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AEROTYLENCHUS SAFRONI N. GEN., N. SP. (NEMATODA : TYLENCHIDA) FROM KASHMIR, INDIA

BY

D. N. FOTEDAR and Z. A. HANDOO

Post-Graduate Department of Zoology, University of Kashmir, Srinagar-190006, India

Aerotylenchus safroni n. gen., n. sp. collected from soil around roots of safron corm (*Crocus sativus*) from Pampore, Kashmir differs from *Irantylenchus*, (Kheiri, 1972) Andrassy, 1976 in the shape of spear knobs, position of dorsal oesophageal gland orifice, shape of female tail and in the presence of aerolations in lateral field.

A new genus of the family Tylenchidae Orley, 1880 collected in Kashmir, India is diagnosed and described below.

AEROTYLENCHUS N. GEN.

Diagnosis : Tylenchinae. Cuticle finely striated. Lateral fields with four incisures, aerolated throughout. Head continuous and smooth. Spear well developed with rounded basal knobs. Opening of dorsal oesophageal gland close to spear base. Oesophagus with a distinct elongate-oval median bulb. Isthmus long and narrow terminating into slightly overlapping pyriform basal bulb. Excretory pore cuticularized leading into a well thickened convoluted excretory duct which ends into a large renette cell. Cardia present. Female reproductive system mono-prodelphic, outstretched and ovary with oocytes mostly in double row. Post-vulval uterine-sac present. Tail long, ventrally curved, with a small mucro at tip.

Type and only species : *Aerotylenchus safroni* n. sp.

Relationship : *Aerotylenchus* n. gen. comes close to *Irantylenchuse* (Kheiri, 1972) Andrassy, 1976 from which it differs in the shape of spear knobs, position of dorsal oesophageal gland orifice, nature of excretory system, aerolation of the lateral field and in the shape of female tail.

AEROTYLENCHUS SAFRONI N. SP.

7♀♀ (paratypes) : L=0.88-0.95 mm ; a=33-38 ; b=6.1-8.3 ; c=6-8 ; V=65-68 ; spear=12-14 µm.

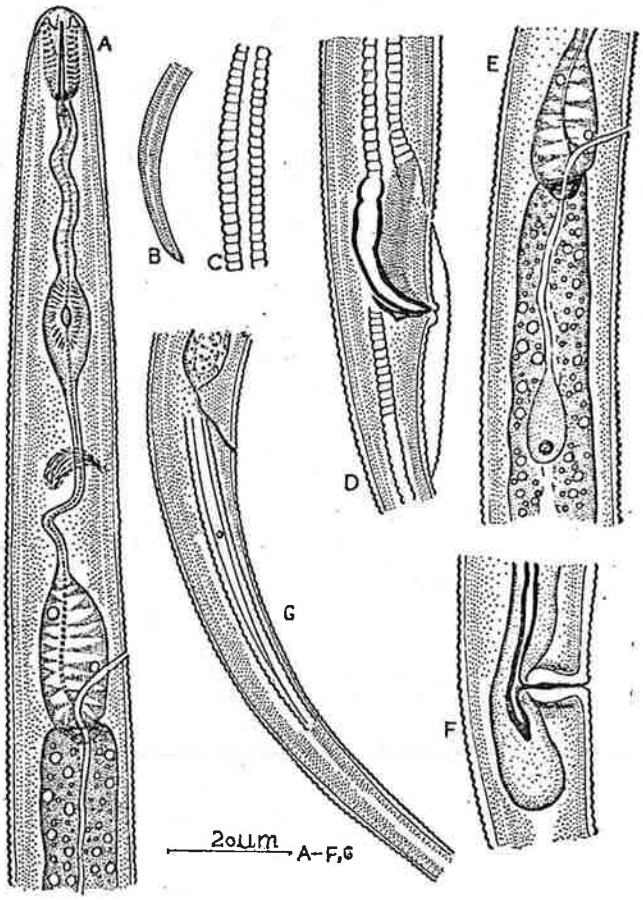

Fig. 1. *Aerotylenchus safroni* n. gen., n. sp. A—Oesophageal region of female ; B—Posterior half of female tail ; C—Aerolated nature of lateral field ; D—Spicular region ; E—Posterior part of oesophagus ; F—Vulval region ; G—Tail region of female.

Female (Holotype) : L=0.90 mm ; a=36 ; b=7.8 ; c=7 ; v=67 ; spear=13µm.

4♂♂ (paratppes) : L=0.89-0.94 mm ; a=32-36 ; b=6.0-7.5 ; C=6-7. spear=13-14 µm ; spicule=27-30 µm ; Gubernaculum=8-10 µm.

Body upon fixation strongly ventrally arcuate, more so in the posterior region, tapering gradually anterior to oesophagus. Lateral field, marked with four incisures arising as a thin streak in the region of procorpus, interrupted by body

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Labial sclerotization
45% of the spear len
located at 2 µm from
elongate metacorpus
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Oesophageal bulb sli
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Vulva trans
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Male : Sim
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striations in the oesophageal region, and becoming completely aerolated on rest of body. Deirids faintly observed located near the latitude of excretory pore. Lip region continuous with body, rounded, about half of body-width at metacorpous. Labial sclerotization weakly developed. Spear having anterior part (metenchium) 45% of the spear length, basal knobs rounded. Dorsal oesophageal gland orifice located at 2 μm from spear base. Procarpus cylindrical terminating into an oval-elongate metacorpus with crescentic valve Isthmus narrower and a bit longer than procorpus ending posteriorly into an almost pyriform basal bulb. Nerve ring around middle of isthmus. Excretory pore cuticularized, opposite to posterior half of basal bulb, excretory duct wide and cuticularized, renette cell large. Oesophageal bulb slightly overlapping the anterior part of intestine. Cardia conoid-rounded.

Vulva transverse slit. Vagina occupying about half of vulval body-width. Post-vulval uterine sac about one vulval body-width long. Reproductive system mono-prodelphic, outstretched. Oocytes mostly in double rows. Spermetheca present. Phasmids located at about one anal body-width posterior to anus. Lateral field completely aerolated on tail. Tail ventrally curved till the lip and provided with a terminal mucro.

Male : Similar to female in general morphology excepting the lip region which is slightly narrower and elevated, lesser developed spear knobs and a cylindrical basal bulb of oesophagus. Testis single, outstretched. Spicules well developed, arcuate. Gubernaculum keel-shaped, thick, Bursa crenate arising almost anterior to spicular head and continuing to about one and a half spicular length behind. Tail ventrally arcuate, striated terminus having a small central mucro.

Type Habitat and Locality : Soil around roots of Safron corm, *Crocus sativus*, from Pampore, Kashmir.

Type specimens : Holotype female on slide No. PN/TYL/1 and paratypes on PN/TYL/2-5 ; deposited in the Deptt. of Zoology, University of Kashmir, Srinagar-6.

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