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ROTYLENCHUS CYPRIENSIS SP. N.
(NEMATODA: HOPLOLAIMIDAE) FROM CYPRUS

by

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During a survey of grapevines in Cyprus for plant parasitic nematodes, a new species of *Rotylenchus* Filipjev, 1936 was found (Antonίου, 1979), in small numbers at 6 different localities in the Limassol and Paphos region. The specimens were fixed in 4% formalin and mounted in dehydrated glycerine after being processed by the Seinhorst (1959) rapid ethanol-glycerol method.

ROTYLENCHUS CYPRIENSIS SP. N.
(Fig. 1, A-H)

Measurements; Holotype ♀: L = 0.63 mm; a = 27; b = 5.9; c = 46; c' = 1.4; V = 57; spear = 24 µm.

16 ♀♀ *paratypes*: L = 0.50-0.69 (0.6) mm; a = 25-39 (30); b = 5.3-6.4 (5.7); c = 40-49 (45); c' = 0.9-1.5 (1.2); V = 57-66 (63); O = 10-20 (14); spear = 21-24 (23) µm.

Description: Female: Body elongate, cylindrical, straight or arcuate to « C » shaped when relaxed by heat. Lateral fields with 4 smooth incisures, not areolated except in oesophageal region. Annules 1.2 to 1.7 µm wide at mid-body. Head hemispherical, well set off from the body contour, with 3 to 4 distinct annules; labial disc distinct. Cephalic framework strong. Head width at lip region 6.6 to 8.4 µm. Spear

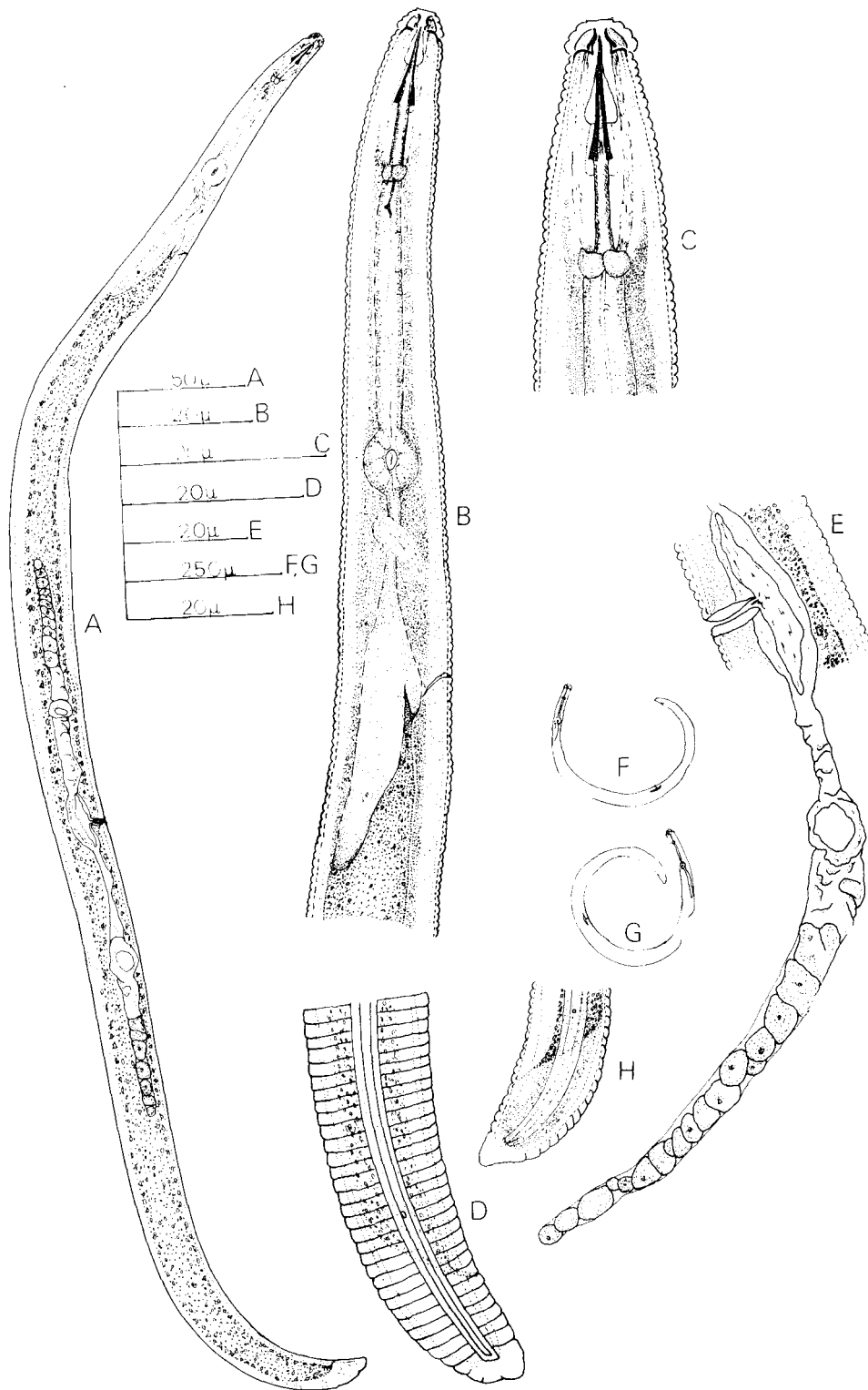


Fig. 1 - *Rotylenchus cypriensis* sp. n.: A, Entire body of holotype female; B, oesophageal region; C, head end; D, H, tail end; E, posterior ovary; F, G, paratype females.

massive, 21 to 24 μm long. Basal knobs rounded with flat to indented anterior surfaces. Oesophagus 96 to 129 μm long, with well developed rounded median bulb, 7.8 to 11 μm width and 11 to 12 μm length. Oesophageal glands overlap the intestine mostly dorsally for 22 to 34 μm . Dorsal oesophageal gland outlet 2.4 to 5.9 μm from the base of the stylet. Excretory pore 91 to 106 μm from anterior end. Nerve ring 2.5 to 5.0 μm behind the end of the basal bulb of the oesophagus. Gonads symmetrical, amphidelphic, outstretched, anterior gonad 96 to 147 μm long and posterior 95 to 117 μm long. Oocytes in a single row except in region of multiplication. Spermatheca small, empty, non-functional. Intestine does not overlap rectum. Phasmids 7 to 14 annules anterior to anus. Tail slightly tapering, rounded, 11 to 14 μm long and 8 to 11 μm wide at the region of the anus, with 6 to 7 annules and a ventral mucron at tip. (Fig. 1.D) No males were found.

Type host and locality: Specimens were collected from soil around the roots of *Vitis vinifera* growing in fields in the locality of Akhelia, Timi, Kouklia, Peyia and Koloni in the district of Paphos, and Trakhoni in the district of Limassol, Cyprus.

Type material: Holotype ♀ (56-17-1) and 3 ♀ ♀ paratypes (56-17-2) at Rothamsted Experimental Station, Harpenden, England; 2 ♀ ♀ paratypes (T. 62.5) at the Commonwealth Institute of Helminthology, St. Albans, England; 2 ♀ ♀ paratypes at Nematology Department, Ministry of Agriculture and Natural Resources, Nicosia, Cyprus; 3 ♀ ♀ paratypes at Laboratorio di Nematologia Agraria Applicata ai Vegetali, 70126 Bari, Italy.

Differential diagnosis; Thirty three valid species of *Rotylenchus* Filipjev, 1936, have been described (Boag, 1978) but *Rotylenchus cypriensis* sp. n. is recognized by a characteristic smooth mucron on the ventral tail terminus. This has not been found in previously described members of this genus, except in *R. breviglans* Sher, 1965 and *R. buxophilus* Golden, 1956. All other members of the genus have a hemispherical annulated tail terminus, occasionally with a small round ventral projection (Boag, 1978).

R. cypriensis resembles some *Helicotylenchus* species in the shape of the tail, but the lip region is offset and the oesophageal glands overlap the intestine dorsally instead of ventrally.

R. cypriensis differs from *R. breviglans* and *R. buxophilus* by the shorter body and spear length. It is distinguished from *R. bre-*

viglans by the extensive dorsal overlap of the intestine by the oesophageal glands and by the location of the phasmids anterior to the anus. The tail of *R. breviglans* has a ventral projection which sometimes resembles that of *R. cypriensis* but usually it is less developed in the former species. *R. cypriensis* is distinguished from *R. buxophilus* by its rounded hemispherical tail compared with the dorsally convex-conoid tail of *R. buxophilus* and again by the overlap of the intestine by the oesophageal glands which in *R. buxophilus* form a short conoid tail of *R. buxophilus* and again by the overlap of the intestine

I would like to express my sincere thanks to Dr. M. R. Siddiqi for his help and encouragement during the preparation of this paper.

S U M M A R Y

A new species of *Rotylenchus*, *R. cypriensis* is described from the rhizosphere of *Vitis vinifera* in Cyprus. The species is characterized by the smooth mucron on the ventral tail terminus, a long overlap of the intestine by the oesophageal glands and a set off head.

R I A S S U N T O

Viene descritto *Rotylenchus cypriensis* una nuova specie di nematode Hoplolaimidae trovata a Cipro nella rizosfera di *Vitis vinifera* L. Essa è caratterizzata da un mucrone liscio situato ventralmente sulla parte terminale della coda, da un lungo accavallamento dorsale delle ghiandole esofagee con l'intestino e dalla testa nettamente separata dal resto del corpo da una costrizione.

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Accepted for publication on 21 April, 1980.