

Nematodes of the order Dorylaimida from Andalucía Oriental, Spain. The genus *Mesodorylaimus* Andrassy, 1959. II. Two new species with pre- and/or postvulval ornamentations

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Summary. Two new species belonging to the genus *Mesodorylaimus* Andrassy, 1959 are described from natural biotopes in southeastern Spain. *Mesodorylaimus ibericus* sp. n. is characterized by its medium sized body (L=1.2-1.8 mm), lip region offset by a depression or almost continuous, odontostyle 12.5-15 μ m or scarcely longer than the lip region width, V=48-58%, vulva longitudinal, presence of small irregularities of the outer cuticle next to the vulva, *pars refringens vaginae* consisting of two well developed and separated triangular sclerotizations, female tail long (62-112 μ m, c=14-24, c'=2.4-4.6) in general with the ventral side straight and the dorsal one first convex and then concave, and males unknown. *Mesodorylaimus ornativulvatus* sp. n. can be distinguished by its small to medium sized body (L=0.9-1.1 mm), lip region offset by a depression, odontostyle 10-11 μ m, V=44-52%, presence of abundant wrinkles and folds on the body cuticle next to the vulva region, *pars refringens vaginae* consisting of two well developed close arrow-head shaped or triangular sclerotizations, female tail filiform (94-144 μ m, c=8-11, c'=5.5-8), male tail rounded (19-25 μ m, c=45-57, c'=0.8-1.0), spicules 40-54 μ m and 8-10 regularly spaced ventromedian supplements beginning outside the range of the spicules.

Key words: *Mesodorylaimus ibericus* sp. n., *M. ornativulvatus* sp. n., description, Spain.

This is the second paper in a series on the taxonomy of *Mesodorylaimus* species from southeastern Spain. Here we describe two previously unknown species. The methods used are as described in the preceding paper (Abolafia and Peña Santiago, 1996).

DESCRIPTIONS

Mesodorylaimus ibericus sp. n. (Fig. 1 & Table 1)

Female. Relatively slender nematodes, 1.2-1.8 mm long. Body cylindrical, clearly tapering towards the posterior end and less so towards the anterior extremity. Habitus after fixation more or less curved ventrad, often an open "C". Outer cuticle layer thin along the entire body, with very fine transverse striations which are sometimes imperceptible. Inner cuticle layer wider than the outer one, thickening at caudal region. Lateral chords occupying about one-third of the midbody diameter. Lateral pores obscure. Lip region 2.3-2.6 times as wide as high and about one-third as wide as the body diameter at neck base;

almost continuous with the adjacent body or slightly offset by a weak depression. Lips amalgamated, somewhat angular. Labial and cephalic papillae easily visible but not interrupting the head contour. Amphid aperture situated at level of depression and occupying about two-thirds of the corresponding body width; fovea an elongated cup. Odontostyle typical of the genus; its length equal to, or scarcely more than lip region width, aperture about two-fifths of the total length. Odontophore rod-like, as long as the odontostyle. Guiding ring simple. Pharynx consisting of a slender but muscular anterior part which expands gradually into the basal bulb. Pharyngeal bulb cylindrical, around seven times as long as wide and occupying about two-fifths of the total neck length. Pharyngeal gland nuclei in general clear but their orifices more obscure: (n=5) DN 57-64%; S₁N 79-83%; S₂N 90-91%; DN-S₁N distance 18-23%; DN-S₂N distance 27-34%. Nerve ring situated at 35-40% of the total neck length. Cardia conoid, about twice as long as wide and enveloped by intestinal tissue, which forms a conical extension

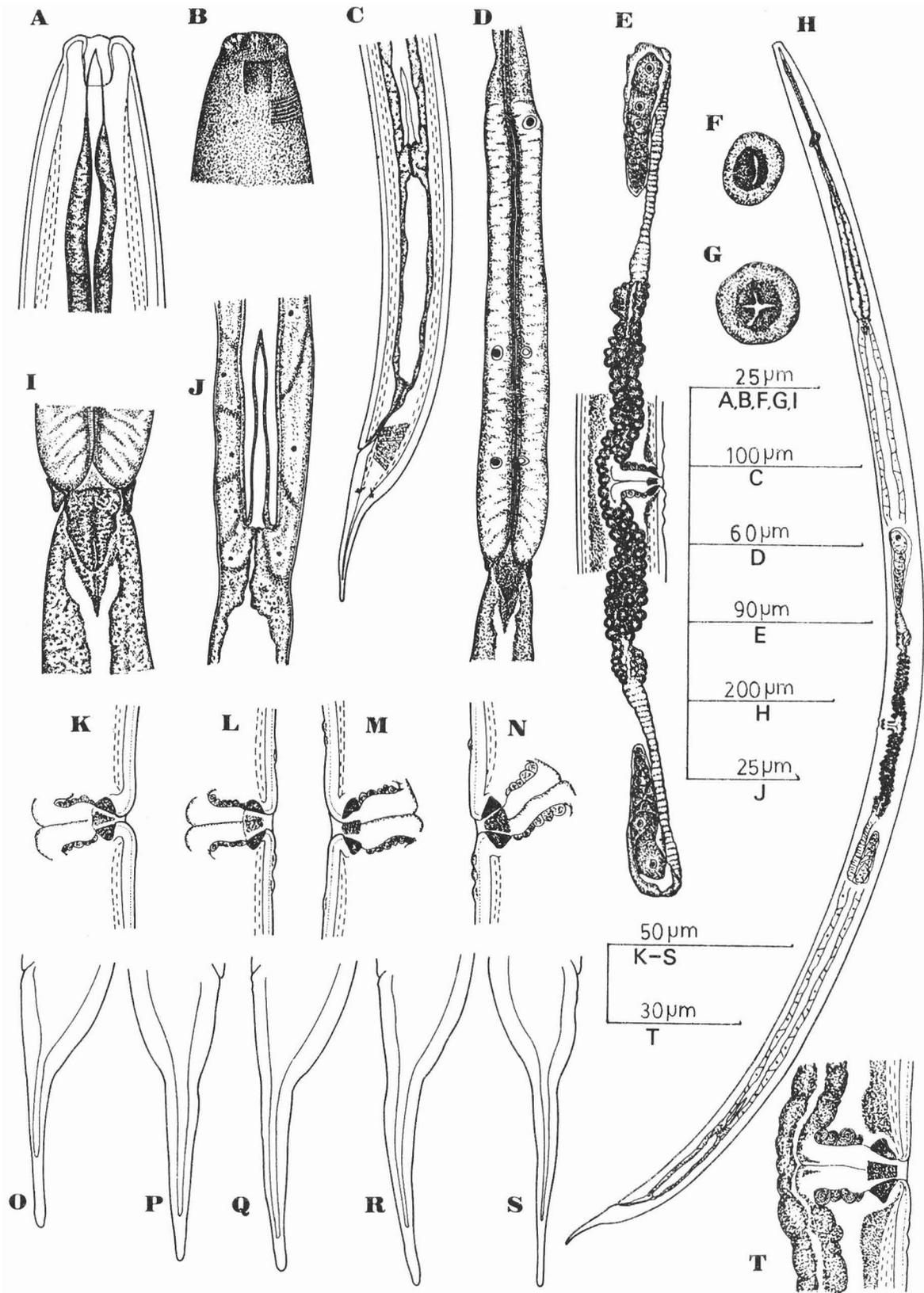


Fig. 1. *Mesodorylaimus ibericus* sp. n. (female). A: Lip region in median view; B: Lip region in surface view; C: Posterior body region; D: Pharyngeal bulb; E: Genital system; F: Vulva in frontal view; G: Vagina in frontal view; H: Entire; I: Cardia; J: Intestine-pretectum junction; K-N, T: Vagina; O-S: Tail.

protruding into the intestinal lumen; its junction with the pharynx base is encircled by a ring-like structure. Genital system didelphic-amphidelphic. Ovaries variable in length but usually not reaching the oviduct-uterus junction. Oocytes first in two rows, then in a single row. Oviduct joining the ovary subterminally and consisting of a slender distal part and a moderately developed *pars dilatata*. Junction between oviduct and uterus consisting of an inner refractive part surrounded by a muscular sphincter. Uterus shorter than oviduct, 1.5-2 times as long as the corresponding body width and alveolar in appearance. Vagina extending inwards to scarcely more than half of the body diameter; *pars proximalis vaginae* 16-19 μm long, about 1.5 times as long as width, with weakly sigmoid contours; *pars refringens vaginae* consisting of two well developed and separated triangular sclerotizations, having a combined width of 15 μm and being 5 μm long (an intermediate sclerotized area often appears between the sclerotizations; it is surely an optical effect of the closely adjacent lateral walls of the sclerotized ring); *pars distalis vaginae* very short. Vulva longitudinal. The cuticle of the perivulval area very often presents some irregularities of variable nature and position. Sperm not seen. Intestine-prerectum junction with a long conical or tongue-like projection which extends forwards into the intestinal lumen. Prerectum 2-5 anal body widths long. Rectum length about 1.5 anal body widths. Tail elongated, tapering first abruptly, then more gradually to a finely rounded terminus; ventrally in general almost straight, dorsally first convex, then concave and finally straight; hyaline portion 9-21 μm , less than one-fifth of the caudal length. Caudal pores two pairs, one subdorsal, the other subventral.

Male. Unknown.

Type habitat and locality. Soil from a meadow near the road from La Puebla de Don Fadrique to Santiago de la Espada in Sierra de la Sagra, province of Granada, Spain.

Other habitats and localities. The new species is widely distributed in southeastern Spain, having been found in twenty five localities of the provinces of Jaén, Granada and Málaga in association with several wild plants (meadows, willow, bulrush, Mediterranean garigues, oak forests, thyme, wild rose and others) and a few crop plant cultures (wheat, almond, pomegranate).

Type material. Eleven females (holotype and paratypes) are deposited in Departamento de Biología Animal, Vegetal y Ecología, Universidad de

Jaén, Spain, on slides n° 0193-0196. Other females paratypes are deposited in the following collections: Instituut voor Dierkunde, Rijksuniversiteit Gent, Belgium (three paratypes); USDANC, Beltsville, Maryland, USA; and Landbouwwuniversiteit, Wageningen, the Netherlands (two paratypes).

Etymology. The specific epithet "ibericus" is the Latin gentile adjective of the Iberian Peninsula.

Differential diagnosis and relationships. *M. ibericus* sp. n. is characterized by its medium sized body ($L=1.2-1.8$), lip region offset by a depression or almost continuous, odontostyle 12.5-15 μm or scarcely longer than the lip region width, $V=48-58\%$, vulva longitudinal, presence of small irregularities of the outer cuticle next to the vulva, *pars refringens vaginae* consisting of two well developed and separated triangular sclerotizations, tail long (62-112 μm , $c=14-24$, $c'=2.4-4.6$) in general with its ventral side straight and the dorsal one first convex and then concave, and males unknown.

The new species is similar to *M. biroi* Daday, 1899, *M. cardiacus* Thorne, 1974, *M. imperator* Loof, 1975, *M. litoralis* Loof, 1969, *M. simplex* Thorne, 1974 and *M. vulvapapillatus* Bagaturia & Eliava, 1966. It can be separated from *M. biroi* by the presence of cuticular irregularities next to the vulva (*vs* absence), vulva longitudinal (*vs* transverse) and female tail with different morphology [*vs mesonyctius*-type, see Fig. 61b by Thorne & Swanger (1936)]. From *M. cardiacus* by having a shorter odontostyle (*vs* 16 μm), cardia with different morphology [*vs* unusually long, see Fig. 27E (Thorne, 1974)], presence of cuticular irregularities next to the vulva (*vs* absence), shorter tail (*vs* $c=13-15$), and males unknown with females not containing sperm (*vs* males present and females with sperm). From *M. imperator* by having vulva longitudinal [*vs* transverse (Loof, 1975)], *pars refringens vaginae* with different sclerotizations, less densely wrinkled cuticle next to the vulva, tail tip more rounded (*vs* clearly attenuated), and males unknown (*vs* males known). From *M. litoralis* by the slightly offset lip region [*vs* constriction (Loof, 1969)], presence of a conical tongue-like projection at the intestine-prerectum junction (*vs* absence), and males absent (*vs* males as frequent as females). From *M. simplex* it differs by having a rounded or somewhat angular lip region (*vs* more angular), *pars refringens vaginae* with different sclerotizations (see Thorne's Fig. 28D), and female tail with different morphology (slender part more cylindrical *vs* more acute) and with a shorter hyaline terminal portion (less than one-fourth of the total length *vs* almost the whole slender part of the tail). From *M. vulvapapillatus* by having a weakly offset lip

region [vs offset by constriction (Bagaturia & Eliava, 1966)], *pars refringens vaginae* with well separated sclerotizations (vs close sclerotizations), less prominent cuticular irregularities next to the vulva, and males unknown (vs male known).

***Mesodorylaimus ornativulvatus* sp. n.**
(Fig. 2 & Table 2)

Female. Relatively slender nematodes, 0.9-1.1 mm long. Body cylindrical, tapering clearly towards the posterior end and less so towards the anterior extremity. Habitus after fixation varying from almost straight or slightly ventrally arched to distinctly ventrally curved. Outer cuticle layer rather thin along the entire body and with very fine transverse striations which are often visible only at the anterior region. Inner cuticle layer wider than outer one and thickened at level of tail. Lateral chord about one-third of the midbody diameter, with granular aspect. Lateral pores obscure in the specimens examined. Lip region offset by depression and somewhat angular; it is twice as wide as high and about one-third as wide as the body width at neck base. Lips amalgamated. Labial and cephalic papillae prominent, slightly interrupting with the head contour. Amphid opening at level of cephalic depression and its aperture occupying scarcely less than half of the corresponding body width; fovea elongated cup-shaped. Cheilostome cylindrical with weakly sclerotized walls. Odontostyle 0.9-1.2 times as long as the lip region width; aperture around two-fifths of the total length. Odontophore rod-like, 1.5 times as long as the odontostyle. Guiding ring simple, sometimes difficult to observe. The pharynx consists of a slender but muscular anterior part which expands gradually into the basal bulb. Pharyngeal bulb cylindrical, about five times as long as wide and occupying about 35% of the total neck length. Pharyngeal gland nuclei often visible in the material studied: (n=5) DN 66-72%; S₁N 81-84%; S₂N 88-94%; DN-S₁N distance 12-18%; DN-S₂N distance 19-26%. Nerve ring located at one-third of the total neck length. Cardia conoid, almost as long as wide and enveloped by the intestinal tissue which forms an extension projecting into the intestinal lumen; a ring structure surrounds its junction with the pharyngeal bulb base. Genital system didelphic-amphidelphic. Ovaries rather small since they do not reach the oviduct-uterus junction. Oocytes numerous, first in two rows, then in a single row. Oviduct joining the ovary subterminally and consisting of a slender part with prismatic cells and an usually well developed *pars dilatata*. Junction between oviduct and uterus with a sclerotized inner part and a distinct muscular sphincter. Uterus 2-3 times as long as the corresponding

body width, and often with a widened portion including abundant spindle-shaped sperm. Vagina occupying more than half of the corresponding body width; *pars proximalis vaginae* 11-12 µm long, about 1.5 times as long as wide, with weakly sigmoid contour; *pars refringens vaginae* consisting of two well developed head arrow-shaped or triangular close sclerotizations; *pars distalis vaginae* short. Vulva transverse. Anterior and posterior to the vulva, the body cuticle (both outer and inner layers) presents abundant wrinkles and folds which are very conspicuous in all the females examined but whose number (0-5 folds anterior and 0-8 folds posterior to the vulva, starting 6-15 µm and 5-20 µm from the vulva respectively) and size (more or less deep folds) are somewhat variable. Prerectum 2.5-3.5 times as long as the anal body diameter; its junction with the intestine with a short and faint conical projection. Rectum about twice as long as anal body width. Tail filiform, first tapering abruptly, then slightly widening again and finally tapering gradually till the finely rounded tip; hyaline terminal part 11-19 µm, about one-sixth of the total tail length. Caudal pores two pairs, one subdorsal, the other subventral.

Male. General morphology similar to the female but with rounded tail and more curved ventrad posterior body region. Genital system diorchic, with opposite testes. Prerectum 3-4.5 anal body widths long, beginning at level of the anterior ventromedian supplements. In addition to the adanal pair, a series of 8-10 regularly spaced ventromedian supplements is present, starting outside the range of the spicules. Spicules relatively robust, curved ventrad and about twice as long as anal body widths. Lateral guiding pieces of medium size, spindle-shaped and with bifurcate end. Tail rounded conoid, ventrally almost straight, dorsally convex. Caudal pores as illustrated.

Type habitat and locality. The new species was collected from a high altitude (2950 m about sea level) wet meadow near the road to Veleta summit, Sierra Nevada, province of Granada, Spain.

Type material. Seven females (holotype and paratypes) and two males (allotype and paratype) deposited in the Departamento de Biología Animal, Vegetal y Ecología, Universidad de Jaén, Spain on slides n° 0197-0203. Other paratypes deposited in the following collections: Instituut voor Dierkunde, Rijksuniversiteit Gent, Belgium (one female and one male); USDANC, Beltsville, Maryland, USA (one female); and Landbouwniversiteit, Wageningen, the Netherlands (one female and one male).

Etymology. The specific epithet derives from the

Table 1. Measurements and diagnostic features of *Mesodorylaimus ibericus* n. sp.
(All measurements in μm except L in mm).

Habitat Locality Province	Meadow Sagra Granada		Garigue Tejeda Málaga	Garigue Arenas Granada	Garigue Huéscar-La Losa Granada	Various Various Jaén
	Holotype (female)	Paratype (16 females)	(15 females)	(9 females)	(8 females)	(9 females)
L	1.5	1.4±0.1 (1.2-1.7)	1.3±0.1 (1.2-1.5)	1.5±0.1 (1.4-1.7)	1.4±0.1 (1.2-1.5)	1.3-1.8
a	39.5	35.9±2.2 (31.9-38.6)	31.4±4.4 (28.4-40.5)	37.4±2.1 (34.8-40.9)	33.4±2.8 (29.9-38.3)	29.4-39.9
b	4.4	4.4±0.2 (4.1-4.9)	4.3±0.2 (4.1-4.8)	4.4±0.2 (4.1-4.8)	4.3±0.2 (4.0-4.5)	4.0-4.6
c	21.1	19.1±2.2 (14.7-24.3)	16.1±1.5 (14.2-20.0)	21.0±1.4 (19.1-23.8)	19.8±1.8 (18.0-23.3)	16.2-23.1
V(%)	52.5	53.2±1.2 (50.4-54.7)	53.8±2.1 (49.2-58.1)	53.1±1.8 (51.1-57.0)	52.5±2.9 (47.8-57.4)	52.2-54.9
G ₁	12.9	13.2±1.5 (9.6-15.5)	13.0±1.6 (8.9-15.7)	13.6±1.9 (9.6-16.9)	20.5±4.6 (13.7-29.9)	10.3-19.0
G ₂	13.4	13.1±1.7 (10.3-17.9)	12.2±2.1 (7.4-15.4)	8.6±1.6 (8.6-16.3)	16.0±2.8 (12.7-21.9)	10.5-20.2
c'	2.7	3.0±0.3 (2.3-3.6)	3.1±1.1 (3.0-4.4)	2.8±0.1 (2.8-3.1)	2.9±0.1 (2.7-3.2)	2.6-3.7
Lip region: width	13.0	11.5-13.0	11.5-12.0	12.0-12.5	11.5-12.5	11.5-13.5
height	5.0	5.0	4.5-5.0	5.0	5.0	4.5-5.5
Amphid aperture	5.0	4.5-5.5	5.5	6.0-6.5	5.0-6.5	4.5-6.5
Odontostyle	12.5	13.3±0.7 (12.5-15.0)	13.1±0.3 (12.5-14.0)	13.3±0.6 (12.5-14.0)	13.0±0.2 (12.5-13.5)	13.0-14.0
Odontophore	?	?	12.5±0.5 (12.0-13.0)	?	17.1±6.2 (12.0-26.0)	?
Guiding ring	8.5	8.0-9.0	7.5-9.0	8.5-10.5	7.5-8.5	8.0-9.0
Nerve ring-ant. end	119	117±9.1 (101-142)	116±8.4 (101-127)	115±7.7 (101-127)	104±12.6 (81.0-122)	106-147
Neck length	344	328±17.9 (300-369)	323±16.2 (294-350)	355±13.8 (337-387)	327±12.5 (306-343)	300-397
Phar. bulb length	147	133±12.9 (116-159)	121±26.0 (96.5-147)	144±8.0 (137-162)	137±7.3 (125-147)	123-167
Cardia: width	9.0	8.0-12.0	8.0-12.0	8.0-12.0	8.0-10.0	8.0-12.0
length	25.0	11.0-25.0	10.0-25.0	15.0-20.0	15.0-21.0	12.0-30.5
Cuticle: head	2.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0
midbody	2.5	2.5-3.5	2.5-3.5	2.0-3.0	2.0-3.5	2.5-3.0
tail	4.0	3.5-4.0	3.0-4.5	3.0-4.0	3.0-4.0	3.0-5.0
Body width: neck base	35.5	34.0-41.0	33.5-42.5	36.5-40.5	34.5-38.5	34.0-49.5
midbody	38.5	36.5-47.5	38.5-48.5	39.5-45.5	37.5-46.5	35.5-46.0
anus	26.0	22.0-28.5	24.0-28.0	24.0-26.0	21.0-25.0	22.0-27.0
Lateral chord	13.0	11.0-15.0	10.0-20.0	10.0-14.0	11.0-13.0	11.0-17.0
Anterior ovary	70.0	76.6±22.6 (53-127)	100±29.3 (63.5-157)	161±34.8 (125-216)	170±63.9 (71.5-269)	62.0-250
Anterior gen. branch	197	195±28.1 (152-248)	184±22.8 (140-243)	215±35.5 (153-279)	262±105 (75.0-465)	150-304
Posterior ovary	73.0	80.7±18.2 (40-107)	92.9±23.0 (56-128)	180±34.2 (125-223)	166±40.3 (87.0-208)	71.0-213
Posterior gen. branch	188	193±29.8 (152-266)	165±38.0 (104-208)	219±41.5 (158-293)	224±43.7 (158-315)	153-229
Vagina: width	16.0	12.0-18.0	11.0-17.0	12.0-16.0	11.0-14.0	12.0-21.5
length	22.0	19.0-25.0	16.0-26.0	18.0-27.0	16.0-27.0	19.0-30.0
Vulva-anterior end	800	779±66.7 (669-925)	766±72.6 (606-894)	840±45.9 (768-912)	732±58.2 (650-837)	693-994
Prerectum	82.0	97.1±15.7 (76-128)	77.5±18.6 (58-127)	80.6±14.2 (66-98.5)	79.3±15.9 (58-102)	64.0-94.5
Rectum	43.5	38.8±5.0 (30.5-46.5)	38.6±2.8 (35.5-44.5)	42.9±2.8 (37.5-46.5)	37.8±3.9 (33.5-46.5)	34.0-50.5
Tail	72.0	77.0±7.2 (62.5-93.5)	88.3±11.7 (75-106)	75.0	70.5±6.0 (62-79)	68.0-93.5

Latin roots "ornatus" = ornament, and "vulva" = vulva, and refers to the irregularities of the body cuticle next to the vulva area.

Differential diagnosis and relationships. *M. ornativulvatus* sp. n. is distinguished by the small to medium (L=0.9-1.1 mm) sized body, lip region offset by a depression, odontostyle 10-11 μm , V=44-52%, presence of abundant wrinkles and folds next to the

vulva, *pars refringens vaginae* consisting of two well developed close head arrow-shaped or triangular sclerotizations, female tail filiform (94-144 μm , c=8-11, c'=5.5-8), male tail rounded conoid (19-25 μm , c=45-57, c'=0.8-1.0), spicules 40-54 μm and 8-10 regularly spaced ventromedian supplements beginning outside the range of the spicules.

The new species is close to *M. johanni* Basson & Heyns, 1974, *M. lopadusae* Vinciguerra & La Fauci,

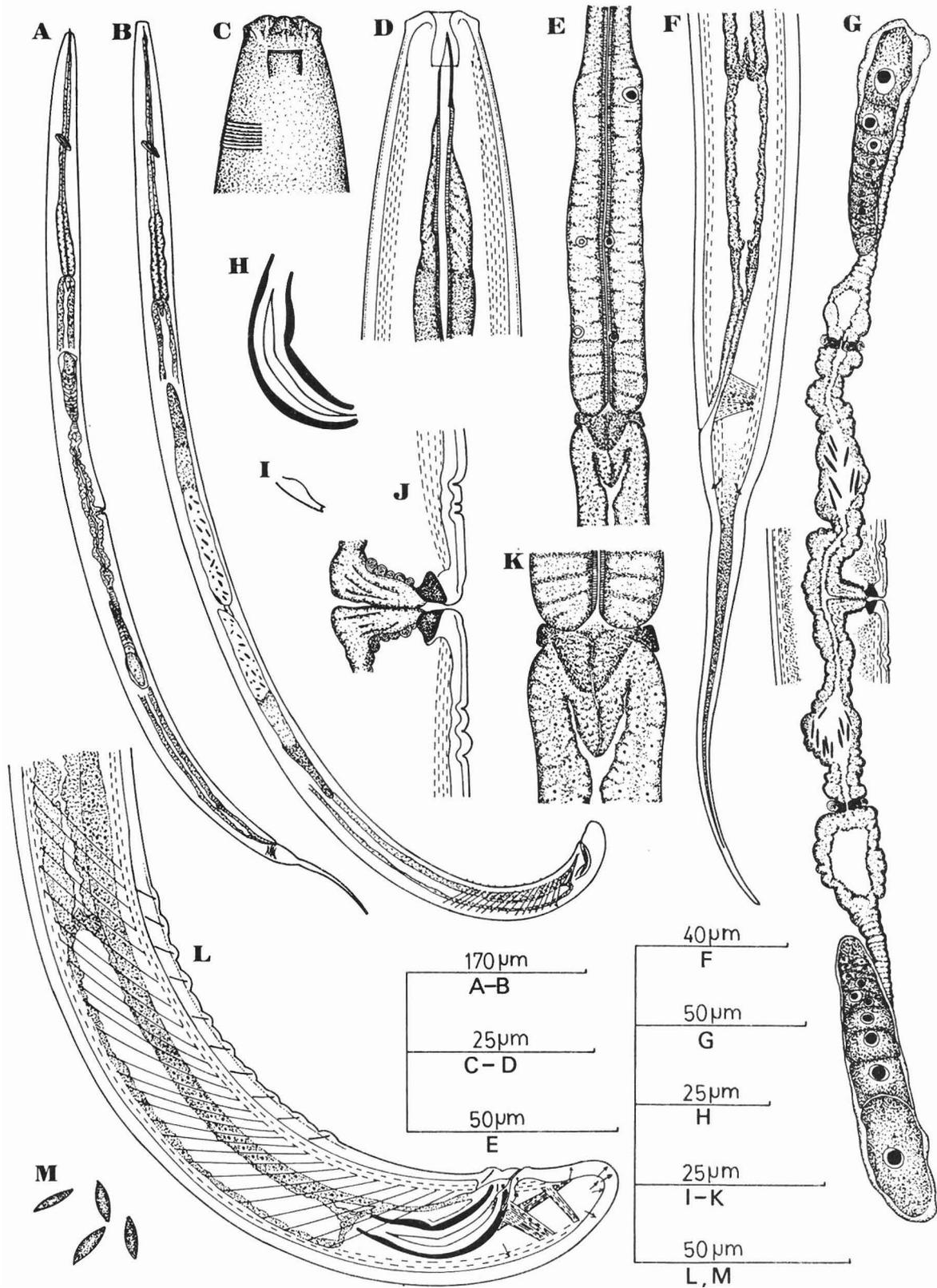


Fig. 2. *Mesodorylaimus ornativulvatus* sp. n. A: Female entire; B: Male entire; C: Lip region in surface view; D: Lip region in median view; E: Pharyngeal bulb; F: Female posterior body region; G: Female genital system; H: Spicules; I: Lateral guiding piece; J: Vagina; K: Cardia; L: Male posterior body region; M: Spermatozoa.

Table 2. Measurements and diagnostic features of *Mesodorylaimus ornativulvatus* n. sp.
(All measurements in μm except L in mm).

Habitat Locality Province	Meadow Sierra Nevada Granada			
	Holotype (female)	Paratypes (9 females)	Allotype (male)	Paratypes (3 males)
L	1.1	1.0 \pm 0.1 (0.9-1.1)	1.0	1.1 \pm 0.1 (1.1-1.3)
a	35.5	34.2 \pm 2.4 (29.8-37.0)	35.1	38.0 \pm 4.0 (34.5-43.6)
b	4.1	4.2 \pm 0.2 (4.0-4.7)	3.8	4.1 \pm 0.2 (4.1-4.5)
c	8.5	9.4 \pm 1.0 (8.7-11.3)	53.3	51.9 \pm 4.9 (45.2-57.2)
V(%)	49.1	49.2 \pm 2.3 (44.1-51.7)	—	—
G1/T1	14.3	13.7 \pm 1.9 (10.1-16.6)	56.1	60.6 \pm 2.4 (58.7-64.1)
G2/T2	14.4	13.2 \pm 2.2 (8.6-15.1)	32.2	31.9 \pm 1.6 (30.7-34.3)
c'	7.7	5.7 \pm 2.1 (5.5-8.0)	0.8	0.9 \pm 0.1 (0.8-1.0)
Lip region width	10.0	9.5-11.5	9.5	10.0-11.0
height	4.5	4.0-5.0	5.0	4.0-5.0
Amphid aperture	4.5	4.5-5.0	4.0	4.0-5.5
Odontostyle	10.5	10.6 \pm 0.8 (10.0-12.5)	10.0	10.5 \pm 0.7 (10.0-11.5)
Odontophore	?	?	?	?
Guiding ring-ant. end	6.0	7.0-8.0	7.0	6.5-7.5
Nerve ring-ant. end	91.0	86.9 \pm 12.4 (56.0-100)	91.0	124 \pm 40.2 (86.0-180)
Neck length	275	249 \pm 15.8 (228-269)	263	277 \pm 34.0 (250-325)
Pharyngeal bulb length	82.0	89.5 \pm 18.0 (71.0-130)	69.0	103 \pm 17.5 (81.0-124)
Cardia: width	8.0	5.0-10.0	7.0	8.0-10.0
length	20.0	8.0-23.0	13.0	8.0-13.0
Cuticle: head	1.0	1.0-2.0	1.0	1.5-2.5
midbody	1.0	1.0-2.5	1.0	1.0
tail	2.5	2.0-3.0	3.0	2.5-3.5
Body width: neck base	29.5	27.5-31.5	27.5	29.5-31.5
vulva	31.5	29.5-34.0	28.5	30.5-31.5
anus	17.0	17.0-18.0	23.0	23.0-25.0
Lateral chord	10.0	8.0-13.0	10.0	7.0-12
Anterior ovary/testis	69.0	73 \pm 13.2 (65.0-105)	122	177 \pm 41.8 (139-235)
Anterior genital branch	160	145 \pm 22.6 (101-179)	569	721 \pm 94.6 (644-854)
Posterior ovary/testis	84.0	72.4 \pm 14.4 (51.0-95.5)	120	166 \pm 31.8 (136-210)
Posterior genital branch	161	137 \pm 25.2 (95.5-169)	327	378 \pm 30.8 (336-409)
Vagina width	10.0	9.0-13.0	—	—
length	16.0	14.0-16.0	—	—
Vulva-ant. end	550	527 \pm 34.7 (469-569)	—	—
Prerectum	40.5	49.5 \pm 6.5 (41.0-65.0)	78.0	100 \pm 16.6 (78.0-118)
Rectum/Cloaca	32.5	35.7 \pm 5.4 (27.5-48.5)	25.0	20.5 \pm 3.2 (17.5-25.0)
Tail	131	113 \pm 14.2 (94.0-144)	19.0	23.0 \pm 2.8 (19.0-25.0)
Spicules	—	—	46.0	40.0-54.0
Lateral guiding pieces	—	—	13.0	8.5-12.0
Ventr. supplements	—	—	8.0	8.0-10.0
Spermatozoa	—	—	8.0	8.0-10.0
Copulatory muscles	—	—	27.0	20.0-26.0

1978, *M. palustris* Andr ssy, 1991 and *M. parasubtilis* Meyl, 1957. From *M. johanni* it can be distinguished by its smaller body [vs L=1.3-1.6 (n=14)(Basson & Heyns, 1974)], relatively shorter pharynx (vs b=5.3-6.5), more posterior vulva (vs V=39-44%) and the

presence of irregularities of the cuticle next to the vulva. From *M. lopadusae* it differs by its smaller general size [vs L=1.39-1.57 (n=21), neck length 272-315 μm , female tail 160-202 μm (Vinciguerra & La Fauci, 1978)], presence of abundant irregularities

of the cuticle next to the vulva [*vs* absent, and longer spicules (*vs* 36-39 μm)]. From *M. palustris* by its shorter body (*vs* $L=1.41$) and odontostyle (*vs* 14 μm), relatively longer female tail (*vs* $c=15$, $c'=4.2$), and different irregularities of the cuticle next to the vulva (Andrássy, 1991). From *M. parasubtilis* by the presence of irregularities of the cuticle next to the vulva (*vs* absent), the relatively shorter female tail [*vs* $c=6-8$ ($n=10$) in the original description], and less spaced ventromedian supplements [*vs* well spaced, see Fig. 19 (Meyl, 1957)].

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Abolafia J., Peña Santiago R. Нематоды отряда Dorylaimida из Восточной Андалусии, Испания. Род *Mesodorylaimus* Andrásy, 1959. II. Два новых вида с пре- и поствувльварной дифференциацией кутикулы.

Резюме. Два новых вида рода *Mesodorylaimus* Andrásy, 1959 описаны из природных биотопов юго-восточной Испании. *Mesodorylaimus ibericus* sp. n. характеризуется средними размерами тела ($L=1,2-1,8$ мм), областью губ, отделенной перетяжкой или почти не отделенной, одонто-стилем 12,5-15 мкм, несколько более длинным, чем ширина губной области, $V=48-58\%$, продольной вульвой, присутствием нарушений в строении кутикулы непосредственно за вульвой, *pars refringens vaginae*, состоящими из двух хорошо развитых и отделенных друг от друга склероций, длиной хвоста самок 62-112 мкм ($c=14-24$, $c'=2,4-4,6$), а также прямыми контурами вентральной стороны, тогда как дорсальная сторона хвостового отдела в передней части выпуклая, а затем вдавленная. Самцы не обнаружены. *M. ornativulvatus* sp. n. отличается размерами тела от мелких до средних ($L=0,9-1,1$ мм), губной областью, отделенной перетяжкой, одонтостилем длиной 10-11 мкм, $V = 44-52\%$, наличием многочисленных складок и морщин на кутикуле тела за вульвой, *pars refringens vaginae*, состоящими из двух близко расположенных друг к другу склероций в форме треугольника или наконечника стрелы, сильно утонченным хвостом самки (94-144 мкм, $c=8-11$, $c'=5,5-8$), округленной оконечностью хвоста самца (19-25 мкм, $c=45-57$, $c'=0,8-1,0$), спикулами длиной 40-54 мкм и 8-10 регулярно расположенными вентромедианными супплементами, расположенными спереди от головок спикул.
