baltic.

GENUS CEPHALOBUS BASTIAN 1865.

66. Cephalobus oxyuroides DE MAN 1876.

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1 ♂ from 't Zwyn, sand and organic detritus, 28.XII.1931; NaCl : 21 ‰.

De Coninck found the species on an carlier date (1930) in 't Zwyn in water with a salinity of only ± 5 ‰.

GEOGRAPHICAL DISTRIBUTION : Cosmopolite

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ADDITIONS

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