ADDITIONAL NOTES TO MY MONOGRAPHS

ON THE

FREELIVING MARINE NEMAS

OF THE BELGIAN COAST. I. AND II

WRITTEN IN COLLABORATION WITH W. ADAM AND L. A. DE CONINCK,
WITH SOME REMARKS ON THE ECOLOGY OF BELGIAN NEMAS

PREFACE

By the courtesy of Dr. E. Leloup some samples of sediments of the belgian coast were collected in 1934 for further study, Moreover Prof. Dr. V. Van Straelen, Director of the Museum of Brussels afforded me the opportunity to visit the shore at Blankenberghe and Zeebrugge under the valuable guide of Dr. Leloup for which opportunity I may thank at this place both collegues. This visit was brougt on 6.VII.1934 during a stay at the Royal Museum of Natural History at Brussels in the month of July. From Zeebrugge as well as from Blankenberghe several samples of sand and mud were brough home, which gave me a chance to fill up a gap in our knowledge on the nemic fauna of the Belgian Coast. The other samples Dr. Leloup had collected for me came from Nieuport, from which locality, situated more to the west on the belgian coast, no samples were studied as yet. In total the present study covers 23 samples with altogether 2690 Nemas, divided over 81 species, belonging to 51 Genera.

By this study the number of species known from the Belgian Coast was raised to 117. 8 new species were discovered. Much more important than the finding of new species and of species till so far not known from the belgian coast was the ecological importance of this study, which brings now sufficient mate-

rial for a comparison with other localities, for instance the Zuiderzee, of which quantitative studies have been made.

In the General Part of this paper I will lay particular stress on this side of my study. For the sake of sparing time and space those species which were already treated in former monographs, will be only enumerated with their output in the Tables in which the composition of the faunas is brought in some detail, but not in the systematical part, unless there is special reason for this procedure, in the case new characteristics could be found. In general however this was not done.

Likewise I will not reproduce here Table XI of the Mongraphe II, written in collaboration with L. A. De Coninck, but only give the prolongation of this Table enumerating the species, new to the belgian fauna as 86 and following numbers.

GENERAL PART

I. — COMPOSITION OF THE STUDIED BIOCOENOSES.

As stated above not less than 23 samples were studied of which the Tables I-XII *B* give a survey.

NIEUPORT.

TABLE I.

Nieuport, Chenal Ouest, sample 7, Juli 1934, 19 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	Ar.	*Ascolaimus elongatus*	—	—	1	1	20
2.	C.	*Sabatiera vulgaris*...	—	—	1	1	20
3.	C.	*Paracanthonchus caecus*	—	—	1	1	20
4.	M	*Sphaerocephalum longicaudatum*	—	1	—	1	20
5.	E.	*Trefusia longicauda*	1 spec.		—	1	20
		Total...	—	—	—	5	—

Nemic Index : 0,26. Composition of the soil : coarse sand mixed up with broken shells and a small quantity of mud only. A few Annelids and a Nemerteans were found at the same spot.

TABLE I *A*.

Nieuport, Chenal Ouest, sample 22, July 1934, 23 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	M.	*Theristus calceolatus*	2	7	1	10	23,8
2.	M.	*Theristus normandicus*	5	—	2	7	16,6
3.	C.	*Chromadorina microlaima*...	1	4	—	5	11,9
4.	M.	*Theristus acer*	2	1	—	3	7,1
5.	Ar.	*Ascolaimus elongatus*	2	—	1	3	7,1
6.	E.	*Viscosia viscosa*	—	3	—	3	7,1
7.	E.	*Enoploides labiatus*	3	—	—	3	7,1
8.	C.	*Chromadora nudicapitata*	1	1	—	2	4,8
9.	C.	*Monoposthia mielcki*	—	1	—	1	2,4
10.	E.	*Enoplolaimus propinquus*	—	—	1	1	2,4

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
11.	E.	*Oncholaimellus calvadosicus*	—	1	—	1	2,4
12.	E.	*Monocholaimus elegans*	1	—	—	1	2,4
13.	M.	*Eleutherolaimus stenosoma*	—	1	—	1	2,4
14.	C.	*Sabatiera punctata*	1	—	—	1	2,4
		Total...	—	—	—	42	—

Nemic Index : 1,82. Coarse sand mixed up with fine mud, Many tubes of annelids, Shells of Lamellibranchs.

TABLE II.

Nieuport, Chenal Est, sample 8, July 1934, 6 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	E.	*Enoplus communis*	—	—	7	7	50
2.	M.	*Theristus calceolatus*	1	—	1	2	14,2
3.	M.	*Eleutherolaimus stenosoma*	—	—	1	1	7,1
4.	C.	*Chromadonrina microlaima*	1	—	—	1	7,1
5.	C.	*Sabatieria punctata*	—	1	—	1	7,1
6.	C.	*Paracanthonchus elongatus*	—	—	1	1	7,1
7.	E.	*Viscosia viscosa*	—	—	1	1	7,1
		Total...	—	—	—	14	—

Nemic Index : 2,33. Shellsand with comparatively few mud, mixed up with it. Numerous eggs of Crustaceans and fishes.

TABLE II *A*.

Nieuport, Chenal Est, sample 16, July 1934, 5,5 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	C.	*Chromadora nudicapitula*	9	13	11	33	48,5
2.	E.	*Metaparoncholaimus campylocerus*	3	2	11	16	23,5
3.	C.	*Chromadorina macrolaima*	3	1	1	5	7,3
4.	M.	*Theristus acer*	3	1	—	4	5,8
5.	C.	*Sabatieria punctata*	2	—	1	3	4,4
6.	M.	*Monhystera parva*	—	2	—	2	2,9
7.	Ar.	*Axonolaimus villosus*	—	1	—	1	1,45
8.	Ar.	*Axonolaimus spinosus*	—	—	1	1	1,45
9.	E.	*Viscosia viscosa*	—	—	1	1	1,45
10.	E.	*Anoplostoma viviparum*	—	—	1	1	1,45
11.	E.	*Enoplus communis*	—	—	1	1	1,45
		Total...	—	—	—	68	—

Nemic Index : 12,36. Much mud, mixed up with a small quantity of sand; Tubes of annelids and annelids, young *Mytilus*.

TABLE II *B*.

Nieuport, Chenal Est, sample 17, 26-VI-7-VII-1934, 9 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	M.	*Theristus calceolatus*	10	2	4	16	69,5
2.	E.	*Viscosia viscosa*	2	—	—	2	8,7
3.	M.	*Monhystera parva*	—	—	1	1	4,34
4.	C.	*Paracyatholaimus proximus*	—	1	—	1	4,34
5.	Ar.	*Tripyloides marinus*	—	—	1	1	4,34
6.	Ar.	*Bathylaimus stenolaimus*	1	—	—	1	4,34
7.	E.	*Oncholaimus brachyvercus*	—	—	1	1	4,34
		Total...	—	—	—	23	—

Nemic Index : 2,55. Algae; *Pectinaria belgica*, young *Mytilus*.

TABLE II *C*.

Nieuport, Chenal Est, sample 23, July 1934, 12 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	E.	*Metaparoncholaimus campylocercus*	—	5	54	59	38,3
2.	C.	*Chromadora nudicapitata*	17	16	1	34	22,2
3.	C.	*Chromadorina microlaima*...	3	15	—	18	11,7
4.	C.	*Sabatieria vulgaris*	5	5	—	10	—
5.	E.	*Enoplus communis*	—	—	6	6	6,53
6.	C.	*Sabatiera quadripapillata*	1	3	—	4	2,61
7.	C.	*Chromadorina macrolaima*	1	2	—	3	3,26
8.	M.	*Theristus setosus*	1	2	—	3	3,26
9.	M.	*Monhystera parva*	2	—	—	2	1,30
10.	E.	*Adoncholaimus fuscus*	—	1	1	2	1,30
11.	E.	*Anticoma limalis*	—	1	1	2	1,30
12.	C.	*Paracathonchus caecus*	—	2	—	2	1,30
13.	M.	*Theristus acer*	—	2	—	2	1,30
14.	M.	*Monhystera microphthalma*	—	—	1	1	0,65
15.	C.	*Halichoanolaimus robustus*	—	1	—	1	0,65
16.	E.	*Catalaimus maxweberi*	—	1	—	1	0,65
17.	E.	*Vicosia viscosa*	—	—	1	1	0,65
18.	E.	*Anoplostoma viviparum*	—	—	1	1	0,65
19.	Ar.	*Ascolaimus elongatus*	—	1	—	1	0,65
		Total...	—	—	—	153	—

Nemic Index : 12,75. Mainly fine sand mixed up with some coarse and relatively much detritus and mud, tubes of Annelids, *Nereis*, Ostracoda, *Hermannella rostrata*, young *Mytilus*.

TABLE III.

Nieuport-Bains, Chenal Est, sample 9, 26-VI-7-VII-1934, 7 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	E.	*Viscosia viscosa*	1	—	5	6	35,3
2.	C.	*Chromadora nudicapitata*	1	2	1	4	23,5
3.	C.	*Chromadorina microlaima*	2	1	—	3	17,65
4.	C.	*Sabatieria punctata*	—	—	2	2	11,75
5.	C.	*Paracanthonchus caecus*	—	—	1	1	5,83
6.	E.	*Anticoma limalis*	1	—	—	1	5,83
		Total...	—	—	—	17	—

Nemic Index : 2,42. Fine sand with comparatively much mud, young *Mytilus*, annelids, tubes of annelids.

TABLE IV.

Nieuport-Bains, sample 13, July 1934, 2 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	C.	*Sabatieria vulgaris*	2	1	—	3	23
2.	M.	*Mononcholaimus elegans*	1	—	2	3	23
3.	M.	*Desmolaimus zeelandicus*	—	1	1	2	15,3
4.	M.	*Theristus*...	—	2	—	2	15,3
5.	C.	*Odontonema tenuis*	—	1	—	1	7,65
6.	C.	*Dichromadora cephalata*	—	1	—	1	7,65
7.	M.	*Theristus parasetosus*	—	1	—	1	7,65
		Total...	—	—	—	13	—

Nemic Index : 6,5. Coarse shellsand with some annelids and their tubes, *Mactra*.

TABLE V.

Nieuport-Bains, Ouest du Chenal, sample 15, 26-VI-7-VII-1934, 34 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	M.	*Theristus normandicus*	2	—	—	2	25
2.	M.	*Theristus longisetosus*	—	—	1	1	12,5
3.	E.	*Metaparoncholaimus campylocerus*	—	1	—	1	12,5
4.	E.	*Viscosia viscosa*	—	—	1	1	12,5
5.	E.	*Monocholaimus elegans*	—	—	1	1	12,5
6.	C.	*Paracanthonchus caecus*	—	—	1	1	12,5
7.	C.	*Dichromadora cephalata*	—	1	—	1	12,5
		Total...	—	—	—	8	—

Nemic Index : 0,23.

TABLE VI.

Nieuport, Estacade, sample 12, July 1934, 5 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	M.	*Theristus acer*	2	—	5	7	41,1
2.	M.	*Theristus calceolatus*	—	1	1	2	11,7
3.	E.	*Enoplus communis*	—	—	2	2	11,7
4.	E.	*Anticoma limalis*	—	—	1	1	5,85
5.	E.	*Viscosia viscosa*	—	1	—	1	5,85
6.	M.	*Eleutherolaimus stenosoma*	—	—	1	1	5,85
7.	M.	*Theristus normandicus*	1	—	—	1	5,85
8.	C.	*Paracanthonchus caecus*	—	—	1	1	5,85
9.	C.	*Dichromadora cephalata*	1	—	—	1	5,85
		Total...	—	—	—	17	—

Nemic Index : 3,4. Coarse sand with comparatively much mud, tubes of annelids, young annelids.

TABLE VI *A*.

Nieuport, Estacade, sample 21, July 1934, 11 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	M.	*Theristus normandicus*	3	—	2	5	29,4
2.	E.	*Oncholaimus brachycercus*	1	—	2	3	17,6
3.	E.	*Mononcholaimus elegans*	1	—	1	2	11,7
4.	Ar.	*Bathylaimus stenolaimus*	1	1	—	2	11,7
5.	M.	*Metalinhomoeus typicus*	1	1	—	2	11,7
6.	Ar.	*Ascolaimus elongatus*	—	—	1	1	5,85
7.	C.	*Oistolaimus suecicus*	1	—	—	1	5,85
8.	C.	*Spilophorella paradoxa*	—	—	—	1	5,85
		Total...	—	—	—	17	—

Nemic Index : 1,54. Coarse shellsand with some annelids, amphipods and Ostracods.

BLANKENBERGHE.

TABLE VII.

Blankenberghe, Brise-lames, sample 2, 6-VII-1934, 36 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	C.	*Dichromadora geophila*	2	—	—	2	16,6
2.	E.	*Enoplolaimus propinquus*	—	—	2	2	16,6
3.	E.	*Moncholaimus elegans*	—	—	2	2	16,6

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
4.	E.	*Oncholaimus brachycercus*	—	—	1	1	8,3
5.	C.	*Dichromadora setosa*	1	—	—	1	8,3
6.	Ar.	*Bathylaimus stenolaimus*	—	1	—	1	8,3
7.	M.	*Theristus acer*	—	—	1	1	8,3
8.	M.	*Eleutherolaimus stenosoma*	—	—	1	1	8,3
9.	M.	*Theritus* spec.	—	1	—	1	8,3
		Total...	—	—	—	12	—

Nemic Index : 0,33. Shellsand with young *Mytilus* and algae.

TABLE VII *A*.

Blankenberghe, Brise-lames, sample 3, 6-VII-1934, 63 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	E.	*Enoplolaimus vulgaris*	—	5	13	18	25
2.	E.	*Enoploides labiatus*	—	3	7	10	13,8
3.	Ar.	*Bathylaimus stenolaimus*	5	3	1	9	12,5
4.	Ar.	*Odonthophora tenuicaudata*	1	1	6	8	11,1
5.	E.	*Viscosia viscosa*	—	2	2	4	5,55
6.	C.	*Dichromadora hyalocheile*...	2	1	1	4	5,55
7.	C.	*Chromadora nudicapitata*	—	3	1	4	5,55
8.	C.	*Longicyatholaimus clavicaudatus*	1	1	1	3	4,1
9.	C.	*Odontonema tenuis*	—	3	—	3	4,1
10.	C.	*Microlaimus ostracion*	—	—	3	3	4,1
11.	C.	*Dichromadora setosa*	1	—	—	1	1,36
12.	Ar.	*Bathylaimus paralongisetosus*	1	—	—	1	1,36
13.	M.	*Theristus normandicus*	1	—	—	1	1,36
14.	M.	*Eleutherolaimus iniquiselosus*	—	—	1	1	1,36
15.	M.	*Steineria mirabilis*	—	1	—	1	1,36
16.	E.	*Oncholaimellus calvadsicus*	—	1	—	1	1,36
		Total...	—	—	—	12	—

Nemic Index : 1,14. Mainly coarse shellsand with some annelids.

TABLE VIII.

Blankenberghe, Bassin chasse, sample 4, 6-VII-1934, 50 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	M.	*Theristus tenuispiculum*	—	6	—	6	—
		Total...	—	—	—	6	—

Nemic Index : 0,12. Very fine putrifying mud, smelling H^2S, giving after some time distinct ferric oxydation.

ZEEBRUGGE.

TABLE IX.

Zeebrugge, Estacade Est, sample 5, 6-VII-1934, 80 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	E.	*Oncholaimus brachycercus*	—	1	—	1	33,3
2.	Ar.	*Ascolaimus elongatus*	—	—	1	1	33,3
3.	C.	*Oistolaimus suecicus*	1	—	—	1	33,3
		Total...	—	—	—	3	—

Nemic Index : 0,04. Fine shellsand with comparatively much mud...

TABLE IX *A*.

Zeebrugge, au bout de l'estacade, sample 6, 6-VII-1934, 60 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	E.	*Enoplus communis*	—	—	220	220	31,7
2.	E.	*Anticoma limalis*	33	42	86	161	23,05
3.	M.	*Theristus acer*	32	40	30	102	14,7
4.	C.	*Chromadora nudicapitata*	32	45	17	94	13,5
5.	E.	*Metaparoncholaimus campylocercus*	3	7	40	50	7,20
6.	M.	*Paramonhystera elliptica*	—	9	4	13	1,87
7.	C.	*Paracanthonchus caecus*	3	4	6	13	1,87
8.	C.	*Chromadorina microlaima*	9	3	1	13	1,87
9.	E.	*Viscosia viscosa*	—	1	10	11	1,48
10.	Ar.	*Araeolaimus elegans*	1	4	1	6	0,86
11.	C.	*Sabatieria vulgaris*	—	2	1	3	0,43
12.	C.	*Neochromadora quinquepapillata*	1	2	—	3	0,43
13.	Ar.	*Axonolaimus paraspinosus*...	1	1	—	2	0,28
14.	C.	*Choniolaimus papillatus*	—	1	—	1	0,14
15.	E.	*Anoplostoma viviparum*	—	—	1	1	0,14
16.	M.	*Theristus normandicus*	—	1	—	1	0,14
		Total...	—	—	—	694	—

Nemic Index : 11,56. Much mud, mixed up with a few sand only. Numerous annelids, tubes of the same, Megalopa stages.

TABLE X.

Zeebrugge, canal de Bruges, sample 10, 6-VII-1934, 11 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	E.	*Viscosia viscosa*	8	4	4	16	39
2.	Ar.	*Ascolaimus elongatus*	1	1	5	7	17,1
3.	M.	*Paralinhomoeus tenuicaudatus*	—	2	1	3	7,3
4.	C.	*Paracanthonchus caecus*	—	—	2	2	4,87
5.	C.	*Sabatieria vulgaris*	1	—	1	2	4,87
6.	Ar.	*Leptolaimus setiger*	—	1	1	2	4,87
7.	E.	*Oncholaimus brachycercus*	—	1	1	2	4,87
8.	Ar.	*Axonolaimus paraspinosus*	—	1	—	1	2,43
9.	Ar.	*Tripyloides marinus*	1	—	—	1	2,43
10.	Ar.	*Tripyloides gracilis*	1	—	—	1	2,43
11.	C.	*Hypodontolaimus buetschlii*	1	—	—	1	2,43
12.	M.	*Theristus acer*	1	—		1	2,43
13.	M.	*Eleutherolaimus stenosoma*	—	1	—	1	2,43
14.	M.	*Theristus normandicus*	1	—	—	1	2,43
		Total...	—	—	—	41	—

Nemic Index : 3,72. Shellsand with few mud.

TABLE XI.

Zeebrugge, Harbour, sample 11, 6-VII-1934, 8 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	M.	*Theristus acer*	13	6	45	64	29,22
2.	E.	*Enoploides labiatus*	8	8	12	28	12,8
3.	Ar.	*Ascolaimus elongatus*	4	6	18	28	12,8
4.	E.	*Viscosia viscosa*	14	4	8	26	11,87
5.	M.	*Theristus normandicus*	2	7	7	16	7,3
6.	E.	*Adoncholaimus fuscus*	4	—	9	13	5,93
7.	C.	*Chromadorita tentabunda*	2	3	—	5	2,28
8.	C.	*Chromadorita ditlevseni*	1	3	—	4	1,82
9.	C.	*Chromadorina nicrolaima*	2	1	1	4	1,82
10.	C.	*Cyatholaimus elongatus*	1	3	—	4	1,82
11.	C.	*Sabatieria breviseta*	1	1	2	4	1,82
12.	Ar.	*Tripyloides marinus*	1	1	2	4	1,82
13.	C.	*Chromadora nudicapitata*	1	2	—	3	1,36
14.	C.	*Oistolaimus suecicus*	—	—	3	3	1,36
15.	M.	*Eleutherolaimus stenosoma*	—	3	—	3	1,36
16.	E.	*Oncholaimus brachycercus*	1	—	2	3	1,36
17.	E.	*Catalaimus maxweberi*	—	2	- -	2	0,91
18.	Ar.	*Axonolaimus spinosus*...	—	—	2	2	0,91

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
19.	C.	*Neochromadora poecilosoma*	—	1	—	1	0,45
20.	C.	*Sabatieria punctata*	—	1	—	1	0,45
21.	M.	*Monhystera parva*	—	1	—	1	0,45
		Total...	—	—	—	219	—

Nemic Index : 27,37. Shellsand covered with a layer of mud; herein tubes of annelids, algae, faeces of molluscs, foraminfera.

TABLE XI *B*.

Zeebrugge, Harbour, sample 18, 6-VII-1934, 10 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	M.	*Theristus normandicus*	29	18	20	67	26,5
3.	M.	*Theristus acer*	13	13	41	67	26,5
3.	Ar.	*Ascolaimus elongatus*	4	1	36	41	16,27
4.	E.	*Viscosia viscosa*	16	2	10	28	11,1
5.	Ar.	*Tripyloides marinus*	9	3	13	25	9,9
6.	M.	*Theristus setosus*	1	3	1	5	1,98
7.	Ar.	*Axonolaimus paraspinosus*	1	2	1	4	1,6
8.	M.	*Eleutherolaimus stenosoma*	—	—	4	4	1,6
9.	C.	*Chromadorita tentabunda*	1	2	—	3	1,2
10.	C.	*Chromadora nudicapitata*	2	—	—	2	0,8
11.	C.	*Paracanthonchus spectabilis*	—	1	—	1	0,4
12.	C.	*Cyatholaimus demani*	—	—	1	1	0,4
13.	C.	*Neochromadora poecilosoma*	—	1	—	1	0,4
14.	E.	*Enoploides labiatus*	—	—	1	1	0,4
15.	E.	*Catalaimus maxweberi*	1	—	—	1	0,4
16.	E.	*Oncholaimus oxyuris*	1	—	—	1	0,4
		Total...	—	—	—	252	—

Nemic Index : 25,2. Much coarse sand with comparatively few fine mud, tubes of annelids, Gastropoda, Lamellibranchs, Foraminfers, Megalopa.

TABLE XI *C*.

Zeebrugge, Harbour, sample 14, 6-VII-1934, 4 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	E.	*Anoplostoma viviparum*	—	—	1	1	50
2.	C.	*Cyatholaimus punctatus*	—	1	—	1	50
		Total...	—	—	—	2	—

Many algae, a few Foraminifers, few *Hydrobia ulvae*, Ostracods.
Nemic Index : 0,5.

TABLE XII.

Zeebrugge-Môle, South border, sample 1, 6-VII-1934, 92 cc,

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	E.	*Oncholaimellus calvadosicus*	11	104	69	184	63,4
2.	M.	*Theristus normandicus*	17	6	20	43	14,8
3.	E.	*Enoplolaimus propinquus*	3	—	13	16	5,52
4.	C.	*Choniolaimus papillatus*	1	8	—	9	3,1
5.	C.	*Prochromadorella germanica*	5	3	1	9	3,1
6.	C.	*Oistolaimus suecicus*	4	1	2	7	2,41
7.	C.	*Monoposthia mielcki*	—	3	2	5	1,72
8.	Ar.	*Ascolaimus elongatus*	--	--	3	3	1,03
9.	Ar.	*Bathylaimus stenolaimus*	—	1	1	2	0,69
10.	C.	*Neochromadora longiesetosa*	—	1	1	2	0,69
11.	C.	*Chromadorita tentabunda*	1	—	—	1	0,34
12.	C.	*Neochromadora poecilosoma*	—	1	—	1	0,34
13.	C.	*Paracanthonchus macrodon*	—	1	—	1	0,34
14.	C.	*Dichromadora geophila*	—	1	—	1	0,34
15.	E.	*Anticoma limalis*	—	—	1	1	0,34
16.	E.	*Oncholaimus brachycercus*	—	—	1	1	0,34
17.	E.	*Metaparoncholaimus campylocercus*	—	—	1	1	0,34
18.	E.	*Enoplus communis*	—	—	1	1	0,34
19.	M.	*Steineria mirabilis*	—	—	1	1	0,34
20.	M.	*Metadesmoleimus labiosetosus*	—	—	1	1	0,34
		Total...	—	—	—	290	—

Nemic Index : 3,15. Coarse shellsand with a very few mud only.

TABLE XII *A*.

Zeebrugge-Môle, sample 19, 6-VII-1934, 1 cc.

N.	Order.	SPECIES.	♂	♀	Juv	Total.	%
1.	C.	*Chromadora nudicapitata*	3	3	2	8	50
2.	M.	*Monhystera parva*	1	1	1	3	18,6
3.	An.	*Rhabditis marina*	1	—	—	1	6,2
4.	An.	*Plectus* spec. *cirrhatus* affinis	—	—	1	1	6,2
5.	E.	*Anoplostoma viviparum*	—	—	1	1	6,2
6.	M.	*Theristus oxycerca*	—	—	1	1	6,2
7.	M.	*Monhystera* spec.	—	1	—	1	6,2
		Total...	—	—	—	16	—

Nemic Index : 16. Many algae, a small quantity of sand, *Hydrobia* and Faeces of Molluscs.

TABLE XII *B*.

Zeebrugge, Mare à côté du Môle, sample 20, 6-VII-1934, 10 cc.

N.	Order.	SPECIES.	♂	♀	Juv.	Total.	%
1.	C.	*Dichromadora geophila*	258	269	19	546	80,7
2.	M.	*Monhystera microphthalma*	18	48	20	86	12,7
3.	M.	*Theristus setosus*	9	5	4	18	2,66
4.	E.	*Adoncholaimus thalassophygas*	3	—	3	6	0,88
5.	An.	*Rhabditis marina*	2	1	3	6	0,88
6.	M.	*Monhystera elegantula*	—	5	1	6	0,88
7.	E.	*Adoncholaimus fuscus*	1	1	—	2	0,29
8.	M.	*Theristus normandicus*	1	—	—	1	0,14
9.	E.	*Viscosia viscosa*	—	—	1	1	0,14
10.	C.	*Sabatieria vulgaris*	1	—	—	1	0,14
11.	C.	*Chromadora nudicapitata*	1	—	—	1	0,14
12.	Ar.	*Ascolaimus elongatus*	—	1	—	1	0,14
		Total...	—	—	—	675	—

Nemic Index : 67,3. Yellowbrown, sulfur-iron containing mud with an enormous number of *Cyanophyceae*.

II. — **ECOLOGICAL REMARKS.**

The Monograph of 1933 did not permit De Coninck and me to draw any special conclusions from the biocoenotic Tables known at that date. The more extensive material now at hand enables me not only to give some results of special interest for the belgian nemic fauna, but also permits a comparison with what is known about the Zuiderzee and the nemic population of the habitats studied in that territory.

As far as the nemic index concerns we may say that in general the more mud a certain sample contains, the higher this index will be, in other words the number of nemas per cc of the sample depends on the quantity of mud the latter contains.

This result seems to be contradictory to what other authors, for instance Allgén state. He and othere are of the opinion that the pure shellsand offers the best opportunities for a wealthy nemic population. The shellsand should be particularly rich in nemas.

Now unfortunately Allgén himself nor other authors, as far as known to me have made quantitative studies of the nemic population of their habitats.

Their results have to be considered as qualitative only, and seen from that point of view, they present in reality a coenobiosis in shellsand rhich in species, which is of course not the same as rich in specimens. Similar habitats which present a relatively great number of species although the biocoenosis is poor, seen from the quantitative point of view, are present in the material at hand, confer for instance Table VII with 9 species and an index of 0,33, Table VII *A* with 16 species and an index of 1,14 only, Table X with 14 species and an index of 3,72, Table XII with 20 species and an index of 3,15, Table I *A* with 14 species and an index of 1,82 to call the attention to the most obvious examples only.

All biocoenoses may be divided into 2 groups. The first group embraces those biocoenoses in which none of the species has the absolute majority, whereas this is the case with the leading species in the biocoenoses of the second group.

In the case none of the species constituting together a biocoenosis reaches a majority we find at the same time a great number of species represented by a single of at the utmost by a few specimens. Now it is no pure chance that all the biocoenoses pointed to especially on the foregoing page as biocoenoses with a comparatively large number of constituents and at the same time a low index belong to the biocoenoses in which none of the constituents has the majority. As to my opinion this prooves two things. For instance that the biocoenosis in question is due to great daily changes, concordant with flood and ebb. The watercurrents remove passively a certain quantity of the nemas together with the sand they bring in motion or transport. And so the second statement arises, that a part if not the greater portion of the species in the mentioned samples which are represented by a single or a few specimens only are occasionally there and form no constant part of the biocoenosis. With this I will say that perhaps the day after my visist or of that of Dr. Leloup several of the species, represented by only one or a few specimens would have not be found back, so that the composition of this kind of fauna is not a very constant one; in contradiction to those biocoenoses where one of the species is able to produce a leading majority, like this is for instance the case with the biocoenoses IX and X from the second monograph, page 10 and with the biocoenoses brought in this paper and enumerated as XII-XII *B* where we caught the samples from localities, where the medium does not change to a great extent.

The explanation for the comparative richness in species of the pure shellsand lays at hand. Nematodes swept by the waves to this kind of habitat find a hold in the pores between the sand particles. The coarse shellsand works as a sieve which retains the nemas and affords to them optimum conditions for agreable movement without however giving good chance for procuring feed; for that reason the sand in question is usually almost sterile from this point of view. So most of the species do not reproduce in this habitat and quickly move to more fertile places, when the waves do bring them there or die off.

In general we may say that the richness of the nemic population, quantitatively spoken depends upon the quantity of mud and detritus present in the habitat. Cobb has demonstrated that the bulk of the marine nemas live in the superior 15 mm of the soil. Sedimentation of sand and mud leads to the condition that sand is shifted under the mud, since the latter is much less heavier. Now we may easily understand that, when a layer of 10 to 15 mm of mud is shifted over an underground of pure sand, it is only the mud that counts; in this case we have to consider the habitat as a habitat of pure mud or al most pure mud and it is the latter that affords optimal conditions for the breeding of nemas in great quantities, like may prooved also by the Tables XII *B*, probably also XI *B*, Table X, Table IX *A* and other biocoenoses with a high index.

I believe the discrepancies in the literature on this point may find a easy and logical explanation, when the foregoing is taken into account. In Table XII *B* where *Dichromadora geophila* prevails and other forms like *Monhystera microphthalma*, *Adoncholaimus thalassophygas*, etc. are found, species which often occur in brackish soil, we have a biocoenosis apparently at the brink between land and sea. The first 5 species of this habitat may easily live in brackish soil like this occurs in Zeeland and other countries with a brackish soil

III. — SURVEY OVER THE MARINE AND BRACKWATERSPECIES OF FREELIVING NEMAS OF THE BELGIAN COAST WITH ZOOGEOGRAPHICAL DATA (Compare Monograph II, Table XI).

In the following Table XIII, I will bring only those species which are new to the belgian fauna. Under these species several occasional forms represented by a single or a few specimens are fonud, so that it does not wonder that they have escaped former explorations. Altogether 31 species were found new to the belgian fauna, under which, the latter marked with an asterisk, 8 new to science.

TABLE XIII.

SPECIES NEW TO THE BELGIAN FAUNA.

Number.	SPECIES.	ZOOGEOGRAPHICAL SURVEY.							
		Atlantic Coast of Europe.	Channel.	North Sea				Baltic.	Belgium.
				Walcheren.	Zuider Zee.	Helgoland.	Danmark. Norway.		
	ORDER **Enoploidea.**								
	FAM. ENOPLIDAE.								
86	*Enoploides labiatus* BUETSHLI...	−	−	−	+	+	−	+	+
87	*Enoplolaimus vulgaris* DE MAN	−	+	+	−	−	+	+	+
	FAM. ONCHOLAIMIDAE.								
88	*Mononchlaimus elegans* KREISS	−	+	−	+	−	−	−	+
89	*Adoncholaimus fuscus* (BASTIAN)	+	+	+	+	+	+	+	+
90	*Anoplostoma viviparum* (BASTIAN)...	−	+	+	+	−	+	+	+
	FAM. ENCHELIDIIDAE.								
91	*Catalaimus maxweberi* DE MAN	−	−	+	+	−	+	−	+
	ORDER **Chromadoroidea.**								
	FAM. CYATHOLAIMIDAE.								
92	*Paracanthonchus elongatus* (DE MAN)... ...	+	−	+	−	−	+	−	+
93	*Paracanthonchus macrodon* DITLEVSEN ...	+	−	−	−	−	+	−	+
94	*Paracyatholaimus proximus* (BUETSCHLI)	−	−	−	+	−	+	+	+
* 95	*Longicyatholaimus clavicaudatus* nov. sp.	−	−	−	−	−	−	−	+
	FAM. DESMODORIDAE.								
96	*Monoposthia mielcki* STEINER	+	−	−	−	−	−	−	+
	FAM. CHROMADORIDAE.								
97	*Odontonema tenuis* (G. SCHNEIDER)	+	−	−	+	−	+	+	+
98	*Dichromadora setosa* (BUETSCHLI)...	−	−	−	+	−	+	+	+
99	*Dichromadora geophila* (DE MAN)...	−	−	+	+	−	+	−	+
* 100	*Neochromadora longisetosa* nov. sp.	−	−	−	−	−	−	−	+
* 101	*Neochromadora quinquepapillata* nov. sp.	−	−	−	−	−	−	−	+
102	*Chromadorita tentabunda* DE MAN...	−	−	−	+	−	+	−	+

Number.	SPECIES.	ZOOGEOGRAPHICAL SURVEY.							
		Atlantic Coast of Europe.	Channel.	North Sea				Baltic.	Belgium.
				Walcheren.	Zuider Zee.	Helgoland.	Danmark. Norway.		
	FAM. COMESOMIDAE.								
103	*Sabatieria punctata* KREIS...	—	—	—	—	+	+	—	+
	FAM. MICROLAIMIDAE.								
*104	*Microlaimus ostracion* nov. sp.	—	—	—	—	—	—	—	+
	ORDER **Araeolaimoidea.**								
	FAM. AXOMOLAIMIDAE.								
105	*Odonthophora tenuicaudata* ALLGÉN	—	—	—	—	—	+	—	+
106	*Axonolaimus villosus* SKWARRA	—	—	—	—	—	—	+	+
107	*Araeolaimus elegans* DE MAN...	—	—	+	+	—	+	—	+
	ORDER **Monhysteroidea.**								
	FAM. MONHYSTERIDAE.								
108	*Paramonhystera elliptica* FILIPJEV	—	—	—	—	—	—	—	+
109	*Theristus oxycerca* DE MAN	—	—	+	—	+	—	—	+
*110	*Monhystera elegantula* nov. sp.	—	—	—	—	—	—	—	+
*111	*Metadesmolaimus labiosetosus* nov. sp. ...	—	—	—	—	—	—	—	+
	FAM. LINHOMOEIDAE.								
*112	*Eleutherolaimus iniquisetosus* nov. sp. ...	—	—	—	—	—	—	—	+
113	*Metalinhomoeus typicus* DE MAN	—	—	+	+	—	—	—	+
114	*Paralinhomoeus tenuicaudatus* (BUETSCHLI)	—	—	+	—	+	—	—	+
*115	*Spaerocephalum longicaudatum* nov. sp....	—	—	—	—	—	—	—	+
116	*Desmolaimus zeelandicus* DE MAN...	—	—	+	+	—	—	—	+
	TOTAL...	4	4	11	12	51	49	30	
	TOTAL OF TABLE XI OF MONOGRAPH II.	12	24	34	28	31	45	44	85
	GRAND TOTAL	16	28	45	40	36	59	53	116

Interesting new data are for instance the findings of *Monosposthia mielcki*, formerly found by Steiner in the Barentzsea and *Paracanthonchus macrodon* till so far only found along the Denmark Coast.

Other species denote that the number of species the belgian fauna has in common with that of Holland and the ajacent countries becomes still greater the more extensive and intensive the exploration of the nemic faunas is done, which is not surprising, since the same watercurrents strive the shores of both countries.

SYSTEMATICAL PART

Order II : CHROMADOROIDEA

Family I : CYATHOLAIMIDAE.

Genus LONGICYATHOLAIMUS Micoletzky 1924.

Syn. : *Cyatholaimus* Bastian 1865 in parte.

The Genus *Longicyatholaimus*, erected by Micoletzky embraces a number of species of widely divergent areas : australian waters, the Mediterranean, the Kolafjord, whereas Allgén recently found a representant of this Genus in the Trondjhemsfjord. I doubt however if Allgén's species *Longicyatholaimus zosterae* Allgén is congeneric, since it apparently misses the differentiated lateral fields marked of by larger dots, which character is essential for the Genus. Moreover the structure of the oral cavity of Allgén's species as well as its genital armature are quite distinct from the same structures in the representants of the Genus *Longicyatholaimus*.

At the other hand Allgén's new species *Cyatholaimus tautraënsis* from Trondjhemsfjord has to be reckoned to the Genus *Longicyatholaimus*.

In the belgian material I met with a species, which although closely ressembling *Longicyatholaimus tautraënsis* (Allgén) differs from the latter in some essential points and has therefore to be considered as new.

This new species, just like *Longicyatholaimus tautraënsis* (Allgén) prooves the close affinity of the Genus *Longicyatholaimus* with the Genus *Choniolaimus*.

95. **Longicyatholaimus clavicaudatus** Schuurmans Stekhoven 1935.

Fig. 1.

1 ♂, 1 ♀, 1 juv. Blankenberghe, Sample 3.
1 ♀, Zeebrugge, Sample 6.
1 ♂, 8 ♀, Zeebrugge, Sample 1.

Dimensions : ♂. L. : 1,54 mm; $\alpha=48{,}1$; $\beta=7{,}3$; $\gamma=8{,}7$.

$$\text{♂}\ \frac{0 \quad 216 \quad 1064 \quad 1364}{18 \quad 28 \quad 24 \quad 32 \quad 6}\ 1{,}54 \text{ mm.}$$

♀. L. : 1,296 mm; $\alpha=36$; $\beta=5{,}6$; $\gamma=7{,}7$.

$$\text{♀}\ \frac{0 \quad 228 \quad 728 \quad 1128}{28 \quad 32 \quad 36 \quad 24}\ 1{,}296 \text{ mm.}$$

Habitus : Body elongate, slender, gradually tapering towards the anterior end where it measures 0,56 × the maximal width in the ♂ and 0,77 × the maximal width in the ♀.

Cuticule transversely striated, the rings marked by rows of dots. Just caudad from the amphids the transverse rows of dots lack on the lateral fields, which are marked here by two longitudinal rows of larger dots, more behind by 4 longitudinal rows or larger dots, separated by relatively large distances, the distance between the middle pair of dots growing wider towards the caudal end. Here the dots of the median pair are lenticular and not square like at the anterior end of the body. At the sides of each lateral field one finds longitudinal rows of pores, being the outlets of the corresponding skinglands. Lateral fields about 1/3 × corresponding body diameter. Body setae seen.

Amphids spiral, transverse, at 1/3 × cephalic diameter from the anterior end, their transverse diameter about 1/2 of the corresponding bodydiameter, the spiral consisting of 5 circumvolutions.

Head truncated in front, with 6 distinct lips and as many rather distinct labial papillae. From the 10 (— 12?) cephalic setae the proximal crown is half as long as the cephalic diameter; the hairs of the distal crown are no longer than 1/4 of the cephalic diameter.

Buccal cavity apparently more or less cyathiform, somewhat protruded in the ♂ depicted in figure 1, distinctly showing the voluminous dorsal tooth. By these features the present species shows affinities to the representants of the Genus *Paracanthonchus* of which it may be distinguished i.a at once by the genital armature (see below).

Ventral gland and *excretory pore* not observed.

Male genital armature. *Spicula* rather stout with indications of a longitudinal list, distal end of the spicula pointed. *Gubernaculum* embracing the spicula at their distal ends like a kind of colleret, its proximal portion rodlike, pointing dorsally. Chord of the spicula 1 ½ anal diameters, *Gubernaculum* slightly more than 1 anal diameter. 22 distinct cupuliform preanal papillae.

Tail clavate, 4 ½ × anal diameters long. Width at the apex × 2/9 anal diameters.

The proximal half of the tail is conical, its distal half filiform to clavate at the tip with a row of rather long hairs along the ventral side.

Family III : **DESMODORIDAE.**

27. **Oistolaimus suecicus** Allgén.

Fig. 2.

This time I found the opportunity to study more closely the praeanal papillae of *Oistolaimus suecicus* which were 18 in number and have a very characteristical s-shape.

Family V : CHROMADORIDAE.

98. **Dichromadora setosa** Buetschli.

Fig. 3.

1 ♂, Blankenberghe, Sample 3.

Dimensions : ♂. L. : 0,592 mm; $\alpha = 29$; $\beta = 6$; $\gamma = 6$.

$$\frac{0 \quad 100 \quad M \quad 492}{14 \quad 16 \quad 20 \quad 16} \; 0{,}592 \text{ mm.}$$

Both Buetschli and Allgén have figured the species in question, but none of them with sufficient detail. So it may be of some value to give some more figures from this interesting species and besides to redescribe it. Compared with Allgén's specimens the ♂ in question is comparatively small.

Habitus : Body almost the same width trhoughout, slightly narrowed anteriorly, tail tapering. The most obvious feature of this species are the long hairs, placed along the body in longitudinal rows and giving the animal a filthy appearance.

Cuticula distincly ringed, the rings beginning close behind the amphids Rings marked by minute dots, those bordering at each side the lateral fields much larger, although still relatively fine. *Lateral fields* broad, width of the same slightly more than 1/3 of the body diameter. Body setae 1 to 1 ½ body diameters long.

Amphids slitlike, narrow, half as wide as the corresponding diameter, at 0,21 cepalic diameters of the anterior end.

Head bluntly rounded anteriorly with a crown of 6 labial papillae, cephalic papillae setiform, cephalic setae long and slender about 1,6 times as long as the corresponding cephalic diameter.

Buccal cavity with a very shallow vestibulum, apparently possessing a likewise minute diadem. Dorsal tooth comparatively large, besides 2 small subventral denticles situated at a level with the amphids Oesophagus distinctly bulbar round the buccal cavity, its dorsal sector more obviously thickened than its ventral portion. Posterior bulb with strong inner lining, 0,2 × oesophageal length.

Excretory pore not seen.

Spicula strongly curved, comparatively slender, hardly swollen at their proximal end, pointed distally, spicular chord 1,1 anal diameters long, *Gubernaculum* more or less spoon-shaped, 0,77 anal diameters long. Allgén describes the presence of 8 preanal papillae, but I could not find them and Allgén's figure is not very clear in this point.

Tail tapering. Terminal tubulus missing the transverse striae, Lateral fields gradually narrowing on the tail. The latter 6 anal diameters long.

Dichromadora setosa was found also in the Zuiderzee, in the southern parts of the Kattegat, in the Kieler Bucht, in Finland near Tvaerminne and in Kurland, Libau.

100. **Neochromadora longisetosa** Schuurmans Stekhoven.

Fig. 4.

1 ♀, 1 juv. Zeebrugge, Sample 1.

Dimensions : ♀. L. : 0,956 mm; $\alpha = 20$; $\beta = 5{,}1$; $\gamma = 7{,}45$. V = 58 %.

0	92	116	304	516	596 mm.
14		28	30	16	

The species in question apparently belongs to the Genus *Neochromadora*, with its dorsal tooth provided with a movable apophysis, the lateral fields being not very distinct and beginning some distance behind the anterior end, fairly marked by larger dots, More in front there are 2 rows more caudad 4 longitudinal rows of larger dots are present on the lateral fields. Body setae very long in the species in question; even longer than in *Chromadorita longisetosa*, to which species the present species resembles rather much.

Body comparatively stout, narrowing anteriorly and tapering behind *Cuticula* distinctly ringed, the rings bearing transverse rows of dots.

Lateral fields not very pronounced, Next to the lateral fields irregularly distributed pores, being the outlets of skin glands are to be seen.

Body setae 0,83 × corresponding body diameter.

Amphids narrow slitlike, almost 1/2 of the corresponding cephalic diameter at 1/3 cephalic diameter from the foreborder.

Head bluntly rounded. Lips apparently intruded, inner crown of labial papillae not observed, cephalic papillae setiform, cephalic setae long and slender, about 1,4 cephalic diameters long.

Buccal cavity shallow, dorsal tooth with distinct apophysis, ventral teeth minute. *Oesophagus* with anterior assymmetrical swelling, the dorsal sector being very prominent. Posterior bulb wide, 0,22 × oesophageal length.

Nerve ring just cephalad to the posterior bulb.

Tail tapering 5 anal diameters long.

101. **Neochromadora quinquepapillata** Schuurmans Stekhoven.

Fig. 5.

1 ♂ and 2 ♀ ♀ from Zeebrugge, Sample 6.

Dimensions : ♂. L. : 1,516 mm; $\alpha = 54{,}8$; $\beta = 8$; $\gamma = 10{,}2$.

0	168	M	1368	1,516 mm.
12	24	24	28	

L. : ♀1, 1,544 mm; $\alpha=38,6$; $\beta=8,2$; $\gamma=9,1$.

$$\frac{0 \quad 188 \quad 748 \quad 1384}{16 \quad 28 \quad 40 \quad 24} \text{ 1,544 mm.}$$

L. : ♀2, 1,6 mm; $\alpha=40$; $\beta=8,6$; $\gamma=7,6$.

$$\frac{0 \quad 164 \quad 728 \quad 1392}{20 \quad 30 \quad 40 \quad 24} \text{ 1,6 mm.}$$

The identification of this species brought some difficulties. At first I thought to have to do with *Neochromadora poecilosoma*, but closer study revealed that it might be distinguished from the latter species by the distinctly shorter cephalic setae, the absence of distinct lateral fields on the caudal half of the body, the smaller number of preanal papillae, the difference in shape of spicula and gubernaculum and other characteristics.

With *Chromadorita ditlevseni* it likewise shows some points of ressemblance but the latter does not possess lateral fields on the anterior half of the body like the present species has. And certainly it is also not identical with *Neochromadora craspedota*, with which it has in common the feature that the dots marking the lateral fields are more or less fused or at least connected on some parts of the body. So I think it wise to give the species in question a new name.

Body comparatively slender, tapering as well in front as towards the end of the tail. *Cuticula* transversely striated with distinct rings, the latter bearing rows of points and bars, Just caudad from the head the lateral fields are marked by a double row of distinct dots, near the cloaca these dots are connected more or less giving thus an ornementation not unlike that of *Neochromadora craspedota* Steiner. Pores of skin glands irregularly scattered sideways from the lateral fields. Body setae relatively short and scarce.

Head elongate rounded bluntly, its skin presenting some rows of finer dots. *Amphids* narrow, slitlike, halfmoon-shaped, not quite half the corresponding cephalic diameter, at 0,28 cephalic diameter from the anterior end.

Labial and cephalic papillae not observed, apparently minute, Cephalic setae 41 % of corresponding cephalic diameter. *Buccal cavity* shallow, with a distinct dorsal tooth, ventral teeth not seen. *Oesophagus* symmetrical anteriorly, without a prominent dorsal swelling. Caudal end of the oesophagus hardly swollen and without a proper bulb.

Genital armature consisting of 5 rather indistinct preanal papillae.

Spicula strongly curved with distinct proximal swelling, Chord 1,27 anal diameters long. Gubernaculum forming a fine sheath, no more than 1 anal diameter.

Tail slender, 7,6 anal diameters long in the ♀, and only 5,2 anal diameters in the ♂.

Family IX : COMESOMIDAE.

103. Sabatieria punctata Kreis.

Fig. 6.

1 ♂, Chenal Ouest, Nieuport, Sample 22.
1 ♀, Chenal Est, Nieuport, Sample 8.
2 ♂, 1 juv. Chenal Est, Nieuport, Sample 16.
1 ♀, Zeebrugge, Sample 11.
2 juv., Sample 9.

Dimensions : ♂. L. : 1,52 mm; $\alpha = 37{,}8$; $\beta = 9$, $\gamma = 10$.

0	112	160	M	1360		1,52 mm.
16		36	40	40	8	

Kreis figures, taken after bis type specimens were not very beautiful neither are those of Allgén in his Oeresund Monograph, but the latter figures present at any rate the characteristical features of the species better than those of Kreis do and enable to recognize the species.

In one point, which may however has escaped the attention of both helminthologists, we remain in doubt, i.e. with respect to the punctation of the skin. Is the skin punctation uniform or does there exist a differentiation of the lateral fields?

The specimens of this species caught along the belgian coast throw some light on this question. Here the *lateral fields* are distinctly differentiated, in that the punctation is coarser; moreover the points are separated by wider distances than on the remainder of the body.

Cuticula presenting fine transverse striations, the rings demarcated by slightly larger points, whereas on the rings the punctation is finer, moreover the lateral fields present a coarser punctation. Lateral fields 39 % of the body diameter. *Body setae* very short, more or less irregularly scattered over the body surface, particularly concentrated on the oesophageal portion of the body and even there scarse.

Amphids almost circular, with 2 ½ circumvolutions, occupying 60-64 % of the corresponding diameter. *Head* with distinct lips, labial papillae distinct, cephalic papillae prominent, cephalic setae short 30 % of the corresponding cephalic diameter.

Buccal cavity shallow. *Excretory pore* on 70 % of the oesophageal length.

Spicula distinctly curved, almost the same width throughout, hardly broader at the proximal end. Distal end blunt. Accessory pieces Y-shaped, embracing at their distal ends the spicula by means of a kind of colleret. Chord of the spicula about one anal diameter. Number of preanal papillae 7-8, the 3 or 4

proximal ones closer together thant the distal ones, which are separated by wider distances. A similar distribution of the papillae was foundly by Kreis and Allgén. Kreis divides the preanal papillae of his ♂ in groups of 4 and 2. In a ♂ from Hallands Väderö the number of papillae was likewise 6. Allgén's specimens from the Trondjhemsfjord presented a rather great variation in respect to the distribution of the papillae, Mostly he found 6 papillae generally divided in 2 groups, the cephal group consisting of 4 the caudal group or 2 papillae. Of the group of 4 papillae the most anterior one is the smallest, papilla 2-4 being of similar size are separated by equal distances, papilla 5 and 6 are closer together than the other ones, papilla 6 again is very small. In a few cases the groups consisted of 5 and 1 papilla each and in a single case no more than 5 papillae were present. In his paper on marine nemas of the Kattegat Allgén mentions that he found specimens in the Oeresund with 8 preanal papillae. *Tail* 5 anal diameters long, elongate conical with terminal 1/3 more or less filamentous, swollen at its apex.

In general my specimens show a similar distribution of the preanal papillae, Therefore I believe the mentioned specimens belong to *S. punctata* Kreis, which species is found until now in the Oeresund, in the Kattegat in Büsum and in the Trondjhemsfjord, and along the belgian coast.

44. **Sabatieria breviseta** Schuurmans Stekhoven.

Fig. 7.

Syn. : *S. quadripapillata* De Coninck and Schuurmans Stekhoven nec Filipjev.

1 ♂, 3 ♀, Chenal Est, Nieuport, Sample 23.

Dimensions : ♂. L. : 1,14 mm; $\alpha = 35{,}6$; $\beta = 7{,}3$; $\gamma = 10{,}5$.

0	156	208	M	912	1032	1,14 mm.
12	30		32	32		

The ♂ in question ressembles in the structure of its genital armature *Sabatieria praedatrix* De Man, its tail however is less slender and does not possess the long filamentous portion like in that species. Moreover the ornamentation of the skin in *S. praedatrix* is different and presents a distinct differentiation of the lateral fields, whereas here the punctation is uniform and very fine like in the present species named *quadripapillata* by De Coninck and me at an earlier date (1933). The cephalic setae of the male in question are fine like in the mentioned females, studied by De Coninck and me, but the distribution of the preanal papillae as well as the shape of the Gubernaculum differs distinctly from the picture Filipjev has given from that species. So I come to the conclusion that *S. quadripapillata* De Coninck and Schuurmans Stekhoven is not synonymous with *S. quadripapillata* Filipjev. Thus the former species has to get a new name fow which I propose *S. breviseta.*

Cuticula presenting a fine uniform punctation without differentiation of the lateral fields. *Body setae* generally short, but relatively long along the male tail, those along the anterior portion of the oesophagus being coupled or single. *Head* not distinctly set of against the remainder of the body. *Amphids* in the studied male very large, 75 % of the corresponding body diameter with 4 circumvolutions and a secondary spiral. Lips not prominent, labial papillae distinct, not much finer than the cephalic papillae, cephalic setae particularly short, 22 % of the corresponding cephalic diameter. *Buccal cavity* narrow, distinct.

Spicula needleshaped, but comparatively less slender than in *punctata* distinctly swollen towards the proximal end with a longitudinal bar in the proximal half, their chord 1,1 anal diameter. *Gubernaculum* with some excrescences at its proximal portion just like in *praedatrix*. 5 preanal papillae in 2 groups, the most distal group consisting of 4 almost adjacent papillae, the 5th papilla separated from the mentioned 4 by a larger distance, but not smaller or less prominent than the papillae 1.-4 and situated distinctly cephalad from the proximal end of the spicula, whereas in *quadripapillata* Filipjev the last preanal papilla is distinctly smaller than the other 3 Moreover papilla 3 and 4 both are situated opposite to the spicula. The tail in *S. breviseta* is elongate conical-clavate and measures 4 anal diameters.

This species is closely allied to *S. punctata* from which it may be distinguished by the shape of the tail, the larger size of the amphids in the male genus and by the distinct distribution of the preanal papillae.

Family X : **MICROLAIMIDAE.**

105. **Microlaimus ostracion** Schuurmans Stekhoven.

Fig. 8.

3 juv. Blankenberghe, Sample 3.

Dimensions : 1 juv. L. : 0,752 mm; $\alpha = 26,9$; $\beta = 6,6$; $\gamma = 10,4$.

$$\frac{0 \quad 120 \quad 680}{\quad 28 \quad 24} \; 0,752 \text{ mm.}$$

Although I possess from the present species juvenile specimens only, they show such characteristical features in the size of the cephalic setae and in the ornamentation of the skin, that I feel justified in creating for it a new species. With *M. marinus* Schulz the present species has in common the comparatively large head, the prominent teeth in the buccal cavity and the general shape of the tail. The amphids are smaller in relation to the correspondent body diameter.

To *Microlaimus zosterae* the present species shows likewise some points of ressemblance but here the tail is distinctly longer in relation to the bodylength, thus giving almost identical figures for *b* and *c*.

Cuticula distinctly ringed, the rings ornamented with vertical bars, giving the skin a peculiar appearance. Body setae scarce, but comparatively long. *Amphids* almost circular, open below, 1/3 as wide as the corresponding body diameter, comparatively far from the beginning of the transverse striation of the skin, this distance being almost the same as the length of the head. *Head swollen, distinctly demarcated against the remainder of the body*. Labial papillae distinct at the top of the diadem in the vestibulum. Cephalic papillae setiform, 30 % of the corresponding cephalic diameter. Cephalic setae very long, 1,1 times as long as the corresponding cephalic diameter. *Buccal cavity* deep, with prominent teeth, just like in *M. marinus* (Schulz). Tail tapering regularly towards the comparatively sharply pointed end, 3 anal diameters long.

Order III : ARAEOLAIMOIDEA

Family AXONOLAIMIDAE.

106. Odontophora tenuicaudata Allgén.

Fig. 9.

In his Oeresundmonograph which the author was so kind to let me consult Allgén has described as new a species, which is, as to my opinion indentical with the present species. The species is characterised by its very long tail in relation to the width and by the long and rather dense haircovering at the cephalic end, which shows strong ressemblance with that of *O. setosa* Allgén. My specimens are considerably shorter than those of Allgén but when one takes into consideration that they apparently were young and that species belonging to the Genera *Ascolaimus, Odontophora* and *Axonolaimus* are liable to strong longitudinal growth, this may not serve as an argument against the separation of the specimens and to divide them over different species.

Allgén has not found the male of his species, which was present in the material at hand, so that I am able to give a rather complete description of this species.

1 ♂, 1 ♀, 6 juv. Blankenberghe, Sample 3.

I have only taken the dimensions after a young female and a juvenile specimen.

Dimensions : juv. ♀. L. : 1,468 mm; $\alpha=46$; $\beta=6,1$; $\gamma=11,1$.

$$\text{juv.}\ ♀\ \frac{0 \quad 240 \qquad\qquad 1302}{14 \quad 30 \quad 32 \quad 24}\ 1,468\ \text{mm.}$$

juv. L. : 1,248 mm; $\alpha=52$; $\beta=6,2$; $\gamma=9,7$.

$$\text{juv.}\ \frac{0 \quad 200 \qquad\qquad 1120}{12 \quad 22 \quad 24 \quad 20}\ 1,248\ \text{mm.}$$

Cuticula with scanty hairs except at the anterior end, where one finds a relatively dense haircovering. Elsewhere the pubescence is short and scanty. At the headend one finds longitudinal rows of rather long setae, the cephalic setae being the longest, measuring 1,35 cephalic diameters. In each longitudinal row one finds 3 hairs. *Amphids* loop-shaped, situated opposite to the limit between the anterior and posterior portion of the buccal cavity, diameter of the amphids 42-55 % of the corresponding cephalic diameter.

Buccal cavity deep with the usual teeth in the vestibulum, teeth protrusible. *Excretory pore* opposite to the caudal end of the amphids.

Tail of the juvenile 5, 8 anal diameters long, very elongate conical with a few setae only.

Male genital armature consisting of *spicula*, knobbed at the proximal end, distally the latter are finely pointed, chord of the same 1,35 anal diameter long, *Gubernaculum* hammer-shaped with dorsal apophysis, male *tail* 5,8 anal diameters with 5 short setae along the ventral side and a few along the dorsal surface.

107. Axonolaimus villosus Skwarra.

Fig. 10.

1 ♀ from Chenal Est, Sample 16.

Dimensions : ♀. L. : 1,892 mm; $\alpha=52$; $\beta=9$; $\gamma=19$. V=58,7 %.

0	60	212	1112	1792	
12		28	36	28	8

1,892 mm.

At first I thought to have discovered a new species, but seen I came to the conclusion that I had rediscovered *A. villosus* Skwarra, a species up to the present found exclusively in the Frisches Haff.

Skwarra's ♀ measured 1,57 mm; $\alpha=40,7$; $\beta=7,3$; $\gamma=11,2$. V=55,8 %.

Her ♀ was also slightly smaller than mine and therefore the indices were smaller than in the present case, although they show the same interrelations. Skwarra's species of which the authoress gives insufficient figures only was characteristised by very long cephalic setae which is also one of the characteristics of the present specimen. Here the cephalic setae measure 166 % of the corresponding cephalic diameter, whereas in Skwarra's ♀ the same cephalic setae measured 177 % of the cephalic diameter. There is therefore a good correspondence between both forms. The villosity of Skwarra's specimens was specific also for the present ♀, so that I am quite sure, that Skwarra's specimens and mine are conspecific. For a species of *Axonolaimus* the pilosity is rather dense, especially on the anterior portion of the oesophagus, these setae are found especially along the submedian lines. Amphids forming an open loop of rather big size, 55 % of the corresponding body diameter.

Head truncate anteriorly. Labial as well as cephalic papillae present.

Buccal cavity conical, consisting of a vestibulum and a saclike oesophageal portion. *Excretory* pore 4,7 cephalic diameters from the anterior end.

Tail elongate conical, very gradually tapering towards the apex, with some scattered setae. Length of *tail* 4,1 anal diameters.

Order V : MONHYSTEROIDEA

Family MONHYSTERIDAE.

109. Paramonhystera elliptica Filipjev.

Syn. : *Paramonhystera setosa* Filipjev.

Fig. 11.

9♀♀, 4 juv. from Zeebrugge, Sample 6.

Dimensions : ♀. L. : 1,748 mm; $\alpha = 29{,}1$; $\beta = 4{,}96$; $\gamma = 8{,}91$. V = 69,1 %.

0	152	352	1212	1552	1,748 mm.
28		64	60	40	

Body comparatively stout, narrowed 1/3 posteriorly and twice anteriorly just as in *P. elliptica* Filipjev.

Cuticula transversely striated. Rings 1 ½ μ apart. *Body setae* arranged in groups of 2-3 hairs, especially so along the oesophagus, or single, often comparatively long.

Amphids tender, large, transversely elliptic, the widest diameter till 73 % of the corresponding body diameter. *Head* with broad and slightly swollen lips, each with a couple of minute conical labial papillae. *Cephalic setae* in 6 groups of 3 hairs each, the larger ones 54 % of the corresponding cephalic diameter (14 μ), the smaller ones subequal, 25 % of the came cephalic diameter. The *body setae* placed just caudad from the head are almost 70 % of the corresponding body diameter, those more behind mostly comparatively shorter. *Buccal cavity* with a tender vestibulum, a cuticularised ring separating this vestibulum from the funnelshaped, oesophageal portion, the sides of which are reinforced at the border between vestibulum and funnel. Female genital tract prevulvar. *Tail* elongate conical, slightly clavate at its tip, 4,5 anal diameters long, with short and comparatively few hairs and a couple of small hairs at the apex, the width is 30 % of the anal diameter. This species may be distinguished at once from *Paramonhystera megacephala* Steiner by its amphids, the more prominent lips and the more clumsy tail. In the present material I found a rather great variation in the pilosity. Not in all specimens the long postcephalic setae were present, likewise the density of the pilosity may vary considerably. Some specimens show a pilosity just like in *Paramonhystera elliptica* Filipjev, in others it is quite identical to that of *Parmonhystera setosa* Filipjev. The heighth of the head varies

according to fixation and according to the question if the oral cavity is open or closed.

So I believe that the present material belongs to *Paramonhystera elliptica* and that *P. elliptica* and *P. setosa* in reality belong to a single species, which should be named according to the rules of priority *P. elliptica*. Filipjev finds the amphids in *elliptica* more anterior than in *setosa*. This may stay in connection with the fact that in the former species the head is more or less flattened by fixation, whereas such did not occur in *P. setosa*.

Geographical distribution : Black Sea, Belgium.

111. **Monhystera elegantula** Schuurmans Stekhoven.

Fig. 12.

5♀♀, 1 juv. from Zeebrugge, Sample 20.

Dimensions : ♀. L. : 0,624 mm; $\alpha = 30{,}8$; $\beta = 5{,}9$; $\gamma = 4{,}4$. V = 51 %.

0	104	316	476	624 mm.
8	20	20	14	

The present species gave me much trouble, since its characteristics are not prominent and fit for several species. So in general shape as well as in dimensions it ressembles to *Monhystera microphthalma* De Man, but also to *Monhystera trichura* Allgén, although the cephalic setae are much longer than in the former species and the tail does not taper so suddenly in this species as is the case in *M. microphthalma*. Moreover *trichura* is about twice as long as *microphthalma*. As for *M. filicaudata*, here the cephalic setae are distinctly longer than in the present species, whereas the amphids are shifted to a distinctly more cephaled position than in the present species. So none of the descriptions of the aforementioned species fits for the present species and therefore it is necessary to create a new species for it, although I am not in favour for doing so with mostly ill defined *Monhystera*-species. Cuticula bare, almost devoid of setae, except at the cephalic end, where, apart from the cephalic setae some minute hairs are found. *Body* slender, tail filiform tapering gradually. *Head* distinctly demarcated. 6 minute cephalic setae, not longer than 1/4 of the cephalic diameter. *Amphids* small, situated at 4,4 cephalic diameters from the anterior end, their diameter 1/3 of the corresonding body diameter. *Tail* 10 anal diameters long.

77. **Steineria mirabilis** Schuurmans Stekhoven & De Coninck.

Fig. 13.

1♀ from Blankenberghe, Sample 3.

Dimensions : ♀. L. : 1,432 mm; $\alpha = 39{,}8$; $\beta = 4{,}5$; $\gamma = 6{,}5$. V = 65 %.

0	312	932	1212	1,432 mm.
16	32	36	28	

The female ressembles in many respects with the male, but to my surprise I could not find the octogenar radial symmetry presènt in the male described by me and De Coninck.

In all other characteristics so in the situation of the amphids, in its general shape, its typical pilosity, the shape of its tail as well as the pilosity at the end of the tail, the present female certainly is the mate of the male, described by Schuurmans Stekhoven and De Coninck.

Body slender, width at the anterior end 44 % of the maximal width, half as wide anteriorly as it is wide at the caudal end of the oesophagus. *Cuticula* distinctly striated like in the representants of the Genus *Theristus*. Body setae more or less arranged in submedian longitudinal rows very long, 3-4,6 times as long as the corresponding body diameter, those just caudad from the head are the longest.

Amphids circular, 17,5 % of the corresponding body diameter, 1,88 cephalic diameters from the anterior end. *Head* with 6 distinct lips, each with a conical papilla. Cephalic *setae*, rather long, paired, the setae of each pair subequal, the longer ones 4/5 as long as the cephalic diameter, the shorter ones not longer than 1/2 cephalic diameter.

Buccal cavity conico-cylindrical with a strong cuticular lining. *Vestibulum* faintly striated. Female genital tract unpaired, prevulvar. Female *tail* gradually tapering towards the tip, 7,57 anal diameters long, apical 1/2 filiform. At the apex 2 long and a minute subapical seta are present, the longer seta is 1/3 as long as the tail.

112. **Metadesmolaimus labiosetosus** n. gen. n. sp.

Fig. 14.

The position of the following species remains rather uncertain. In general outlook, the species in question ressembles a *Theristus*, to which I was inclined to bring the species at first, but closer study revealed in total 3 crowns of cephalic sense organs, minute labial papillae, distinct rigid setiform labial papillae, 6 in number, and a third crown, composed of 10 cephalic setae, the paired ones being almost subequal. The annulation of the skin is *Theristus*-like, the structure of the buccal cavity reminds one at the buccal cavity of *Sphaerolaimus* or of *Desmolaimus* since there is a strongly chitinised median ring, distinctly subdivided in two by means of a constriction. *Amphids* circular, although apparently of spiral origin. *Tail* tapering elongate conical.

Herewith the main characteristics of the genus are given; it should be brought to the *Linhomoeidae*. Of the species in question unluckily only one single juvenile specimen was present, caught at Zeebrugge in sample 1.

Dimensions of the juvenile specimen 1 mm. Longer cephalic *setae* 84 % of the corresponding cephalic diameter, the shorter ones 80 % of the cephalic diameter, the labial setae 24 % of the cephalic diameter at the level of the cephalic hairs. *Amphids* 25,7 % of the corresponding body diameter, 1,2 cephalic diameters from the anterior end, Just behind the amphids some minute body setae are to be found. *Tail* elongate conical, 5 anal diameters long, more or less *Eleutherolaimus*-like in shape.

If later studies, when males and females are present proove the affinity of the present species to the representants of the genus *Desmolaimus*, than it ought to be brought to the family of *Linhomoeidae*. If after all it is a new species of *Theristus*, then the species may remain in the family of *Monhysteridae*. At any rate the species in question as well as for example some species of *Eleutherolaimus* indicate that there must exist relationships between the *Monhysteroidea* and the *Chromadoroidea*, which as one knows are in the possession of 3 crowns of cephalic sense organs.

Family **LINHOMOEIDAE.**

113. **Eleutherolaimus iniquisetosus** Schuurmans Stekhoven.

Fig. 15.

1 juv. from Blankenberghe, Sample 3.

From the known species of *Eleutherolaimus* the present species may be easily distinguished by the unequal length of the labial and cephalic setae, the latter being more as twice as long as the former, the very long cylindrical oral cavity and by the long neckhairs, which are to be found some distance behind the large circular amphids.

Dimensions of the juvenile specimen. L. : 1,160 mm; $\alpha = 58$; $\beta = 5{,}8$; $\gamma = 8{,}2$.

Skin smooth. *Body* elongate tapering $\frac{0 \quad 200 \qquad 1020}{12 \quad 20 \quad 20 \quad 16 \quad 8}$ 1,630 mm. more attenuated posteriorly than anteriorly. *Amphids* circular, large, 60 % of the corresponding body diameter, slightly more than one cephalic diameter at the level of the short labial setae from the anterior end. *Labial papillae* minute, labial setae at the utmost 25 % of the corresponding body diameter, cephalic setae mueh longer, of the same length as the corresponding body diameter and, 3,6 times als long as the labial setae. In my specimen I did observe only 4 labial setae and as many cephalic setae. Neckhairs quite as long as the mentioned cephalic setae, just caudad from the amphids. *Buccal cavity* consisting of a minute vestibulum and a comparatively long cavity, the latter being 3,6 times as long as wide. *Tail* long and slender, 8,7 anal diameters long.

116. **Sphaerocephalum longicaudatum** Schuurmans Stekhoven n. sp.

Fig. 16.

1 ♀ from Chenal, Sample 7.

The female in question gave me much trouble in identification. Its general shape, its elongate form, the rounded blunt head with the two crowns of setae, the typical shape of its oesophagus, with the distinct cardia between oesophagus and intestine, the circular amphids and the elongate, bluntly ending tail characterised the female as a representant of the Family of *Linhomoeidae*. It did however not fit into one of the known genera *Linhomoeus*, *Paralinhomoeus* or *Metalinhomoeus*. Neither does it belong to the Genus *Linhomoella* created by Cobb in 1920. With *Litinum* Cobb it shows some points of ressemblance but here the amphids have a different type. But most of all the species in question ressembled *Sphaerocephalum crassicauda* Filipjev! Filipjev is inclined to place his species in the neighbourhood of *Axonolaimus*. He sees a similarity with *Chromadoridae* like *Laxus* and *Chromaspira*, but as to my opinion the shape of the amphids of Filipjev's *Sphaerocephalum* would fit quite well with a representant of the *Linhomoeidae*, since here often a hidden spiral or a faint spiral type of amphid is found. The shape of the oesophagus of *Sphaerocephalum crassicauda* is a typical Linhomoeid type. Filipjev does not depict a cardia, If this was not present is questionable. The pilosity at the anterior end is identical in both cases. The funnel-shaped, slitlike oral cavity is characteristical as well for Filipjev's species as for mine, like also the situation of the amphids and the shape of the tail. So I came to the conclusion that the present species may belong to the Genus *Sphaerocephalum* and that the Genus *Sphaerocephalum* must be placed into the family of the *Linhomoeidae*.

One might also think at the Genus *Siphonolaimus* but here one finds an onchium in the tubular oral cavity. So I think it most probable that the present species is a *Sphaerocephalum* species, which may be distinguished at once from Filipjev's species by the smaller amphids and the more elongate tail.

Dimensions : ♀. L. : 1,072 mm; $\alpha = 33{,}5$; $\beta = 6$; $\gamma = 8$. V = 50,8 %.

$$0\ \frac{0 \quad 180 \quad 544 \quad 940}{24 \quad 32 \quad 32 \quad 20 \quad 8}\ 1{,}072 \text{ mm.}$$

Body elongate cylindrical, smooth, almost devoid of setae except at the anterior end where two crowns of short setae, 10 (6 and 4) in total are to be found. *Amphids* circular, small, 1/6 of the corresponding body diameter, their anterior border 1 cephalic diameter at the level of the posterior crown of setae from the anterior end, *Lips* not distinctly demarcated, rounded. Cephalic and subcephalic *setae* almost of the same length, 1/3 cephalic diameter long. *Nerve ring* at 56 % of the oesophageal length. Cardia present. *Ovaries* double. *Tail* elongate conical 6,6 anal diameters long ending blunt

Order VI : ANGUILLUDOIDEA

Family RHABDITIDAE.

65. Rhabditis marina Bastian.

Rhabditis marina was found in 2 samples from Zeebrugge. Still I am in doubt if the specimens of sample 20 really belong to this species, although the dimensions of males as well as of females fall in the range of variation of the said species and although the bursa copulatrix shows strong ressemblances to the type described in the second monograph of the freeliving nemas of the belgian coast.

Dimensions : ♂. L. : 1,480 mm; $\alpha = 33,6$; $\beta = 6,1$; $\gamma = 24,6$.

0	240	480	1420	1,489 mm.
16	40	44	32	

♀. L. : 1,820 mm; $\alpha = 33,3$; $\beta = 6$; $\gamma = 15,1$. V = 54,9 %.

0	200	300	400	1000	1700	1,820 mm.
12		40		60	40	

The head of the female of this species shows distinctly 2 rows of papillae, the labial and the cephalic row. The oral cavity is slender and almost 8 times as long as it is wide. The skin bears some fine body setae and the tail of the female is elongate slender, tapering towards the tip, where its is slightly swollen. This tail is just 3 anal diameters long, just like in the formerly described *Rhabditis marina*, although seemingly more slender than in the typical specimens. I found a distinct transverse striation of the skin, which we apparently oversaw in our former researches, although it was clearly depicted in the bursa copulatrix of the male.

On the rings of the cuticule barlike structures are to be seen. The distribution of the papillae on the bursa copulatrix is almost the same as in the specimens observed on a former occasion. The *spicula* are knobbed at the proximal end.

The differences which the present material shows when compared with what was seen on a former occasion are rather minute and I believe therefore the specimens of Zeebrugge do belong to *Rhabditis marina* Bastian.

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Utrecht, 29 March 1935.

EXPLANATION OF PLATE I.

FIG. 1. — *Longicyatholaimus clavicaudatus* S. S.

A. Head of a ♂, Oc. 6, Obj. ×100. — B. Male tail.

FIG. 2. *Oistolaimus succicus* ALLGÉN.

A. Anal portion of a male with preanal papillae, Oc. 6, Oil Imm. ×100. — B. Preanal papilla, 15 and 16.

FIG. 3. — *Dichromadora setosa* BUETSCHLI.

A. ♂, total view, Oc. 6, Obj. D. — B. Head end, Oc. 6, Obj. ×100. — C. ♂, tail end, Oc. 6, Obj. ×100.

EXPLANATION OF PLATE II.

FIG. 4. — *Neochromadora longisetosa* S. S.

A. Head end. — B. Idem. — C. Tailend of a ♀, Oc. 6, Obj. ×100.

FIG. 5. — *Neochromadora quinquepapillata* S. S.

A. Head end ♂. — B. Posterior end of œsophagus. — C. Tail end ♂. — D. Tail ♀, Oc. 6, Obj. ×100.

FIG. 6. — *Sabatieria punctata* KREIS.

A, B. Head end of two ♂. — C. Tail end of a ♂. — D. Male genital armature.

FIG. 7. — *Sabatieria breviseta* S. S.

A. Head end of a ♂.

EXPLANATION OF PLATE III.

FIG. 7. — *Sabatieria breviseta* S. S.

B. Male genital armature, Oc. 6, Obj. ×100.

FIG. 8. — *Microlaimus ostracion* S. S.

A. Total view juv., Oc. 3, Obj. D. — B. Head end, Oc. 6, Obj. ×100. — C. Skin ornamentation.

FIG. 9. — *Odontophora tenuicaudata* ALLGÉN.

A. Head end of a juv. — B. Head end of a ♂. — D. Male tail.

FIG. 10. — *Axonolaimus villosus* SKWARRA.

A. Head end of a ♀.

EXPLANATION OF PLATE IV.

FIG. 9. — *Odontophora tenuicaudata* ALLGÉN.

C. Female tail.

FIG. 10. — *Axonolaimus villosus* SKWARRA.

B. Tail of the same, Oc. 6, Obj. ×100.

FIG. 11. — *Paramonhystera elliptica* FILIPJEV.

A, B. Head ends of 2 ♀ ♀, Oc. 6, Obj. ×100. — C. Female tail, Oc. 1, Obj. ×100.

FIG. 12. — *Monhystera elegantula* S. S.

A. Head end. — B. Tail of a female, Oc. 6, Obj. ×100.

EXPLANATION OF PLATE V.

FIG. 13. — *Steineria mirabilis* S. S. & DE C.

A. Head end, Oc. 1, Obj. ×100. — B. Tail end with vulva, Oc. 3, Obj. D.

FIG. 14. — *Metadesmolaimus labiosetosus* S. S.

A. Head end of a ♀. — B. Tail of the same, Oc. 6, Obj. ×100.

FIG. 15. — *Eleutherolaimus iniquisetosus* S. S.

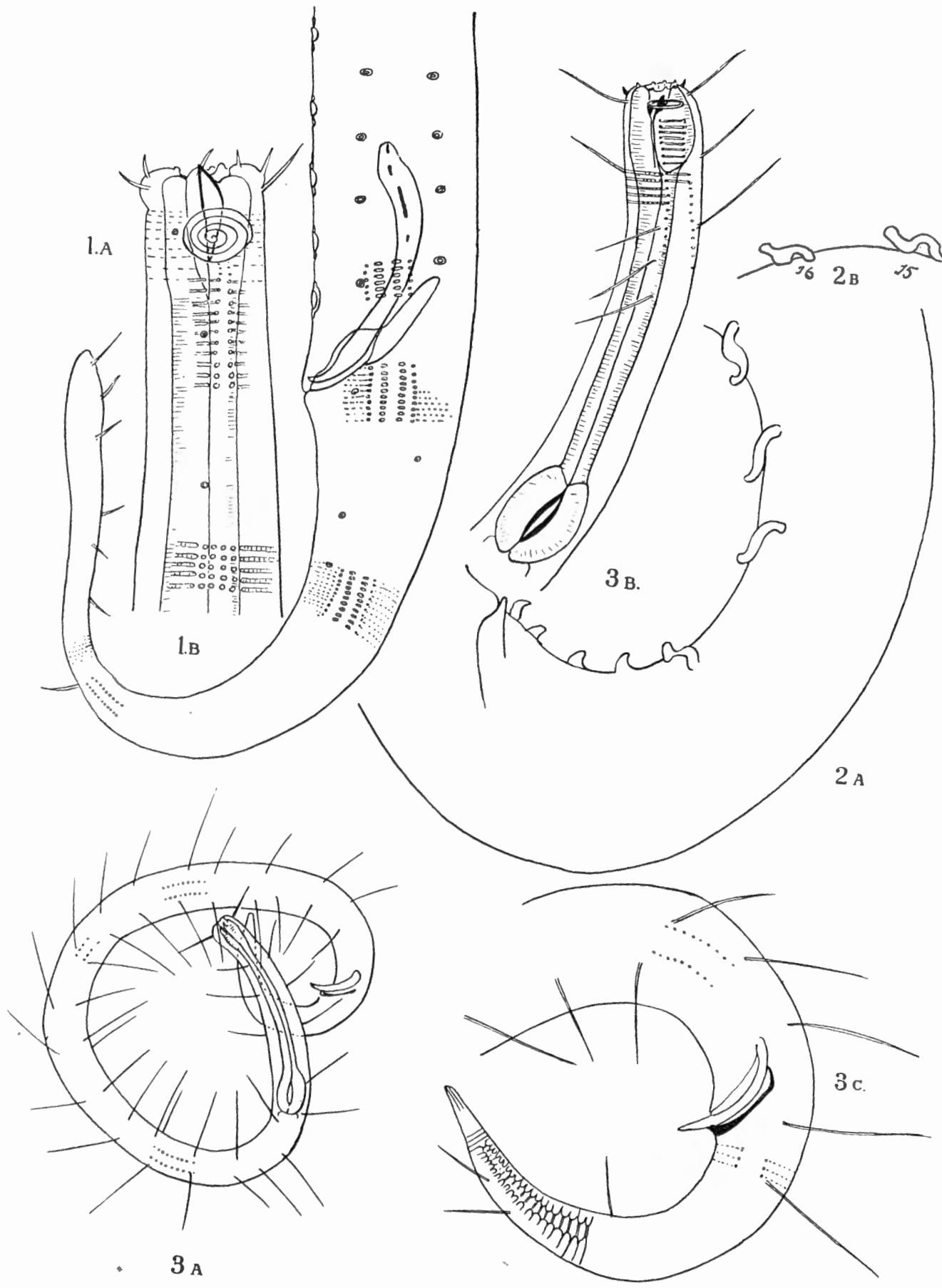
A. Head end. — B. Tail of a juv., Oc. 6, Obj. ×100.

FIG. 16. — *Sphaerocephalum longicaudatum* S. S.

A. Head end. — B. Tail of a ♀, Oc. 6, Obj. ×100.

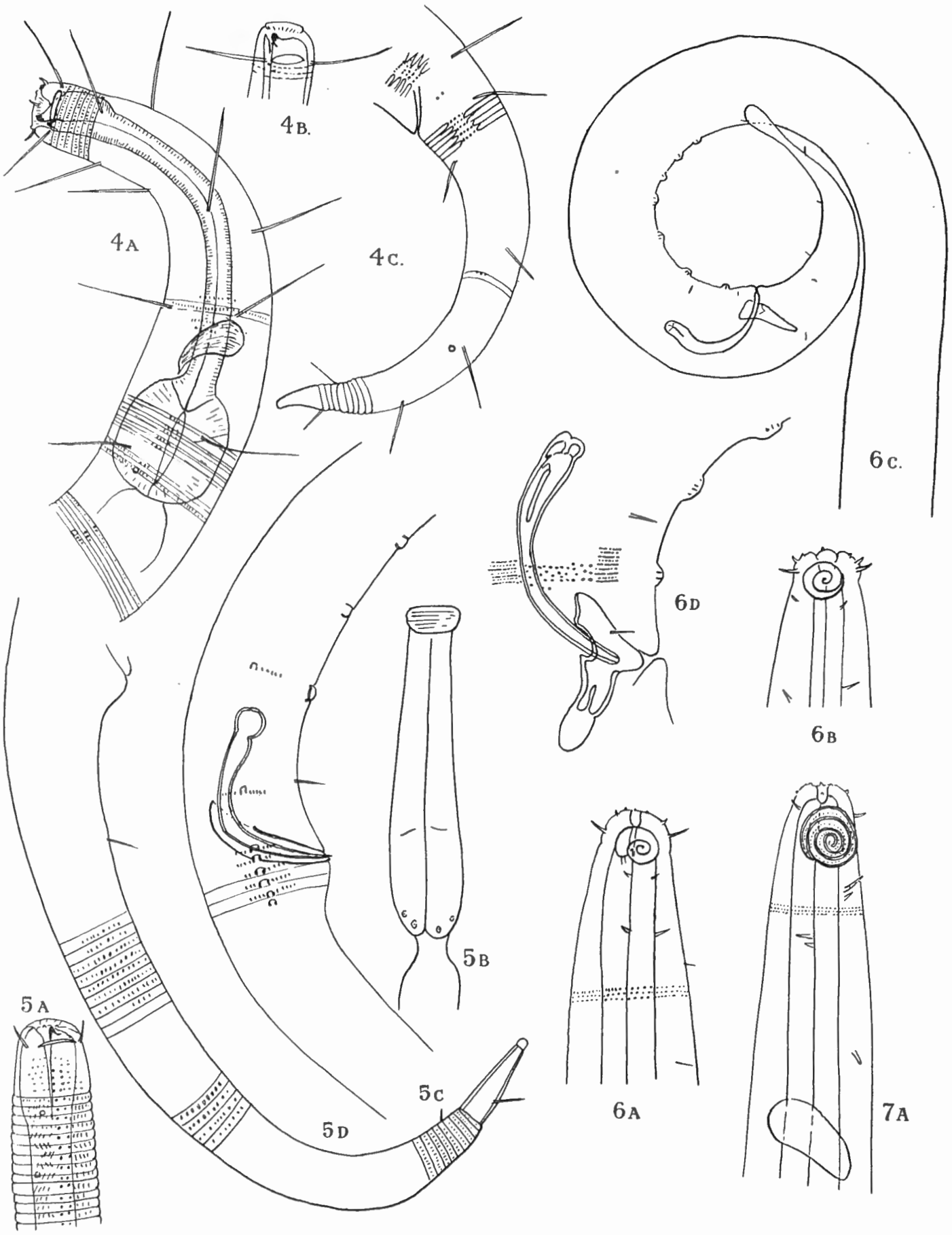
Mém. Mus. Roy. Hist. Nat. Belg. — N° 72, 1935.
Verh. Kon. Natuurh. Mus. Belg. — Nr 72, 1935.

PLATE I.



J. H. SCHUURMANS STEKHOVEN Jr. — Belgian freeliving marine Nemas III.

Mém. Mus. Roy. Hist. Nat. Belg. — N° 72, 1935.
Verh. Kon. Natuurh. Mus. Belg. — Nr 72, 1935.



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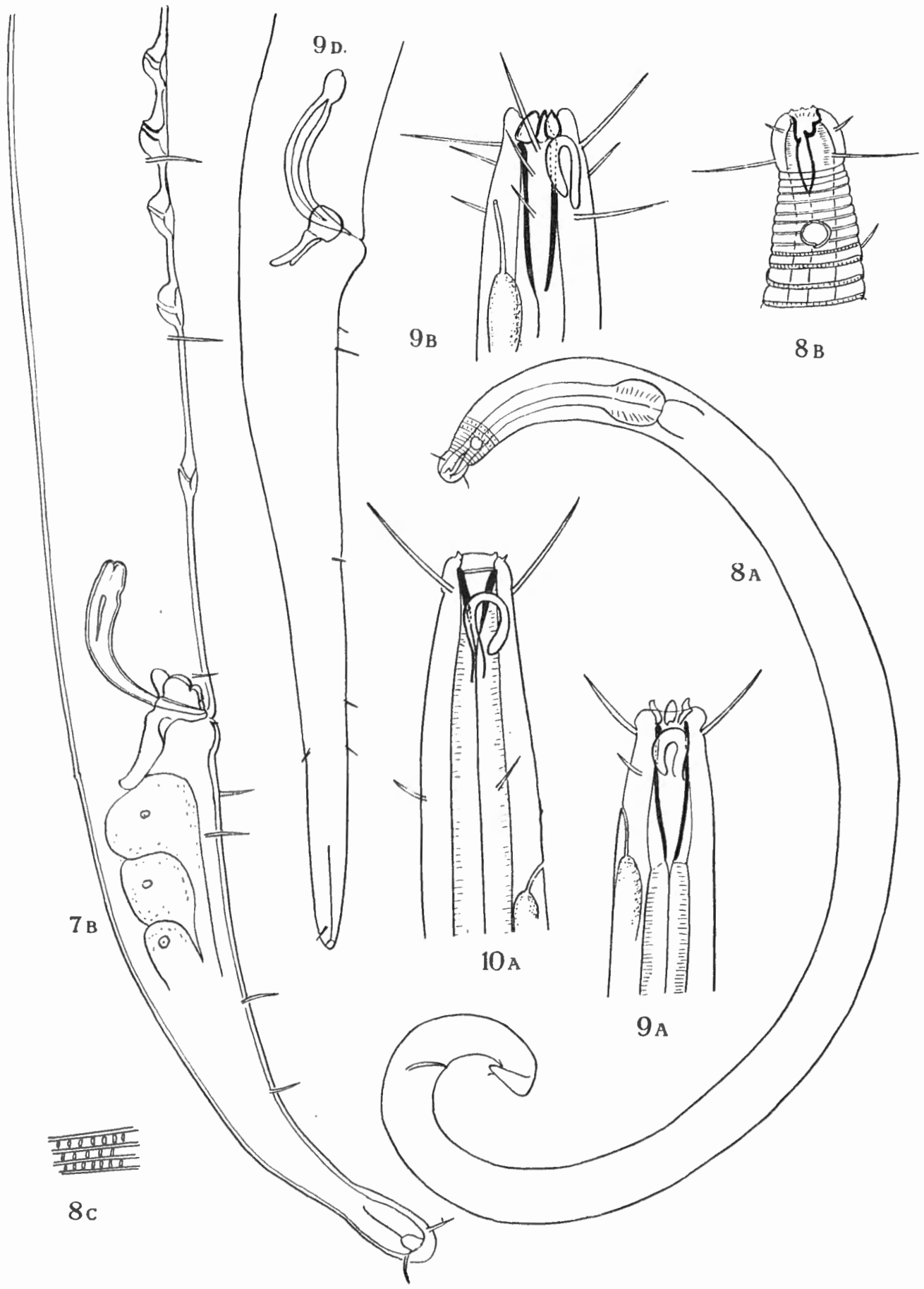
Verh. Kon. Natuurh. Mus. Belg. — Nr 72, 1935.



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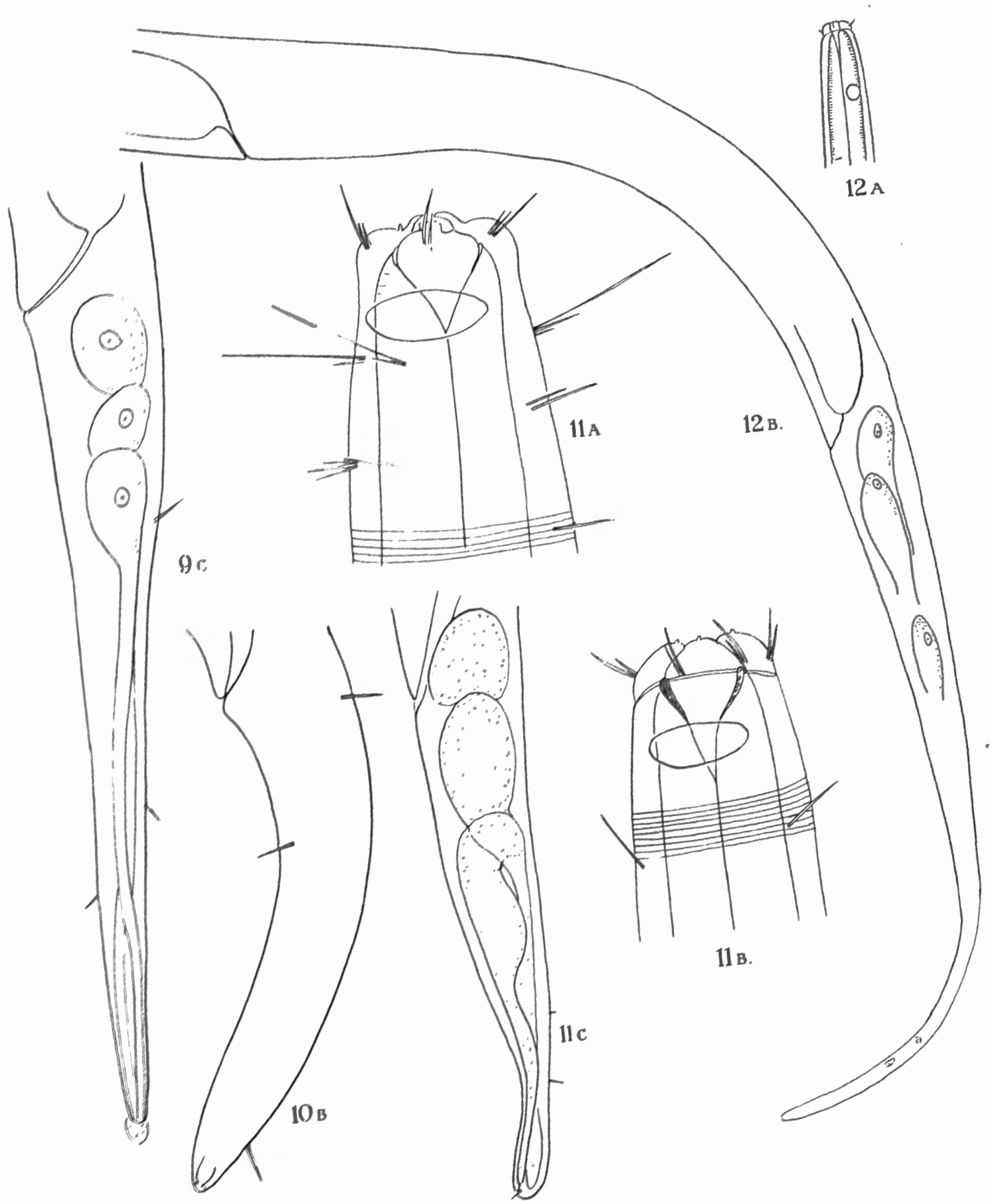
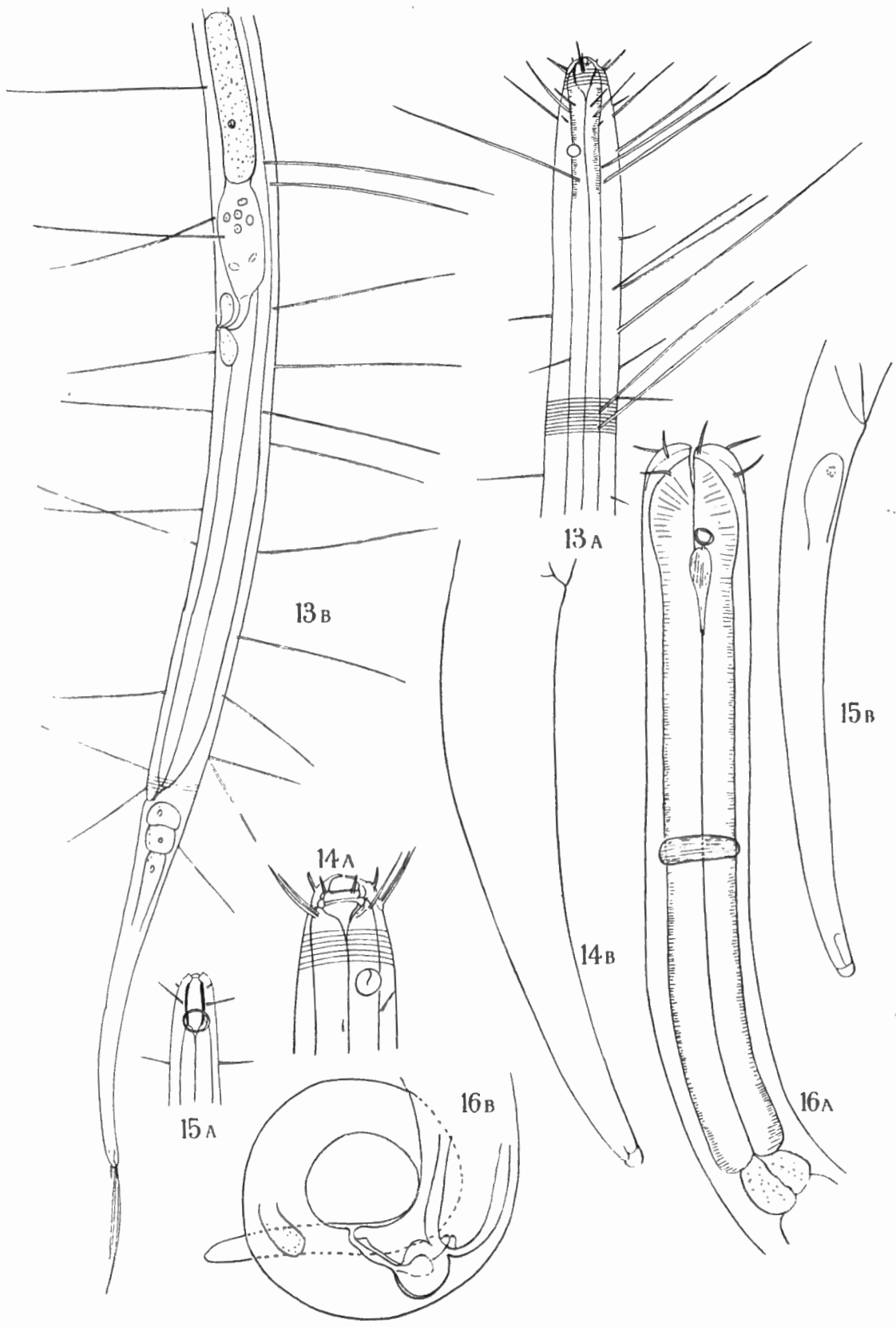
Mém. Mus. Roy. Hist. Nat. Belg. N° 72, 1935.
Verh. Kon. Natuurh. Mus. Belg. – N^r 72, 1935.



J. H. SCHUURMANS STEKHOVEN J^r. — Belgian freeliving marine Nemas III.

Mém. Mus. Roy. Hist. Nat. Belg. — N° 72, 1935.
Verh. Kon. Natuurh. Mus. Belg. — N^r 72, 1935.

PLATE V.



J. H. SCHUURMANS STEKHOVEN J^r. — Belgian freeliving marine Nemas III.