

New species of *Antomicron* and *Leptolaimus* (Nematoda: Leptolaimidae) and record of *Procamacolaimus* (Nematoda: Camacolaimidae) from Patagonia coast, Chubut and Santa Cruz, Argentina

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This paper focuses on Antomicron, Leptolaimus and Procamacolaimus, three genera inhabiting coastal water systems of the Patagonian, Chubut and Santa Cruz provinces of Argentina, providing a review of their taxonomy for a new identification key. One new species belonging to the genus Antomicron and one new species belonging to the genus Leptolaimus of the family Leptolaimidae are described from Puerto San Julián, Santa Cruz province: Antomicron alveolatum sp. nov. has 35 alveoli and three preloacal supplements and Leptolaimus gabinoi sp. nov. is characterized by the structure and number of preloacal supplements (three) with hamate distal end with two hooks. Another species belonging to the genus Procamacolaimus of the family Camacolaimidae is described and recorded from Puerto Madryn, Chubut province of Argentina: Procamacolaimus dorylaimus.

Keywords: description, systematics, key to species, Patagonian

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INTRODUCTION

During an ecological and taxonomic study of the meiobenthos of Patagonia bays (Chubut and Santa Cruz, Argentina) new free-living marine nematodes were found. This is the third paper of the series. From these areas we describe two new species of the family Leptolaimidae Örley, 1880 for these two areas, belonging to the genera: *Antomicron* Cobb, 1920 and *Leptolaimus* de Man, 1876.

Antomicron Cobb, 1920 has 5 valid species and was reviewed by Vitiello (1971), Gerlach & Riemann (1973) and Platt & Warwick (1988). *Antomicron donsi* Allgén, 1946 is described only from females, so we do not include it as a valid species. No previous key has been given.

Leptolaimus de Man, 1876 has 40 valid species. It has been reviewed by Gerlach & Riemann (1973), de Bovée (1974), Alekseev & Rassadnikova (1977) and Platt & Warwick (1988). De Bovée (1974) recognized 30 species and Alekseev & Rassadnikova (1977) recognized 27 species and 3 subgenera. Several species had been described as females only and they could not be included in keys. A comparison of measurements of the 40 valid species (known with males) to help the future revision of the genera has been added.

Leptolaimus sebastiani Pastor de Ward (1984) was the first *Leptolaimus* species described from the coast of Patagonia

Argentina and *Leptolaimus vinnulus* Vitiello, 1974 was the first known *Leptolaimus* species recorded from the same coast (Pastor de Ward, 1984).

The genus *Procamacolaimus* Gerlach, 1954 includes nine species of marine camacolaimid nematodes: *Procamacolaimus dorylaimus* Holovachov, 2003 was the first known *Procamacolaimus* species recorded from the coast of Patagonia Argentina.

MATERIALS AND METHODS

Description of sites studied

Samples were collected from Patagonia littoral coastal sediments at Puerto Madryn, Chubut Province (42°45'S 64°55'W) and at Puerto San Julián, Santa Cruz Province (49°13'S 67°40'W), Argentina (see Figure 1). Puerto Madryn bay is located in Golfo Nuevo, Patagonia. Tidal currents are the most important water movement with a range of 4 m between high and low tides. The specimens from Puerto Madryn beach were collected in front of the city, on upper littoral at medium sand, 1 m depth. Specimens from the Golfito locality came from near sublittoral, 5 m depth.

The San Julián bay is 19.9 km long and has two distinct areas with one near the entrance to the bay (length/width 6.8/5.3 km) and one towards the very end (length/width 11.8/8.2 km) separated by a narrow passage where the city

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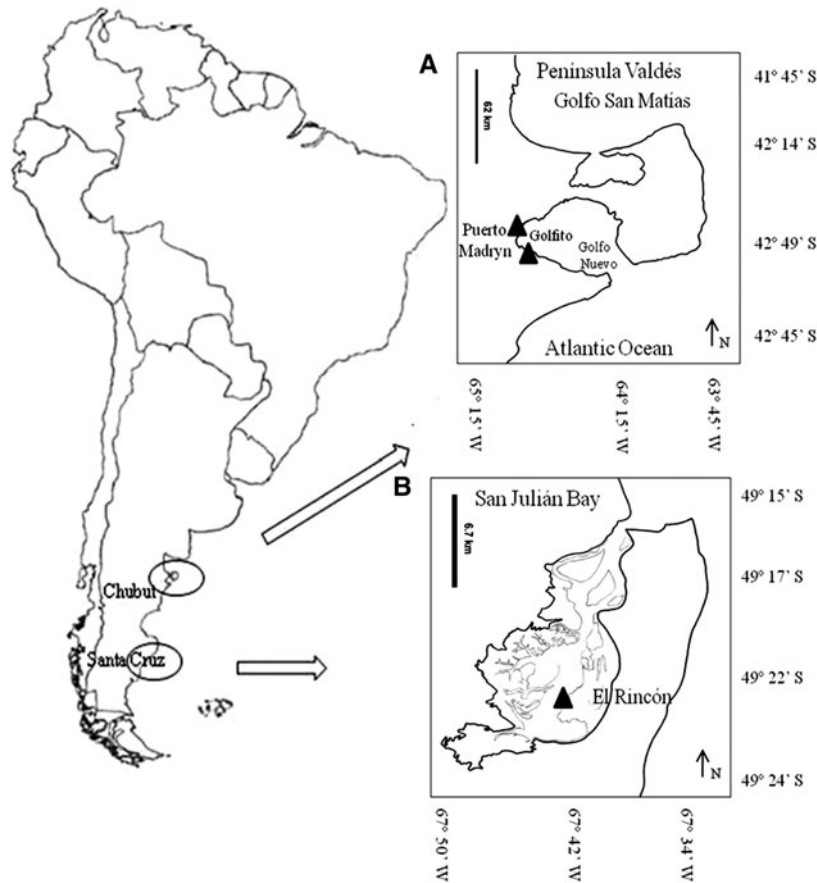


Fig. 1. Patagonian map showing the samples stations: (A) Golfito in Puerto Madryn Bay (Chubut); (B) El Rincón in San Julián Bay (Santa Cruz).

of Puerto San Julián is located. Tidal currents are the most important water movement with a range of 8 m. The specimens were collected in ‘El Rincón’ at the end of the bay, in low littoral, at very fine sand substrate.

Sample collection and treatment

On each site, five sediment samples were taken with a cylindrical Plexiglas corer, 10 cm high and 2.8 cm in diameter. They were preserved in 5% formaldehyde in filtered seawater, sieved through both 500 µm and 50 µm mesh sieves. The nematodes present on the 50 µm sieve were separated by Ludox™ and then counted and identified to species level. Nematodes were fixed following the method described by Ditlevsen (1911) and preserved in anhydrous glycerin on slides sealed with Canada resin.

Specimen analysis

Morphometric data were obtained from camera lucida drawings using a Zeiss microscope with differential interference contrast (DIC). The measurements are in microns. Photographs were taken with Olympus microscopy equipment with DIC. Sediment analyses were carried out by dry-sieving and classified according to the Wentworth scale. Literature has been obtained from Deprez (2006). Type specimens were deposited in the Museo Nacional de Ciencias Naturales ‘Bernardino Rivadavia’, Argentina. The classification followed for the systematic position of the species was De Ley & Blaxter

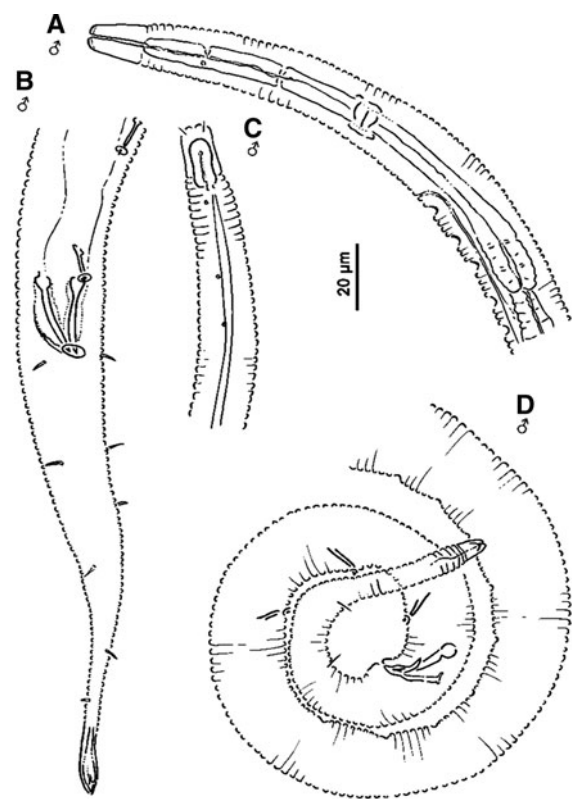


Fig. 2. *Antomicron alveolatum* sp. nov. (A) Oesophageal region of male holotype; (B) posterior end of male paratype; (C) head region of male holotype; (D) copulatory apparatus and precloacal supplements of male holotype.

(2002). De Man's ratios, a, b and c used in this paper were calculated as standard.

Abbreviations

Abd, anal body diameter; aw, width; bdc, body diameter at level of cephalic setae; bda, body diameter at amphidial fovea level; bdph, body diameter at level of pharyngeal end; daa, distance from anterior end to anus; daph, oesophagus length; dav, distance from anterior end to vulva; mbd, maximum body diameter; lcs, length of cephalic setae; spic, spicular length in microns, along the arc; spic%, spicule chord as proportion of anal body diameter; c', tail in anal diameter; gub, gubernaculum length; gub%, gubernaculum

length as proportion of cloacal body diameter; L, total length; V%, distance from the anterior end to the vulva opening in percentage of total length; amph%, amphidial fovea diameter as percentage of corresponding body diameter; T, tail length; PS, precloacal supplements. Measurements are in μm apart from body length which is in mm.

RESULTS AND DISCUSSION

SYSTEMATICS

Order PLECTIDA Malakhov, Ryzhykov & Sonin, 1982

Suborder LEPTOLAIMINA Lorenzen, 1981

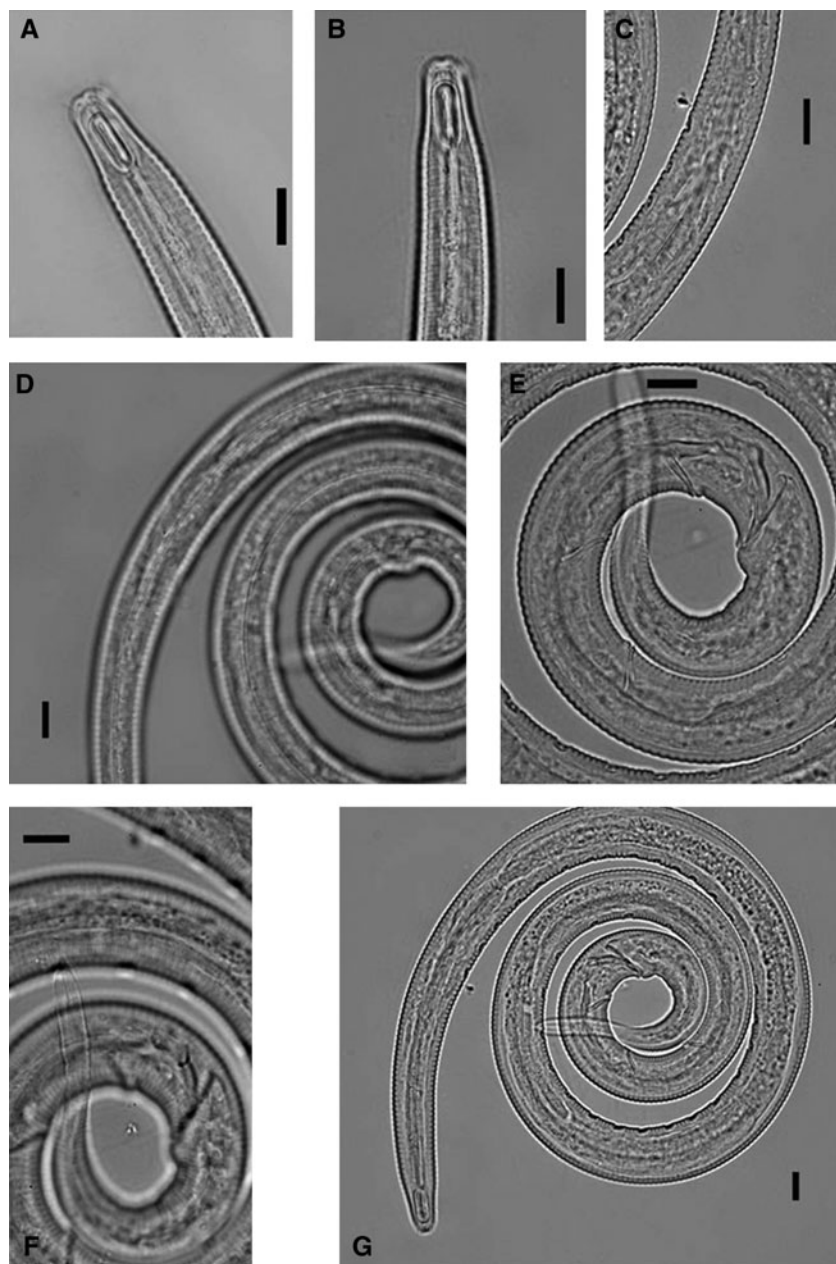


Plate 1. *Antomicron alveolatum* sp. nov. (A) Amphidial fovea on anterior end of male holotype; (B) cephalic setae of male holotype; (C) alveoli on oesophageal region of male holotype; (D) lateral band of male holotype; (E) copulatory apparatus, precloacal supplements, spicule and gubernaculum of male holotype; (F) tail of male holotype; (G) entire male holotype. Scale bars: A, B, C, D, E & F= 10 μm ; G = 20 μm .

Family LEPTOLAIMIDAE Örley, 1880
 Genus *Antomicron* Cobb, 1920
Antomicron alveolatum sp. nov.
 (Figures 2A–D & 5D; Plate 1A–G; Table 1)

TYPE MATERIAL

Holotype: male. Registration number MACN-In 37989; coordinates: 49°20'96"S 67°42'08"W; water depth: low littoral. Collected by C.T. Pastor de Ward, 23 January 2008.

Paratype: male. Registration number CNP NEM 1533; coordinates: 49°20'96"S 67°42'08"W; water depth: low littoral. Collected by C.T. Pastor de Ward, 23 January 2008.

ETYMOLOGY

From Latin word *alveolatum* (adj.) = alveolate, with presence of alveoli.

MATERIAL EXAMINED

Measurements: see Table 1.

DESCRIPTION

Male (holotype): body length medium-sized. Cuticle with widely spaced transverse striation 2 µm apart from smooth lateral field, 2 µm wide. With lateral differentiation unstriated 2 µm in diameter. No labial sensillae were observed. There are four 5 µm long cephalic setae. There is a longitudinal row of papillae down both sides of the lateral line. Amphidial fovea oval, 15 µm long and 5 µm wide, located 5 µm from anterior end on head capsule. Buccal cavity is thin, 17 µm long. Oesophagus is widening towards the posterior end cardia 150 µm long. Excretory pore is 110 µm from anterior end. Along oesophageal region and posterior to excretory pore 35 alveoli observed. Male with one testis right to the intestine (Figure 5). Spicules equal length, 26 µm long measured along blade, slightly curved ventrally. Gubernaculum curved anteriorly with a dorsal apophysis 18 µm long. Three 10 µm long cuticularized tubular preloacal supplements, the posterior most located 15 µm from spicule

Table 1. Measurements (µm) of *Antomicron alveolatum* sp. nov.

	Holotype male	Paratype male
L	700	750
a	29	37.5
b	4.7	5.1
c	6.19	8.15
lcs	5.00	5.00
aw	5.00	7.00
bda	14.00	8.00
amph%	35.71	62.50
daph	150.00	137.00
bdph	22.00	17.00
mbd	24.00	20.00
bdc	8.00	7.00
daa	587.00	658.00
abd	22	16
spic	26.00	21.00
spic%	1.18	1.31
gub	18.00	14.00
gub%	0.82	0.88
c'	5.13	5.75
T	113	92

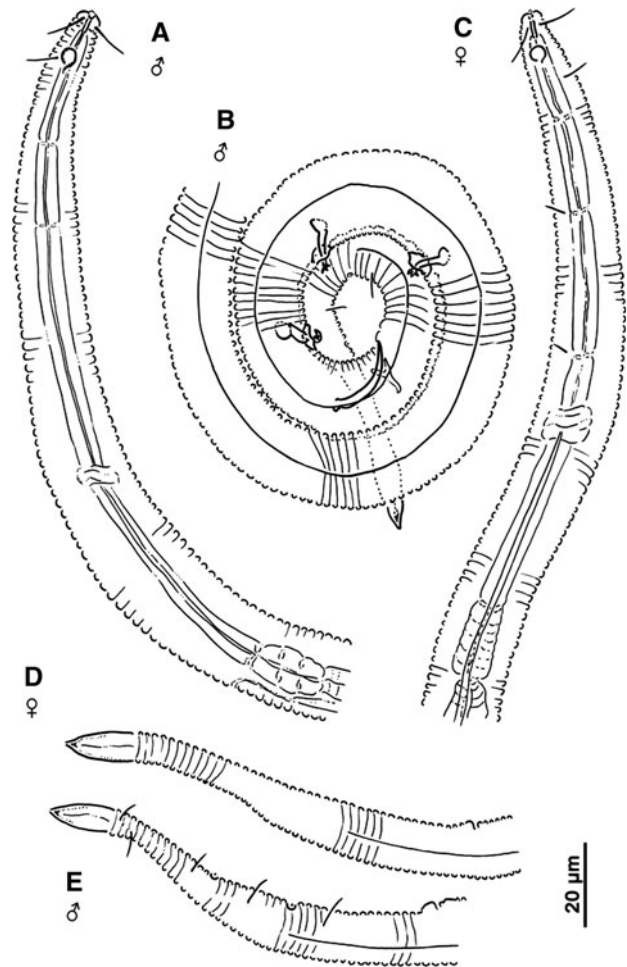


Fig. 3. *Leptolaimus (T) gabinoi* sp. nov. (A) Oesophageal region of male holotype; (B) copulatory apparatus and preloacal supplements of male holotype; (C) oesophageal region of female paratype; (D) posterior end of female paratype; (E) posterior end of male paratype.

head, the second one located 30 µm and the third one located 52 µm. Tail 113 µm long, distal third cylindrical in shape. On the tail are two subventral pairs of setae.

DIAGNOSIS AND RELATIONSHIPS

Antomicron alveolatum sp. nov. is characterized by having alveoli along posterior oesophageal region and anterior intestine and three preloacal supplements in male. *Antomicron alveolatum* sp. nov. resemble *A. profundum* Vitiello, 1971 and *A. intermedius* Gagarin & Thanh, 2005 by the presence of alveoli but in these species their position is posterior to the oesophageal region and it also differs in number of preloacal supplements. The new species also resemble *A. pellucidum* Cobb, 1920, *A. elegans* Lorenzen, 1969 and *A. pratensis* Lorenzen, 1969 by the presence of preloacal supplements but differs in that they do not have alveoli along the posterior oesophageal region.

KEY FOR THE SPECIES OF GENUS ANTOMICRON

1. With alveoli or cuticularized papillae in oesophageal region.....2
 - Without alveoli or cuticularized papillae in oesophageal region..... 3

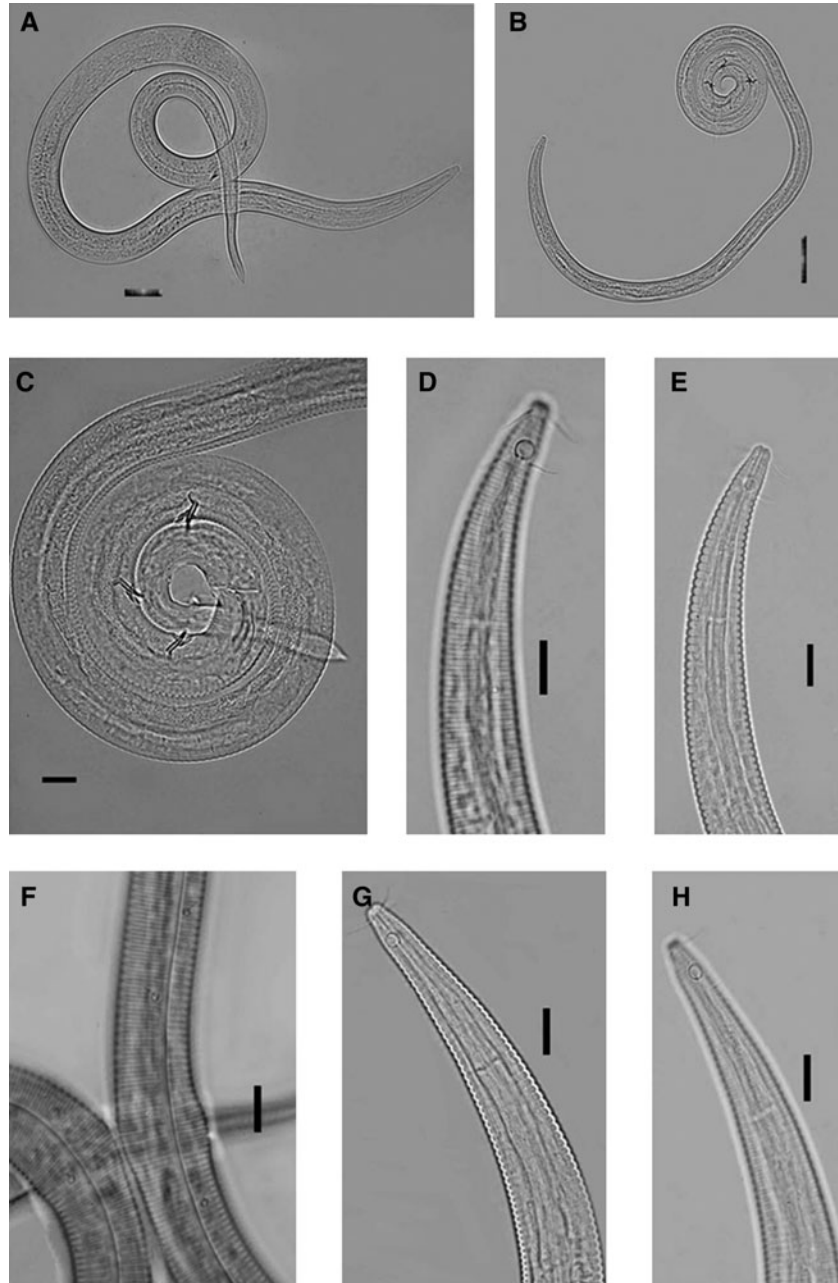


Plate 2. *Leptolaimus (T) gabinoi* sp. nov. (A) Entire female paratype; (B) entire male holotype; (C) copulatory apparatus and precloacal supplements of male holotype; (D) cephalic setae and amphidial fovea on anterior end of male holotype; (E) buccal cavity of male holotype; (F) vulva; (G) cephalic setae on anterior end of female paratype; (H) buccal cavity of female paratype. Scale bars: A & B= 50 µm; C, D, E, F, G & H= 10 µm.

- 2. With alveoli on oesophageal region; Patagonia, Argentina..... *A. alveolatum* sp. nov.
 — With alveoli posterior to oesophageal region; Mediterranean..... *A. profundum* Vitiello, 1971
- 3. Amphidial fovea posterior to cephalic capsule; Costa Rica..... *A. pellucidum* Cobb, 1920
 — Amphidial fovea for at least 50% on cephalic capsule..... 4
- 4. Gubernaculum with dorsal apophyses..... 5
 — Gubernaculum without dorsal apophyses; North Sea..... *A. pratensis* Lorenzen, 1969
- 5. Elongated amphidial fovea, length/width= 0.5; North Sea..... *A. elegans* Lorenzen, 1969

— Rounded amphidial fovea, length/width = 1; Cam River, Vietnam
 *A. intermedius* Gagarin & Thanh, 2005

Genus *Leptolaimus* de Man, 1876
Leptolaimus (Tubulaimus) gabinoi sp. nov.
 (Figures 3A–E & 5B, C; Plate 2A–H; Table 2)

TYPE MATERIAL

Holotype: male. Registration number MACN-In 37992; coordinates: 49°20'96''S 67°42'08''W; water depth: low littoral. Collected by C.T. Pastor de Ward, 23 January 2008.

Table 2. Measurements (μm) of *Leptolaimus* (*T*) *gabinoi* sp. nov. (range, mean value in parentheses).

	Holotype male	Paratype female	Males N = 2	Female	Juvenile
L	885	720	872–880 (876)	698	530
a	52	42	44–52 (48)	41	33
b	6	6	6–7 (6.6)	6	4
c	10	7.2	8–9 (8.5)	9	4
lcs	6	5	5	5	5
aw	4	4	3–4 (3.5)	3	3
bda	7	8	10	8	5
amph%	57	50	30–40 (35)	38	410
daph	147	153	140–150 (145)	120	140
bdph	17	17	18–23 (20.5)	23	15
mbd	19	23	20	26	16
bdc	6	5	4–6 (5)	6	4
daa	799	620	762–782 (772)	618	410
abd	15	15	14–23 (18.5)	16	10
dav	–	370	–	238	–
V%	–	51.4	–	34	–
spic	20	–	20–24 (22)	–	–
spic%	1.3	–	1.04–1.4 (1.2)	–	–
gub	13	–	14	–	–
gub%	0.86	–	0.61–1.0 (0.8)	–	–
c'	5.7	6.3	4.8–7– (5.9)	5.3	12
T	86	100	98–110 (104)	80	120

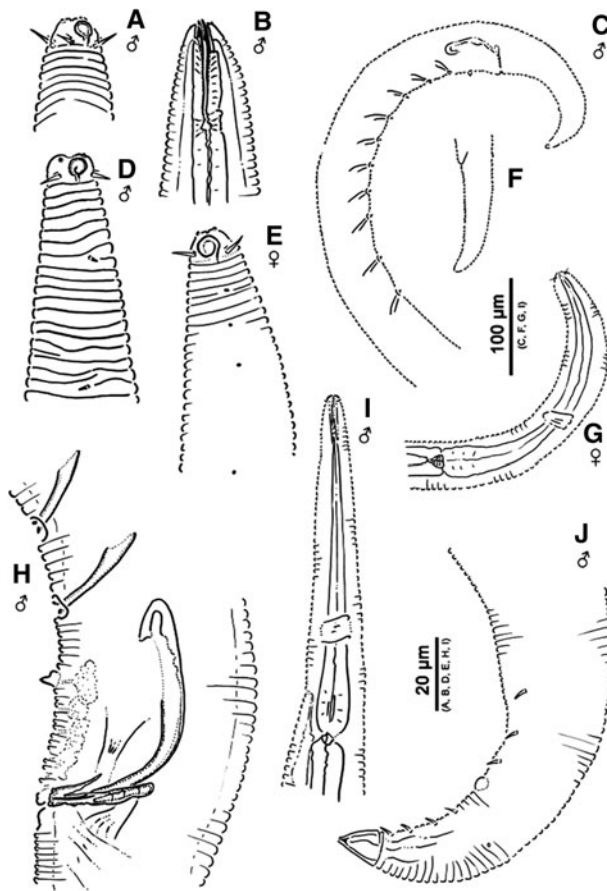


Fig. 4. *Procamacolaimus dorylaimus*. (A) Head region of male; (B) anterior end of male, showing buccal cavity; (C) posterior end of male; (D) anterior end of male; (E) head region of female; (F) tail of female; (G) neck region of female; (H) copulatory apparatus and prelocaal supplements of male; (I) oesophageal region of male; (J) caudal setae on tail of male. Scale bars: C, F, G & I = 100 μm ; A, B, D, E, H & J = 20 μm .

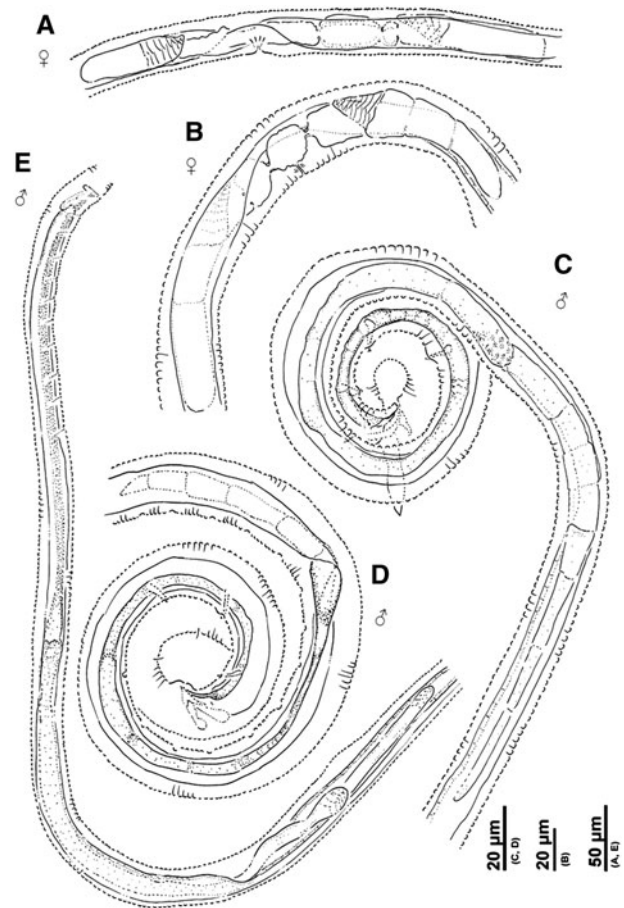


Fig. 5. Reproductive system of: (A) *Procamacolaimus dorylaimus* female; (B) *Leptolaimus* (*T*) *gabinoi* female paratype; (C) *L. (T) gabinoi* male holotype; (D) *Antomicron alveolatum* male holotype; (E) *P. dorylaimus* male. Scale bars: A & E = 50 μm ; B, C & D = 20 μm .

Paratype: female. Registration number MACN-In 37993; coordinates: 49°20'96"S 67°42'08"W; water depth: low littoral. Collected by C.T. Pastor de Ward, 23 January 2008.

Two males and one female additional specimens. Registration number CNP NEM 1534-1536; coordinates: 49°20'96"S 67°42'08"W; water depth: low littoral. Collected by C.T. Pastor de Ward, 23 January 2008.

ETYMOLOGY

Dedicated to G.M. Ward in recognition of his help given during the sampling for this project.

MATERIAL EXAMINED

Measurements: see Table 2.

DESCRIPTION

Male (holotype): body length medium-sized. Cuticle striated 1.2 μm . With lateral differentiation 2 μm in diameter. Four long cephalic setae 6 μm long. There is a longitudinal row of long cervical setae down each side of the lateral field. Amphidial fovea is circular, 4 μm in diameter, 10 μm from anterior end. Buccal cavity is small, 10 μm long. Oesophagus with a small terminal bulb and a short cardia.

Male with one testes right to the intestine (Figure 5). Spicules equal length, 20 μm long, measured as a curve, slightly curved ventrally. Gubernaculum with dorsal

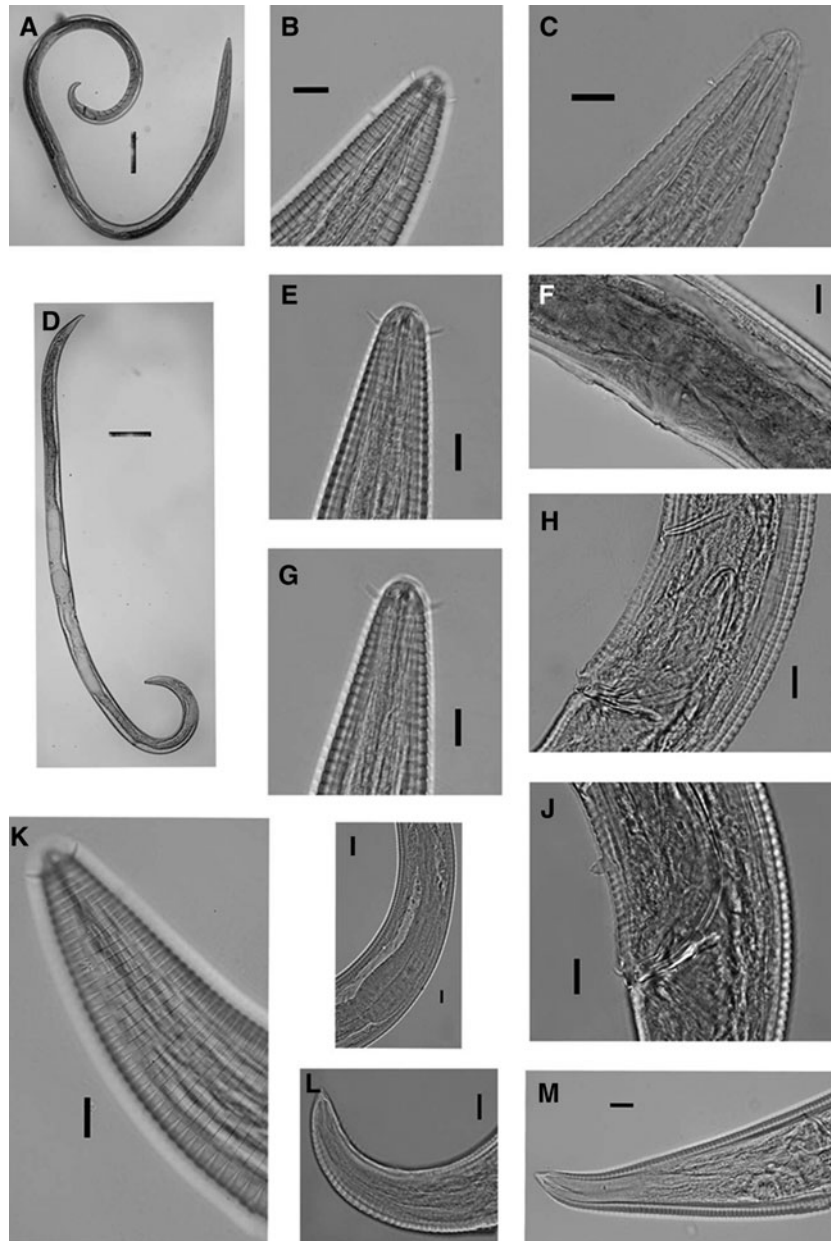


Plate 3. *Procamacolaimus dorylaimus*. (A) Entire male; (B) amphidial fovea on anterior end of male; (C) cephalic setae of male; (D) entire female; (E) buccal cavity of female; (F) vulva; (G) buccal cavity of male; (H) precloacal supplements of male; (I) oesophageal bulb of male; (J) copulatory apparatus of male; (K) cephalic setae of female; (L) tail of male; (M) tail of female. Scale bars: A & D= 160 μm ; B, C, E, F, G, H, I, J, K, L & M= 10 μm .

apophysis, 13 μm long. Three, 17 μm long cuticularized tubular precloacal supplements cephalate proximally and terminating distally in several hooks, surrounded by an oval disc 8 μm in diameter. Tail is 86 μm , conical in shape with posterior swelling. On the tail are three subventral pairs of setae, two small alveoli and one subdorsal setae.

Female (paratype): females are similar to males in general body shape with two antidromously reflexed ovaries right/left to the intestine (Figure 5). Vulva is 51.4% of body length. Spermatheca is globular, short vagina. Tail 100 μm long, conico-cylindrical in shape. Caudal glands present.

DIAGNOSIS AND RELATIONSHIPS

Leptolaimus (T) gabinoi sp. nov. is characterized by the number of precloacal supplements (three) with hamate distal

end. It belongs to the group of *Leptolaimus (Tubulaimus)* having hamate appendages, together with *L. macer* Lorenzen, 1972 and *L. scotlandicus* Jayasree & Warwick, 1977. *Leptolaimus (T) gabinoi* sp. nov. resembles: *Leptolaimus asiaticus* Gagarin & Thanh, 2005 by the number of precloacal supplements (three) but differs by the shape of amphidial fovea which is long and thin; *L. kerguelensis* de Bovée, 1977 and *L. leptaleus* Lorenzen, 1921 by the number of precloacal supplements (three) but differs in the length of the spicule, the value of a, b and c; *L. puccinealliae* Lorenzen, 1969, *L. pocillus* de Bovée, 1974, *L. tritubulatus* Boucher & Helléouët, 1977, *L. venustus* Lorenzen, 1972 and *L. vinnulus* Vitiello, 1974 by the number of precloacal supplements (three) but differs in the length of the spicule, the value of a and c. *Leptolaimus (T) gabinoi* sp. nov. differs from: *L. minutus* Vitiello, 1971

Table 3. Measurements (μm) of *Procamacolaimus dorylaimus*. (range, mean value in parentheses).

	Males N= 6	Females N = 3	Juvenile
L	1050–2080 (1722)	1050–1800 (1433)	1050
a	23–52 (44)	38–55 (48)	46
b	4–9 (7)	6–7 (7)	3.5
c	11–23 (19)	19–25 (22)	14
lcs	4–6 (5)	3–6 (5)	5
aw	3–7 (5)	3–5 (4)	5
bda	8–12 (10)	8–10 (9)	12
amph%	25–60 (43)	38–50 (44)	38
daph	210–280 (248)	170–220 (200)	300
bdph	27–40 (34)	19–30 (25)	26
mbd	35–45 (39)	19–47 (31)	23
bdc	7–10 (8.5)	7–9 (8)	11
daa	957–1990 (1632)	994–1713 (1366)	975
dv	–	500–850 (733)	–
V%	–	47–48.3 (48)	–
spic	65–80 (71)	–	–
spic%	5.8–9.8 (7.28)	–	–
gub	20–30 (25)	–	–
gub%	2.08–3.3 (2.57)	–	–
c'	28–37 (31)	19–28 (25)	25
T	82–97 (89)	56–87 (67)	75

and *L. pumicus* Vitiello, 1970 by the presence of precloacal supplements which are absent in these two species; *L. acicula* Lorenzen, 1966, *L. alatus* Vitiello, 1977, *L. ampullaceus* Warwick, 1970, *L. antarcticus* Cobb 1914, *L. cupulatus* Lorenzen, 1972, *L. danicus* Jensen, 1978, *L. ditlevseni* Kreis, 1963, *L. elegans* Lorenzen, 1972, *L. fluvialis* Alekseev, 1981, *L. gerlachi* Murphy, 1966, *L. limicolus* Lorenzen, 1966, *L. longispiculus* Alekseev & Rassadnikova, 1977, *L. luridus* Timm, 1963, *L. maximus* Chitwood, 1936, *L. membranatus* Wieser, 1951, *L. meyer-reili* Jensen, 1991, *L. mixtus* Lorenzen, 1972, *L. nobilis* Gerlach, 1956, *L. papilliger* de Man, 1922, *L. praeclarus* Timm, 1961, *L. pumilus* Gagarin & Thanh, 2009, *L. relictus* Tsalolikin, 1979, *L. sebastiani* Pastor, 1984, *L. septempapilatus* Platt, 1973, *L. setiger* Gerlach, 1953, *L. timmi* Vitiello, 1971 and *L. vipriensis* Gagarin & Thanh, 2005 by the different number of precloacal supplements; *L. surdus* Gerlach, 1954 in the length of the body, the value of a and c (the number of precloacal supplements and the length of the spicule are not comparable because such values are not present in the original work).

A comparison of measurements of the 40 valid species (known from males) of *Leptolaimus* until now, are pointed out in Table 4.

The species *L. longiseta*, Allgén 1934; *L. norvegicus* Allgén, 1936; *L. plectoides* Chitwood, 1951; *L. steineri* Filipjev, 1922; *L. tenuis* Gerlach, 1956; *L. trichodes* Kreis, 1929 and *L. exile* Cobb, 1920 are known only from females, so they were not included in Table 4. *Leptolaimus longisetosus* Allgén, 1928 and *L. pellucidus* Southern, 1914 were transferred to *Halaphanolaimus* by having circular amphidial fovea and *L. haploopsis* Jensen, 1978 was transferred to *Leptolaimoides* by their very elongated amphidial fovea (Deprez, 2006).

Family CAMACOLAIMIDAE Micoletzky, 1924

Genus *Procamacolaimus* Gerlach 1954

Procamacolaimus dorylaimus Holovachov, 2003

(Figures 4A–J & 5A–E; Plate 3A–M; Table 3)

TYPE MATERIAL

Male: Registration number CNP NEM 1537; coordinates: 42°77'67"S 64°98'83"W, water depth: sublittoral, 5 m. Collected by C.T. Pastor de Ward, 10 December 1986.

Five male and three female additional specimens. Registration number CNP NEM 1538-1545; coordinates: 42°46'56.9"S 65°00'50.7"W; water depth: upper littoral. Collected by G. de Luca, 10 January 1993.

MATERIAL EXAMINED

Measurements: see Table 3.

DESCRIPTION

Male: body length large-sized. Cuticle with fine transverse striation, 2 μm without lateral differentiation. There are four cephalic setae. Six external labial papillae have been observed. Oesophagus with a small terminal bulb and a short cardia. Ventral gland not observed. Spicules equal length, arcuate ventral and strongly ventrally inclined. Gubernaculum with dorsal apophysis. Nine to ten 28 μm long cuticularized tubular precloacal supplements and terminating distally in two hooks, the posteriormost located 52 (average) μm from the cloacal opening. One prominent papilla and several small tubes associated with glands have been observed, along the 28 (average) μm before cloacal opening. Tail is robust, cylindro-conical in shape. On the male tail seven subventral precloacal pairs of setae and one postcloacal papilla.

Female: females similar to males in general body shape, cuticle and arrangement and size of anterior sensilla. Vulva is 48% (average) of body length. Tail is cylindro-conical in shape.

DISCUSSION

The specimens found resemble the original description of *P. dorylaimus* Holovachov, 2003 in: the general shape of the body, length of cephalic setae in male and female 5 μm (average) versus 5.5 μm holotype and paratype female, ocelli absent, shape, width and position of the amphidial fovea which is located anteriorly to cephalic setae bases, the de Man's ratio male $b = 7$ (average) versus $b = 8.5$ holotype, in female $b = 7$ (average) versus $b = 8.3$ paratype female, the de Man's ratio $c = 19$ (average) in male versus $c = 18.6$ holotype, in female $c = 22$ (average) versus $c = 20$ paratype female, shape of the spicule, gubernaculum and precloacal supplements, position of the vulva 48% (average) length of body versus 44.4% paratype female, distance precloacal papillae–cloaca in males 28 μm (average) versus 20 μm holotype, distance posteriormost precloacal supplement–cloaca in males 52 μm (average) versus 53 μm holotype, stoma strongly cuticularized in male 30 μm (average) long versus 41 μm holotype, length of stoma/cephalic diameter = 1 (average) in male versus 1.5 holotype, length of spicule/length of gubernaculum = 3 (average) in male and holotype, length of gubernaculum/length of precloacal supplements = 1 (average) in male and holotype.

It also differs in: the de Man's ratio male $a = 44$ (average) versus $a = 60.8$ holotype, in female $a = 48$ (average) versus $a = 64.2$ paratype female, shorter body length male 1722 μm (average) versus 3374 μm holotype, in female 1433 μm (average) versus 3496 μm paratype female, shorter length of spicule in male 71 μm (average) versus 85.5 μm holotype, shorter length of gubernaculum in male 25 μm (average)

Table 4. Differentiating data of holotype male of *Leptolaimus* species.

Species	References	L	a	b	c	spic	Hd	amph%	PS
<i>L. acicula</i>	Lorenzen, 1966	450	30	4.7	4.7	12	5.5	40	2
<i>L. alatus</i>	Vitiello, 1977	595	28	3.7	11.6	26	10	47	7
<i>L. ampullaceus</i>	Warwick, 1970	860	61	7	7.2	17	9	55	9
<i>L. antarcticus</i>	Cobb, 1914	800	33	3.8	–	–	–	–	2
<i>L. asiaticus</i>	Gagarin & Thanh, 2005	472	34	4.1	4.2	15	6	27	3
<i>L. cupulatus</i>	Lorenzen, 1972	600	46	4.9	7.1	17	7.6	53	7
<i>L. danicus</i>	Jensen, 1978	519	29	4.5	6.2	22	7.5	50	6
<i>L. ditlevseni</i>	Kreis, 1963	578	26	4.4	6.5	11.5	7.7	52	1
<i>L. elegans</i>	Lorenzen, 1972	635	33	4.7	6.7	20	8.1	50	6
<i>L. fluvialis</i>	Alekseev, 1981	–	–	–	–	27	–	–	6
<i>L.(T) gabinoi</i>	This study	885	52	6	10	20	8	57	3
<i>L. gerlachi</i>	Murphy, 1966	780	28	5	7.6	28	10	45	4
<i>L. kerguelensis</i>	de Bovée, 1977	595	33	4.7	5.8	29	7	59	3
<i>L. leptaleus</i>	Lorenzen, 1971	1180	112	7.2	5.8	13.5	8	48	3
<i>L. limicolus</i>	Lorenzen, 1966	785	24	4.4	8.3	48	14	46	5
<i>L. longispiculus</i>	Alekseev & Rassadnikova, 1977	750	24	5.2	7.4	65	7	40	8
<i>L. luridus</i>	Timm, 1963	680	34	5.8	8.4	35	15	35	4
<i>L. macer</i>	Lorenzen, 1972	790	66	5.7	7.2	16	5	40	7
<i>L. maximus</i>	Chitwood, 1936	2130	51	10	9	–	17	40	5
<i>L. membranatus</i>	Wieser, 1951	510	26	4.2	6.8	23	10	45	5
<i>L. meyer-reili</i>	Jensen, 1991	540	24	4.0	5.6	18	8	53	9
<i>L. minutus</i>	Vitiello, 1971	378	23	4.2	6	15.5	7	50	0
<i>L. mixtus</i>	Lorenzen, 1972	735	34	5	7	25	9	55	4
<i>L. nobilis</i>	Gerlach, 1956	1115	25	7.1	8.9	32	14	64	2
<i>L. papilliger</i>	de Man, 1922	446	30	4.5	7.6	16	7	33	25
<i>L. pocillus</i>	de Bovée, 1974	426	22	4.2	5.6	22	9	44	3
<i>L. praeclarus</i>	Timm, 1961	512	27	4.6	8.5	26	15	54	4
<i>L. puccinealliae</i>	Lorenzen, 1969	550	27	5.8	5.2	15	7	43	3
<i>L. pumicosus</i>	Vitiello, 1970	608	36	4.8	8.5	20	6	56	0
<i>L. pumilus</i>	Gagarin & Thanh, 2009	350	32	4.4	7.1	15	7	85	4
<i>L. relictus</i>	Tsalolikin, 1979	750	33	4.7	9.3	55	–	–	8
<i>L. scotlandicus</i>	Jayasree & Warwick, 1977	1185	51	7.7	8	31	6	66	12
<i>L. sebastiani</i>	Pastor de Ward, 1984	630	23	4.4	9.6	26	9	44	5
<i>L. septempapillatus</i>	Platt, 1973	935	44	5.9	10	25	7	60	7
<i>L. setiger</i>	Gerlach, 1953	1507	100	8.1	7.5	24	7	57	16
<i>L. surdus</i>	Gerlach, 1957	668	25	5.8	6.4	–	13	–	–
<i>L. timmi</i>	Vitiello, 1971	1295	70	10	10.7	21	10	47	10
<i>L. tritubulatus</i>	Boucher & Helléouët, 1977	618	46	5.4	6.6	17	4.5	77	3
<i>L. venustus</i>	Lorenzen, 1972	625	31	5.3	5.2	15	7.6	68	3
<i>L. vinnulus</i>	Vitiello, 1974	619	27	5.1	5.8	24	12	44	3
<i>L. vipriensis</i>	Gagarin & Thanh, 2005	693	26	4.7	8.3	24	9	60	4

Hd, head diameter.

versus 33 μm holotype, different number of preloacal supplements in males 9–10 versus 12 holotype, different number of caudal setae in male 14 versus 23 holotype, but the arrangement of the setae in the tail is similar to that species.

Due to similarities in metric and proportional morphological measurements between holotype and our specimens, we consider these individuals as *P. dorylaimus*.

The observed differences in the measurements (body length, spicule and gubernaculum) may be due to different environmental conditions in the two geographical locations.

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