

Enchodelus southeyi n. sp. (Nematoda : Dorylaimida) from China

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SUMMARY

Enchodelus southeyi n. sp. from China is described and illustrated. The new species differs from the closely related species *E. satendri* Baqri & Jairajpuri, 1974 in having a longer odontostyle, well developed flanges at base of odontophore and lesser number of ventromedian supplements.

RÉSUMÉ

Enchodelus southeyi n. sp. (Nematoda : Dorylaimida) provenant de Chine

Enchodelus southeyi n. sp. provenant de Chine est décrit et illustré. Cette nouvelle espèce ressemble à *E. satendri* Baqri & Jairajpuri, 1974 dont elle diffère par un odontostyle plus long, des ailettes bien développées à la base de l'odontophore et un nombre plus faible de suppléments ventromédians.

Mr. J. F. Southey of the Agriculture Development & Advisory Service, Harpenden, U.K. sent one of us (MSJ) specimens of a species of *Enchodelus* which was obtained from a soil sample from China. The specimens upon detailed study were found to represent a new species and is designated as *Enchodelus southeyi* n. sp. in recognition of the work done by Mr. Southey in Nematology.

Enchodelus southeyi n. sp. (Fig. 1)

MEASUREMENTS

Female (paratype; n = 4) : L = 1.11-1.39 (1.22) mm; a = 23-27 (25); b = 4.5-5.0 (4.7); c = 21-23 (22); c' = 1.8-2.0 (1.9); V = 43-48 (45); G₁ = 15-26 (19); G₂ = 17-26 (23); odontostyle = 30-33 (32) μm; odontophore = 33-36 (34) μm; oesophagus = 232-267 (248) μm; prerectum = 64-79 (70) μm; rectum = 21-26 (24) μm; tail = 49-64 (56) μm; ABD = 26-30 (28) μm.

Male (paratype; n = 2) : L = 1.01-1.09 mm; a = 23-27; b = 4.4-4.6; c = 21-30; c' = 1.3-1.7; T = 63-65; odontostyle = 23-33 μm; odontophore = 33-36 μm; oesophagus = 228-232 μm; spicules = 41-42 μm; lateral guiding pieces = 8-9 μm;

ventromedian supplements = 4; prerectum = 85-93 μm; tail = 36-48 μm; ABD = 28-29 μm.

Holotype (female) : L = 1.18 mm; a = 30; b = 4.5; c = 24; c' = 1.9; V = 45; G₁ = 16; G₂ = 20; odontostyle = 33 μm; odontophore = 36 μm; oesophagus = 247 μm; prerectum = 76 μm; rectum = 21 μm; tail = 52 μm; ABD = 26 μm.

DESCRIPTION

Female : Body ventrally curved upon fixation, more strongly in its posterior half. Cuticle with fine transverse striations, 2-3 μm thick at midbody and 6-10 μm on tail. Lip region marked off from body by a slight depression, 10-12 μm wide or about 1/4 th of body width at base of oesophagus. Amphid stirrup-shaped with slit-like aperture, 9-10 μm wide. Odontostyle 2.5-3.2 lip region widths long. Guiding ring double, fixed ring at 22-23 μm from anterior end of body. Odontophore slightly longer than odontostyle and provided with well developed flanges at its base. Nerve ring at 112-123 μm from anterior end of body. Expanded portion of oesophagus occupying 29-35 % of oesophageal length. Cardia 8-10 μm long, hemispheroid, surrounded by intestinal tissue. Oesophageal gland nuclei and their orifices are located as follows : DO = 68-73; DN = 71-77; DO-DN = 5-6; S₁N₁ = 76-83; S₁N₂ = 77-85; S₂N = 85-90; S₂O = 86-91. Reproductive system amphidelphic. Vulva transverse slit-like, vagina thick-walled extending to about half the corresponding body width. Sphincter at oviduct-uterus junction, well

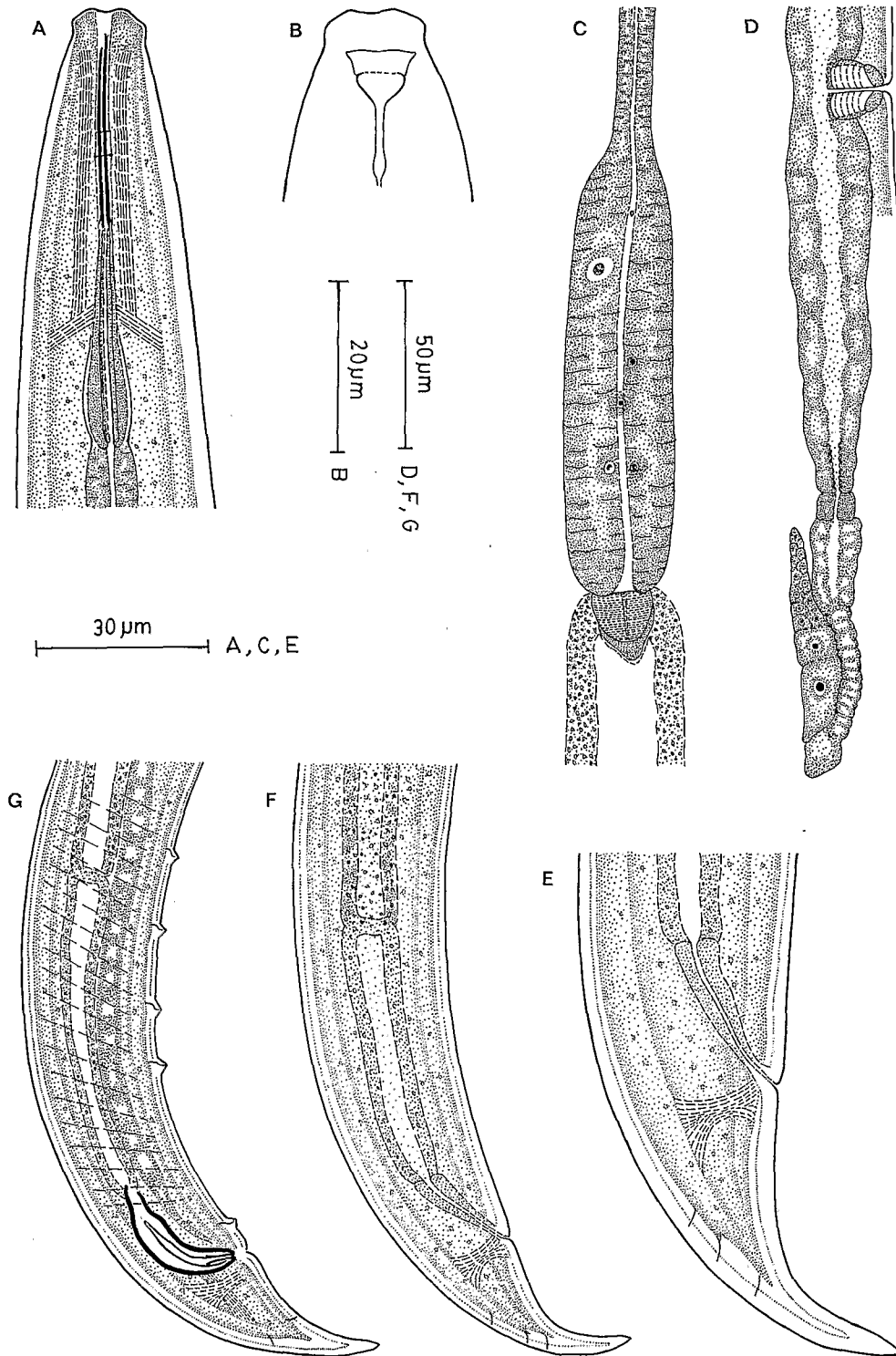


Fig. 1. *Enchodelus southeyi* n. sp. A : Anterior region; B : Anterior end showing amphid; C : Expanded part of oesophagus; D : Female genital branch (posterior); E : Female posterior end; F : Female posterior region; G : Male posterior region.

developed. Sperms present in uterus. Prerectum 2-3 anal body widths long. Rectum slightly less than one anal body width long. Tail conoid, slightly ventrally curved, 1.8-2.0 anal body widths long with rounded terminus, a pair of caudal pores on each side.

Male : Supplements an adanal pair and four widely spaced ventromedians. Spicules dorylaimoid, 1.4-1.5 anal body widths long; lateral guiding pieces simple rod-like, about 1/5th of spicule length. Prerectum 3.0-3.3 anal body widths long. Tail similar to females 1.3-1.4 anal body widths long with a pair of caudal pores on each side.

TYPE HABITAT AND LOCALITY

Soil around roots of *Juniperus chinensis*, Penjing, China.

TYPE SPECIMENS

Holotype on slide *Enchodelus southeyi* n. sp./1, deposited in the nematode collection of Zoology Department, Aligarh Muslim University, Aligarh, India. *Paratypes* : One female deposited in the collection of the

Muséum national d'Histoire naturelle, Laboratoire des Vers, Paris; remaining paratypes in the AMU collection.

DIAGNOSIS

Enchodelus southeyi n. sp. comes close to *E. satendri* Baqri & Jairajpuri, 1974 but differs from it in having a shorter body, longer odontostyle, odontophore with well developed flanges at its base, lesser c and V values and lesser number of ventromedian supplements (L = 1.21-1.58 mm; odontostyle = 23-27 μ m; odontophore without flanges; c = 23-35; V = 49-58 and supplements 5-6 in *E. satendri*).

The new species is placed in the subgenus *Paraenchodelus* Ahmad & Jairajpuri, 1980.

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Accepté pour publication le 6 novembre 1985.