

New Species of *Telotylenchus* (Tylenchida: Nematoda) on Peach in Ganima, Libya.

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ABSTRACT

Telotylenchus siddiqii n. sp. is described from around the roots of peach (*Prunus persica*) in GANIMA, Libya. The new species is characterized by the presence of long spear, sloping spear knob, size and shape of oesophagus, distinct oesophagointestinal junction, position of excretory pore and position of phasmid.

A soil sample taken in March 1979 from around the roots of peach (*Prunus persica*) showing dieback symptoms in Ganima, Libya, yielded a new species of *Telotylenchus*. Apparently this species was not involved with the dieback symptoms of the peach trees. Specimens were fixed in F.A. 4:1 and mounted in dehydrated glycerine after processing through warm lactophenol. The species is described and illustrated as follows:

Telotylenchus siddiqii n. sp. (Fig. 1. A-D)

10 ♀♀ (paratypes): L = 0.9–1.0 mm; a = 41–49;
b = 5.5–7.6; b' = 4.5–5.9; c = 16–22;
V = 52–55; spear = 21–23/μm.

5 ♂♂ (paratypes): L = 0.85–1.0 mm; a = 40–50;
b = 6.9–7.9; b' = 4.9–5.5; c = 16.6–18.0;
T = 46–52; spear = 20–23/μm.

Female

(Holotype): L = 0.9 mm; a = 42.1, b = 6.4; b' = 5.1;
c = 18.2; V = 54.9; spear = 22/μm.

Body assuming ventrally arcuate position upon fixation. Body cuticle with distinct striae about 1.5/μm apart at middle of body. Lateral field occupying $\frac{1}{4}$ of body at mid body, with four incisures of which outer ones are crenate in the tail region. Deirids not observed. Head rounded, 7–8/μm wide 4.5–5/μm high, set off by a deep constriction from body and marked by 7–8 transverse striae. Labial frame work hexaradiate, not sclerotized. Spear 21–23/μm long with an anterior tapering tip and a posterior cylindrical shaft of equal length, bearing three strong slightly sloping basal knobs,

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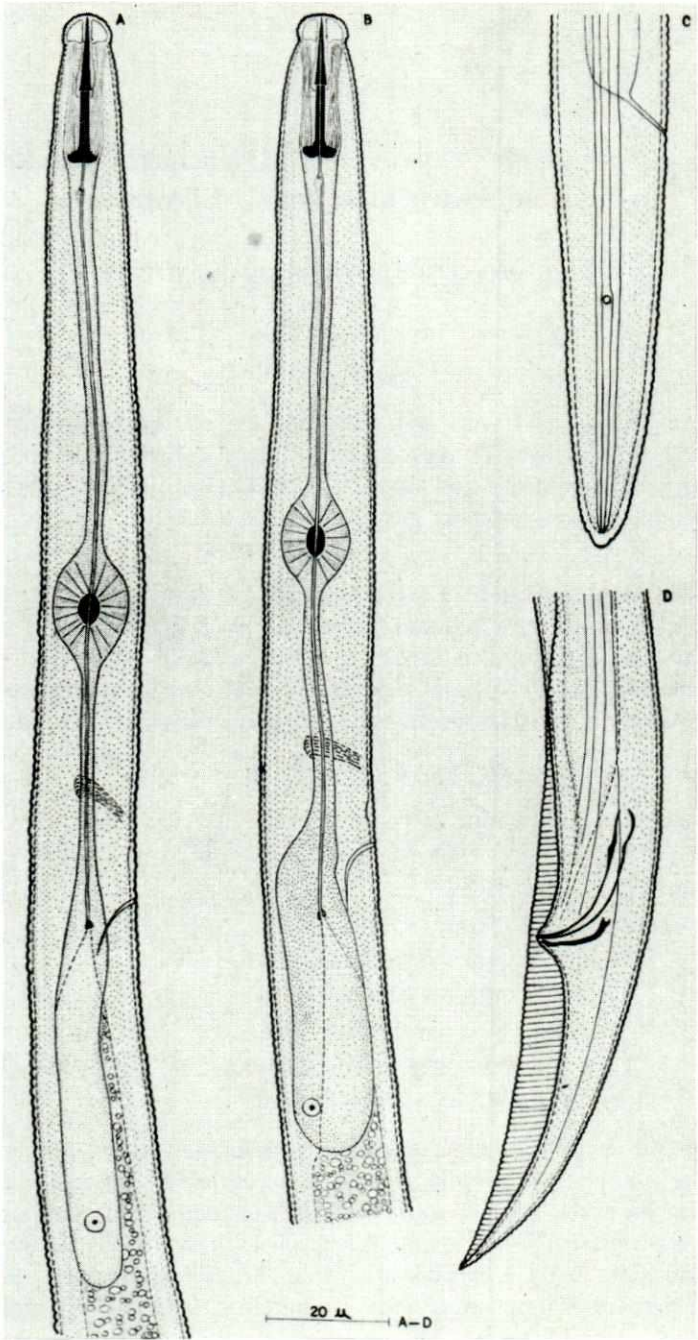


Fig. 1. A-D

measuring 4–5/μm across and 2–3/μm high. Orifice of dorsal oesophageal gland located 2–5/μm behind spear base. Procorpus 3/μm wide and longer than isthmus. Median oesophageal bulb ovate, 14–17/μm long and 11–13/μm wide, highly muscular. Isthmus elongate, enveloped by nerve ring near its middle. Excretory pore at 133 to 166/μm from anterior end. Hemizonid 0–3 annules above excretory pore. Intestine joins oesophagus in the anterior part of oesophageal lobe. Gland nuclei distinct, oesophago-intestinal junction distinct. Oesophageal gland longer in males as compared to female.

Vulva a transverse depressed slit. Vagina at right angle to body axis. Spermatheca spherical, devoid of sperms. Ovaries paired, symmetrical outstretched. Rectum about half or more body width long. Tail cylindrical, elongate regularly tapering to an unstriated rounded terminus, tail annules 40–48 in number. Phasmid near middle of tail. Male: Body similar to that of female. Oesophageal gland slightly longer as compared to female in some paratypes. Testis single, outstretched, spermatocytes arranged in multiple rows. Spicula paired ventrally arcuate, cephalated, 27–29/μm long. Gubernaculum simple 11–12/μm long, rod shaped in lateral view with proximal end knobbed. Phasmids in the middle of tail. Bursa arising at about 3/4 tail length anterior to cloaca, completely enveloping tail.

Holotype: Female on type slide No. TLI/VI deposited with Commonwealth Bureau of Helminthology, St. Albans, England.

Paratypes: 10 female and 5 males on type slide No TLI/I to TLI/XIII other data same as for holotype.

The species is named in honour of Dr. M. R. Siddiqi.

Type habitat and locality: Collected from around the rhizosphere of peach (*Prunus persica*) at Ganima, Libya.

Diagnosis and relationship: *Telotylenchus siddiqi* n. sp. comes close to *T. teres* Khan and Darekar, 1978; *T. impar* Khan & Darekar, 1978 and *T. indicus* Siddiqi, 1960. From *T. teres* the new species differs in having longer spear, sloping spear knobs, posterior location of excretory pore, presence of hemizonid, different size and shape of oesophageal gland (spear = 17–19/μm; spear knobs forwardly directed; excretory pore located at 118–128/μm from anterior end; hemizonid not observed and oesophageal gland of normal size and shape in *T. teres*). It can be differentiated from *T. impar* by the size of spear; position of excretory pore, position of hemizonid and position of phasmid (spear 15–17/μm, excretory pore at the level of oesophago-intestinal valve, hemizonid one annule anterior to excretory pore and phasmid in posterior half of tail in *T. impar*). It can also be distinguished from *T. indicus* in having longer body, longer spear; distinct oesophago-intestinal junction, hemizonid and anterior position of excretory pore (L = 0.7–0.88 mm; spear 16–18/μm; indistinct oesophago-intestinal junction, hemizonid obscure and excretory pore near indistinct oesophago-intestinal junction in *T. indicus*).

LITERATURE CITED

1. Khan, E. and S. K. Darekar. 1978. Soil and plant parasitic nematodes from Maharashtra, India. IV. Two new species of *Telotylenchus* siddiqi, 1960 (Tylenchida:Nematoda) Indian J. Nematol. 8:13-18.
2. Siddiqi, M. R. 1960. *Telotylenchus*, a new nematode genus from North India (Tylenchida: Telotylenchinae n. sub fam.), Nematologica. 5:73-77.