Two new species of the genus *Orientylus*
Jairajpuri & Siddiqi, 1977 (Tylenchida: Rotylenchoidinae)

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Summary

Two new species of *Orientylus* Jairajpuri & Siddiqi, 1977 from the Chamba district of Himachal Pradesh, India, are described and figured. *O. himprus* n. sp. is characterised in having a body 0.55-0.68 mm long, head marked with 3-4 annules, spear 24-27 µm long, orifice of dorsal oesophageal gland 12-14 µm from spear base and phasmids preanal. This new species is close to *O. orientalis* (Siddiqi & Husain, 1964) Jairajpuri & Siddiqi, 1979 and *O. citri* (Rashid & Khan, 1973) Jairajpuri & Siddiqi, 1979. *O. symmetricus* n. sp. is characterised in having a body 0.54-0.64 mm long, head marked with 4-5 annules, spear 25-27 µm long, orifice of dorsal oesophageal gland 12-15 µm from spear base and phasmids adanal. The new species is close to *O. orientalis* (Siddiqi & Husain, 1964) Jairajpuri & Siddiqi, 1979 and *O. secondus* (Mulk & Jairajpuri, 1975) Jairajpuri & Siddiqi, 1979. In both cases only females have been found.

Résumé


During the survey of high altitudes in India carried out in the years 1970-77 many species of different nematode genera were recorded. Of this material two new species of *Orientylus* Jairajpuri & Siddiqi, 1977 are described here.

Observations were made and measurements taken on specimens fixed in hot 4% formalin and processed to glycerine by slow method.

*Orientylus himprus* n. sp.

(Fig. 1)

**Dimensions**

*Paratype females* (10) : L = 0.63 mm (0.55-0.68 mm); a = 28 (27-32); b = 6.3 (5.1-6.9); b' = 4.3 (3.8-4.6); c = 44 (35-47); c' = 1.2

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Fig. 1. Orientylus himprus n. sp. Female. A: Entire female; B: En face view; C: Oesophageal region; D: Posterior oesophageal region; E: Genital tracts; F-H: Tails.
DESCRIPTION

Female

Body a loose spiral when relaxed, tapering gradually towards extremities. Cuticle striations almost 1 µm wide near midbody. Lateral fields non-areolated, about 1/4 of body-width, marked with four incisures in middle. Lip region broadly hemispherical, marked with three to four annules; basal annule smooth. Cephalic framework sclerotized. Spear 24-27 µm long, metenchium slightly longer than telenchium; basal knobs slightly indented anteriorly. Orifice of dorsal oesophageal gland 12-14 µm, almost 1/2 of spear length, from spear base. Oesophagus elongate with procorpus measuring 32-36 µm, isthmus 12-16 µm and basal gland lobe 30-40 µm. Basal lobe overlapping intestine dorsally. Oesophago-intestinal junction at the level of isthmus. Excretory pore 86-98 µm from anterior extremity, almost at level of oesophago-intestinal junction. Hemizonid one to two annules wide, 83-95 µm from anterior extremity, one to two annules anterior to excretory pore. Hemizonion one annule wide, six to eight annules posterior to hemizonid. Nerve ring 78-86 µm from anterior extremity near middle of isthmus. Posterior cephalids at level of middle spear. Vulva a depressed transverse slit. Vagina almost 1/2 body-width long. Reproductive system amphidelphic, posterior sexual branch slightly less developed. Spermatheca empty. Ovary with a single row of oocytes. Phasmids dot-like, two to four annules anterior to level of anus. Tail roughly hemispherical, marked with nine to eleven annules and almost one anal body-diameter long.

Male

Not observed.

Type habitat and locality

Soil around roots of apple (Malus pumila), Khajjiar, Chamba (Himachal Pradesh), India.

Type specimens

Holotype on slide H.A. 106/Orientylus himprus n. sp./1; paratypes on slides H.A. 106/Orientylus himprus n. sp./2 & 3 deposited in the Department of Zoology, Aligarh Muslim University and two paratypes on slide H.A.106/Orientylus himprus n. sp./4 deposited in Muséum national d'Histoire naturelle, Laboratoire des Vers, Paris, France.

Diagnosis

The new species Orientylus himprus comes close to O. orientalis (Siddiqi & Husain, 1964) Jairajpuri & Siddiqi, 1979 and O. citri (Rashid & Khan, 1973) Jairajpuri & Siddiqi, 1979. It differs from both these species in having finer body annules, differently shaped lip region and basal glandular lobe of oesophagus almost three times the size of isthmus (body annules coarse, 2 µm wide near midbody; lip region conoid; basal glandular lobe equal to the size of isthmus in O. orientalis and O. citri). In addition the new species differs from O. orientalis in having its posterior reproductive branch comparatively more developed. From O. citri it differs in having a comparatively smaller body and spear, and metenchium longer than telenchium (L = 0.62-0.82 mm; spear = 26-29 µm; metenchium shorter than telenchium in O. citri).

Orientylus symmetricus n. sp. (Fig. 2)

Dimensions

Paratype females (9): L = 0.59 mm (0.54-0.64 mm); a = 31 (29-34); b = 5.5 (5.4-5.8); b' = 4.4 (4.1-4.7); c = 48 (37-59); c' = 0.9 (0.7-1.0); V = 237315 (20-2971-7715-17); m = 50 (50-51); O = 51 (45-53).

Holotype female: L = 0.58 mm; a = 31; b = 5.8; b' = 4.5; c = 44; c' = 1.0; V = 237215; m = 50; O = 50.

Description

Female

Body forming a loose spiral when relaxed, tapering gradually towards anterior extremity.


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Fig. 2. *Orientylus symmetricus* n. sp. Female. A: Oesophageal region; B-D: Tails; E: Genital tracts.

Male
Not observed.

Type habitat and locality
Soil around roots of unidentified grasses from Banikhet, Chamba (Himachal Pradesh), India.

Type specimens
Holotype on slide H.A.65/Orientylus symmetricus n. sp./1, paratypes on slides H.A. 65/Orientylus symmetricus n. sp./2 & 3 deposited in the Department of Zoology, Aligarh Muslim University and one paratype on slide H.A./65 Orientylus symmetricus n. sp./4 deposited in Muséum national d’Histoire naturelle, Laboratoire des Vers, Paris, France.

Diagnosis
Orientylus symmetricus n. sp. comes close to O. orientalis (Siddiqi & Husain, 1964) Jairajpuri & Siddiqi, 1979 and O. secondus (Mulk & Jairajpuri, 1975) Jairajpuri & Siddiqi, 1979. From the former it differs in having shorter body, lesser value of 'O', shorter oesophagus with basal lobe almost double the size of isthmus, posterior reproductive branch fully developed and phasmids adanal (L = 0.68-0.76 mm; O = 62; b = 6.2-6.7; basal lobe of the size of isthmus; posterior reproductive branch reduced and phasmids preanal in O. orientalis). From O. secondus the new species differs in having shorter body, distinct lip annules, basal lobe of oesophagus almost double the size of isthmus, vulva away from centre of body and tail shorter or equal to one anal body-diameter (L = 0.63-0.77 mm; annulations at lip region absent or faint; basal lobe of oesophagus almost equal to isthmus; V = 61-65; c' = 0.9-1.3 in O. secondus).

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References


