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*ROTYLENCHUS EXIMIUS* SIDDIQI, 1964  
(NEMATODA: HOPLOLAIMIDAE)  
IN THE CANARY ISLANDS AND ALMERIA, SPAIN

by

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A *Rotylenchus* species was found by Bello in soil and root samples from *Tamarix gallica* L. var. *canariensis* Willd.; the material was collected in January 1969 near a sublitoral pond in Maspalomas (Gran Canaria, Canary Islands); Jiménez-Guirado found the same *Rotylenchus* species in soil and roots from *Inula erithmoides* L. and *Arthrocnemum* sp. collected near the mouth of river Andarax (Almeria, South of Spain) during February, March and April 1973. The *Rotylenchus* species shows very close resemblances to *R. eximius* Siddiqi, 1964 described from Tunis; and of which only the females were known. Our material also contained males which are described for the first time; we also compared our females with those described by Siddiqi (1964).

*Description*

*Measurements:* See Table I.

*Females:*

Body usually C shaped and ventrally arcuate, cuticle with very strong annulation. Lateral fields with four incisures, areolated in the anterior region, sometimes interrupted by transverse striae in the rest of the body. Small, pore-like phasmids situated between the fifth anterior and the third posterior annule to anus level.

Table I - Comparative study of measurements in *Rotylenchus eximius*.

Locality	Maspalomas (Gran Canaria)			Rio Andarax (Almeria)		Siddiqi (1969)
	Lactophenol	Glycerin		Lactophenol		Glycerin
specimens	♀ ♀ (n = 8)	♀ ♀ (n = 12)	♂ ♂ (n = 2)	♀ ♀ (n = 4)	♂ (n = 1)	♀ ♀ (n = 7)
L(mm)	1.0-1.2(1.1)	1.0-1.3(1.1)	1.0-1.1	1.1-1.3(1.2)	1.0	1.2-1.4
a	23-28(25)	25-32(28)	26-33	26-27(27)	25	32-37
b	7.6-9.5(8.6)	7.9-9.0(8.5)	8.2-9.0	8.1-8.9(8.6)	8.1	8-9
b'	5.3-7.1(6.5)	5.7-7.1(6.3)	7.0-7.8	6.5-6.8(6.6)	7	—
c	43-63(54)	44-68(56)	33-37	40-41(46)	36	48-57
V	53-60(55)	50-59(56)	—	57-62(58)	—	54-55
O	—	15-25(21)	19-24	21-24(23)	12	28-31
Stylet $\mu$ m	33-39(36)	33-39(36)	27-28	37-39(38)	28	38-41
Spicules $\mu$ m	—	—	30-33	—	33	—

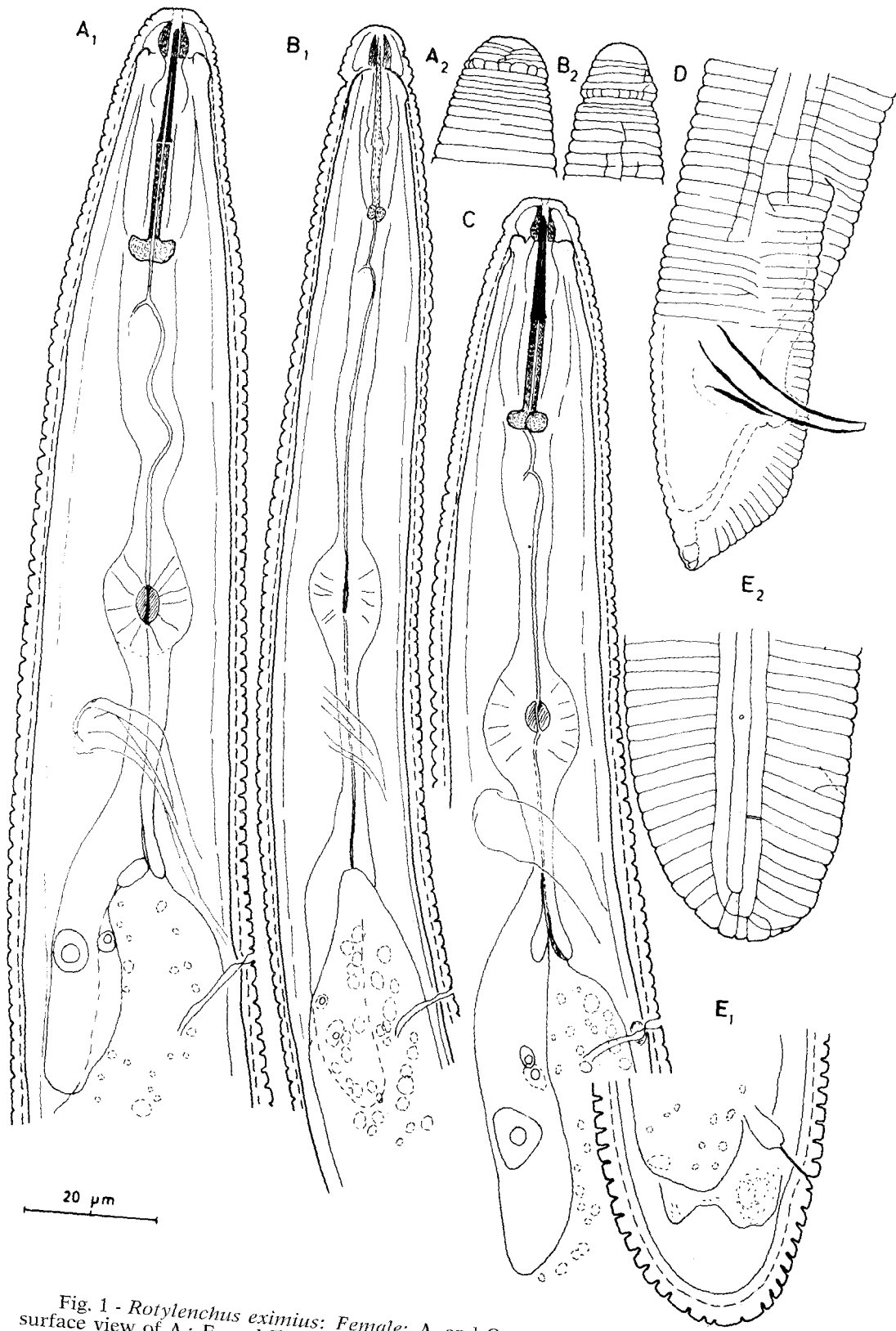


Fig. 1 - *Rotylenchus eximius*: Female: A<sub>1</sub> and C, oesophageal region; A<sub>2</sub>, head surface view of A<sub>1</sub>; E<sub>1</sub> and E<sub>2</sub>, tail (E<sub>2</sub> surface view of E<sub>1</sub>). Male: B<sub>1</sub>, oesophageal region; B<sub>2</sub>, head (surface view of B<sub>1</sub>); D, tail.

Labial region clearly offset by a deep constriction consisting of one or two fine annules; this labial region is hemispherical, more or less truncate anteriorly and has 4-5 annules; basal annules bulging out irregularly with about 20 longitudinal subdivisions. Stylet of 33-39  $\mu\text{m}$  length with basal knobs anteriorly flattened to concave, usually 6-7  $\mu\text{m}$  wide (but up to 10  $\mu\text{m}$  was also found). Dorsal oesophageal gland opening about 5-9  $\mu\text{m}$  behind spear base.

Elongated and cylindrical oesophageal glands extending posteriorly over the dorsal part of the intestine for about 13 annules; the three glandular nuclei in the oesophageal gland lobe lie at about the same level and distinctly posterior to the oesophago-intestinal junction. Hemizonid obscure, about one annule anterior to excretory pore.

Ovaries paired, outstretched; spermatheca rounded, axial, with sperms. Vulva a transverse slit with epiptygmas poorly developed, probably within the vagina.

Intestine with a postrectal sac; hemispherical tail, with 8-13 annules on the ventral side, sometimes with unstriated tip.

#### *Males:*

Sexual dimorphism in head and stylet. Stylet smaller than in the females (27-28  $\mu\text{m}$ ), with small basal knobs, 2.5-3  $\mu\text{m}$  wide. Outlet of dorsal oesophageal gland 3-7  $\mu\text{m}$  behind spear base.

Head higher than in the female with 5-6 annules and also with longitudinal subdivisions in the basal annule. Spicules slightly curved 30-33  $\mu\text{m}$  long, gubernaculum 11  $\mu\text{m}$  long; capitulum 8.5  $\mu\text{m}$  long; titillae visible. Bursa surrounding the tail.

#### *Diagnosis and discussion*

*Rotylenchus* species with sexual dimorphism in head and stylet; clearly offset head with 4-5 annules in the female and 5-6 in the male; stylet 33-39  $\mu\text{m}$  long with large, usually excavated knobs in the female and 27-28  $\mu\text{m}$  long with poorly developed knobs in the male; dorsal oesophageal gland opening rather far away from the stylet knobs (5-9  $\mu\text{m}$ ); excretory pore posterior to oesophago-intestinal junction; rounded tail with 8-13 annules on the ventral side; phasmids close to anus; body annules very deeply marked.

Differs from the type material, Siddiqi (1964), by a slightly smaller body and spear; the more anterior position of the dorsal oesophageal gland opening and the presence of males.

#### S U M M A R Y

Males of *Rotylenchus eximius* Siddiqi, 1964 were found for the first time. Females and males of this species from Maspalomas (Gran Canaria) and Almeria coast, south of Spain, are described. Our specimens differ from the type material by the body and stylet length and the longer distance of the dorsal oesophageal gland opening to the stylet knobs.

#### R I A S S U N T O

*Presenza di Rotylenchus eximius Siddiqi, 1964 (Nematoda: Hoplolaimidae) nelle Isole Canarie e ad Almeria, Spagna.*

Il maschio di *Rotylenchus eximius* Siddiqi, 1964 è stato trovato per la prima volta. Vengono descritti femmine e maschi del nematode raccolti a Maspalomas (Gran Canaria) e sulla costa di Almeria. Gli esemplari differiscono dal materiale tipo avendo lunghezza totale del corpo e dimensioni dello stiletto inferiori e per la maggiore distanza dell'apertura della ghiandola dorsoesofagea dalla base dello stiletto.

#### R É S U M É

*Rotylenchus eximius Siddiqi, 1964 (Nematoda: Hoplolaimidae) dans les îles Canaries et Almeria (Espagne).*

On a trouvé pour la première fois les mâles de *Rotylenchus eximius* Siddiqi, 1964. Femelles et mâles de ce nématode de Maspalomas (Gran Canaria) et de la côte d'Almeria (Sud d'Espagne) ont été décrits. Nos spécimens diffèrent du matériel type par la longueur du corps et du stylet, et par la position du débouché de la glande oesophagienne dorsale.

#### L I T E R A T U R E C I T E D

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