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ACROBELES OASIENSIS SP. N. (NEMATODA: CEPHALOBIDAE)
FROM TUNISIA

by
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A new species of *Acrobeles* von Linstow, 1877, was found in soil samples from an oasis in the vicinity of Nefta, Tunisia. The nematodes were killed by heat and fixed in cold TAF (Hooper, 1970), processed to glycerine by a slow method (Hooper, 1970) and mounted on slides as described in Boström and Gydemo (1983).

ACROBELES OASIENSIS sp. n.
(Fig. 1)

Measurements

Holotype ♀: L = 571 µm; a = 22; b = 4.2; c = 11; V = 54; T/ABW = 3.

Paratypes: 2 ♀♀ (young): L = 426-429 µm; a = 17-19; b = 3.4-3.6; c = 9-11; V = 60-63; T/ABW = 3.

Description

Female: Body strongly ventrally arcuate, almost C-shaped, when relaxed by heat; body width 23-26 µm at midbody. Thick 'double' cuticle with annules about 2 µm at midbody; cuticle tends to separate

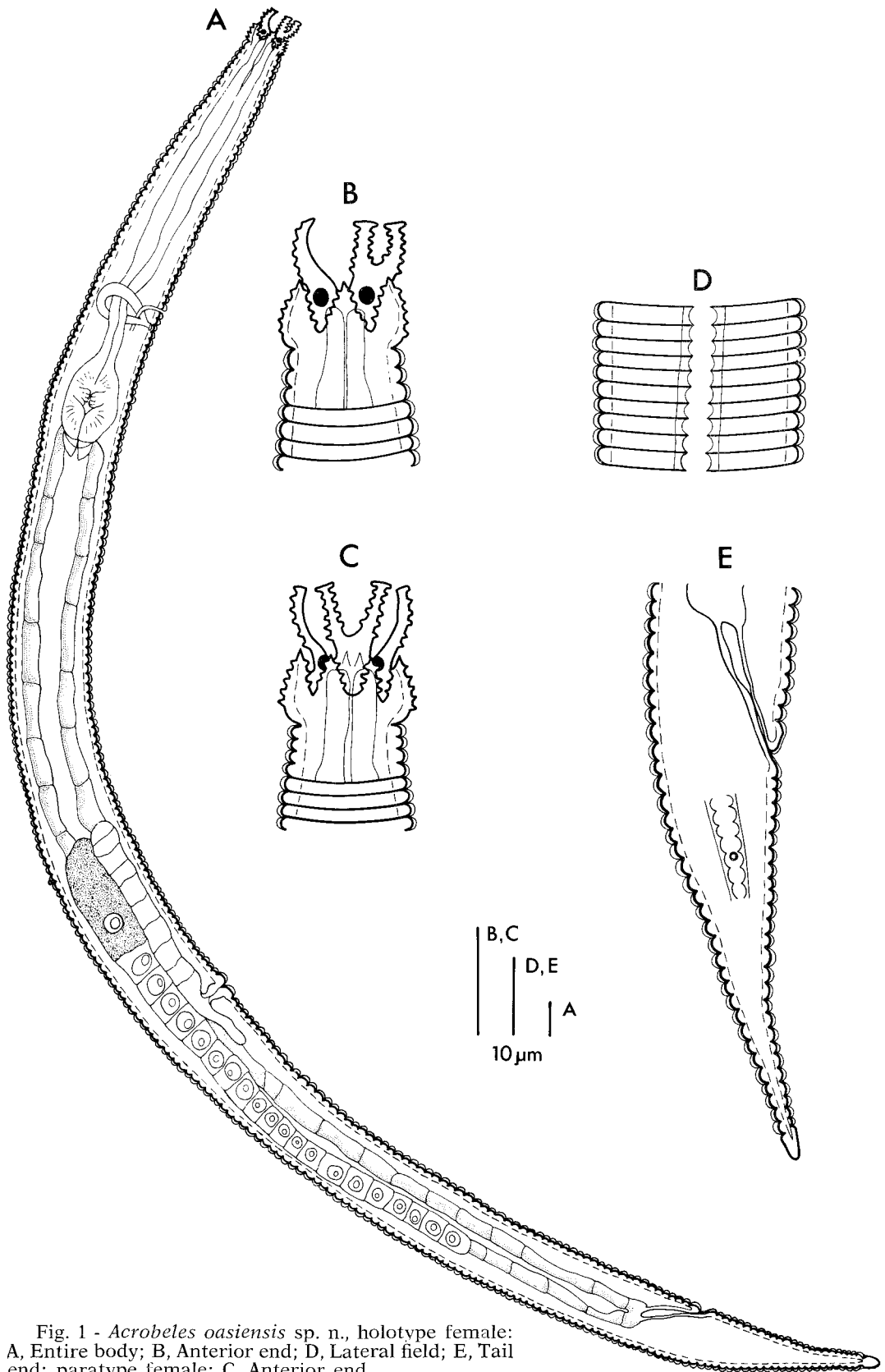
on fixation. Lateral field with four incisures, the outer ones shallow and straight, the inner crenate; its termination on the tail is obscure. Deirids at level of basal bulb. Hemizonid not observed. Six (three pairs) of cephalic probolae with membranous fringes; three deeply bifurcate labial probolae with membranous fringes, five times on the inner and six to seven times on the outer sides of the prongs; labial probolae bases joined together by tangential ridges bearing two pointed protuberances alternating with the probolae. Cheilorhabdions appear as refractile roundish spots making up a wide cheilostom; other buccal elements obscure, forming a narrow canal. Pharynx cephaloboid, 119-137 μm long, metacarpus somewhat fusiform, isthmus narrow, bulb ovate with conspicuous valvular apparatus; cardia prominent. Nerve ring surrounding isthmus opposite to excretory pore. Renette cell visible antero-ventral to bulb. Rectum about one anal body width (ABW) long. Tail elongate-conoid with minutely rounded terminus, 40-53 μm or about 3 ABW long. Phasmids at about 25-30% of tail length. Gonad monodelphic, prodelphic; ovary directed posteriorly, reflexed at oviduct, but without flexure posterior to vulva; oogonia and oocytes in single line; postuterine branch (PUB) 13-15 μm long (about 0.5 BW); spermatheca not observed. Vulval lips not protruding.

Male: Not found.

Type habitat and locality: Agricultural soil at an oasis close to Nefta, Tunisia.

Type material: Holotype ♀ and one paratype ♀ (access no. 3329 and 3330) at Swedish Museum of Natural History, Section for Invertebrate Zoology, S-104 05 Stockholm, Sweden.

Differential diagnosis: *A. oasiensis* sp. n. is similar to *A. recurvus* and *A. capensis*, both described by Heyns (1969) from South Africa, to which it is somewhat intermediate in size. Andrásy, however, recently (1984) synonymized *A. mariannae*, a small species from Paraguay described by Andrásy (1968), with *A. capensis*, thus extending the morphometric ranges of the species. *A. oasiensis* sp. n. differs from *A. recurvus*, *A. capensis* and *A. mariannae* by the strongly ventrally arcuate body and the apical fringes of the labial probolae being neither recurved nor curved inwards. It differs from *A. recurvus* by the shorter PUB (1.5 BW long in *A. recurvus*) and by not having a spermatheca; from *A. capensis* by the more posterior position of the nerve ring and excretory pore, and the more anterior position of the phasmids; and from *A. mariannae* by the shorter PUB (about 1 BW



| B, C
 | D, E
 | A
 10 μ m

Fig. 1 - *Acrobeles oasiensis* sp. n., holotype female: A, Entire body; B, Anterior end; D, Lateral field; E, Tail end; paratype female: C, Anterior end.

long in *A. mariannae*) and the more posterior position of the excretory pore.

I am grateful to B. Mayrhofer for skilful work with the drawings.

S U M M A R Y

Acrobeles oasiensis sp. n. is described from agricultural soil in Tunisia. The new species differs from the closely related *A. recurvus* Heyns, 1969, *A. capensis* Heyns, 1969 and *A. mariannae* Andrassy, 1968, by the strongly ventrally arcuate body and the shape of the apical fringes of the labial probolae.

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

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- HEYNS J., 1969 - South African species of the genus *Acrobeles* von Linstow (Nematoda: Cephalobidae). *Phytophylactica*, 1: 57-66.
- HOOPER D. J., 1970 - Handling, fixing, staining and mounting nematodes. In: Laboratory Methods for Work with Plant and Soil Nematodes. Technical Bulletin 2 (ed. J. F. Southey), 39-58. London: Ministry of Agriculture, Fisheries and Food.

Added in proof

Since the paper was accepted, Andrassy (1985) has proposed a new genus, *Seleborca*, for all species of *Acrobeles* with double cuticle and a lateral field consisting of two simple outer lines and two corrugated or waved inner lines.

- ANDRÁSSY I., 1985 - A dozen new nematode species from Hungary. *Opusc. zool. Bpest*, 19-20: 3-39.

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