

NEMATODES FROM RAJASTHAN, INDIA. IV. SEVENTEEN SPECIES AS NEW RECORD FROM THE STATE

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Baqri (2000) reported 20 species for the first time and reviewed literature on survey, identification and taxonomy of plant and soil nematodes from Rajasthan. While adding six new species as new to science, Baqri & Bohra (2001) initiated a series of papers on nematodes from Rajasthan. This fourth paper of the series reports 17 species of nematodes belonging to orders Tylenchida (4 spp.) Dorylaimida (9 spp.) and Mononchida (4 spp.) as new records from the state. Besides, brief descriptions, illustrations and the information on host(s) and locality(ies) of these species have also been provided.

MATERIALS AND METHODS

Nematodes were fixed in hot 4% formalin and mounted in anhydrous glycerine. All the specimens included in the present study have been deposited and registered with the National Collection of Zoological Survey of India, Jodhpur.

Order TYLENCHIDA Thorne, 1949

Family TYLENCHIDAE Orley, 1880

1. *Filenchus vulgaris* (Brezeski, 1963) Lownsbery & Lownsbery, 1985

(Fig. 1, A-B)

Measurements : Females (2) : L = 0.56–0.61 mm; a = 35; b = 5.6–5.8; c = 5.0–6.1; c = 9.1–10.0; V = 9–10 59–65.

Description : Female : Body slightly arcuate upon fixation. Cuticle transversely striated, about 0.5 μ m apart. Lateral fields marked by four incisures. Lip region continuous striated. Stylet 10–11 μ m long, with small knobs. Oesophageal median bulb at 41–42% from anterior end. Basal bulb pyriform. Excretory pore at 92–95 μ m from anterior end. Posterior uterine sac about 0.6–0.7 vulval body-width long. Tail filiform, 91–121 μ m or 1.0–1.5 times the vulva anus distance.

Male : Not found.

*Habitat and Locality : Collected from soil around roots of wheat (*Triticum aestivum*) at Tonk, district Tonk, Rajasthan.*

2. *Basiria graminophila* Siddiqi, 1959

(Fig. 1, C-E)

Measurements : Females (4) : L = 0.68–0.76 mm; a = 30–40; b = 5–6; c = 5.9–6.0; c' = 9.0–9.5; V = ¹²⁻¹³63–64.

Males (2) L = 0.65–0.67 mm; a = 39–40; b = 5.9–6.0; c = 5–6; T = 55–60; Spicules = 16–18 μ m; Gubernaculum = 4–5 μ m.

Description : Female : Body more or less straight upon fixation. Cuticle striated, striae about 1 μ m apart. Lip region marked by slight depression, with flat apex, narrower than body. Lateral fields marked by four incisures. Stylet 11–12 μ m long, with rounded basal knobs. Dorsal oesophageal gland opening at 9–10 μ m posterior to stylet base. Median oesophageal bulb poorly developed, 45–55% of oesophageal length from anterior end. Basal bulb set off from intestine. Cardia distinct. Female reproductive system mono-prodelphic. Ovary outstretched. Spermatheca lobed. Post vulval -uterine sac about half vulval body-width long. Vulva -anus distance more than one tail length. Tail elongate filiform, 112–128 μ m long, with fine rounded terminus.

Male (2) : Similar to female in general shape and morphology except in tail shape and reproductive system. Bursa adanal. Spicules 16–18 μ m long. Gubernaculum simple fixed.

*Habitat and Locality : Collected from soil around roots of wheat (*Triticum aestivum*) at Darrah, district Kota and two females were collected around roots of *Sorghum vulgare* at Peeh, district Nagaur.*

Family DOLICHODORIDAE Chitwood in Chitwood & Chitwood, 1950

3. *Telotylenchus aerolatus* Baqri & Jairajpuri, 1969

(Fig. 1, F-G)

Measurements : Female (1) L = 0.80 mm; a = 38; b = 5.3; c = 17.7; c' = 3.0; V = ¹⁰53⁹

Description : Female : Body slightly curved ventrally. Cuticle marked with distinct transverse striae, about 1 μ m apart. Lip region set off, flat at apex, marked by 8 striae. Labial framework sclerotized. Lateral fields marked by four incisures, outer ones are crenate. Lateral fields irregularly aerolated throughout the length. Stylet 17 μ m long, with rounded posteriorly sloping basal knobs. Dorsal oesophageal gland opens 2 μ m posterior to stylet base. Oesophagus overlapping intestine for about two body-width. Female reproductive system amphidelphic. Vulva transverse. Tail elongate, 45 μ m, cylindrical, with rounded terminus; marked with 36 striae; three anal body-widths long. Phasmids in anterior third of tail.

Male : Not found.

*Habitat and Locality : Collected from soil around roots of millet (*Pennisetum typhoides*) at Jas Nagar, district Nagaur.*

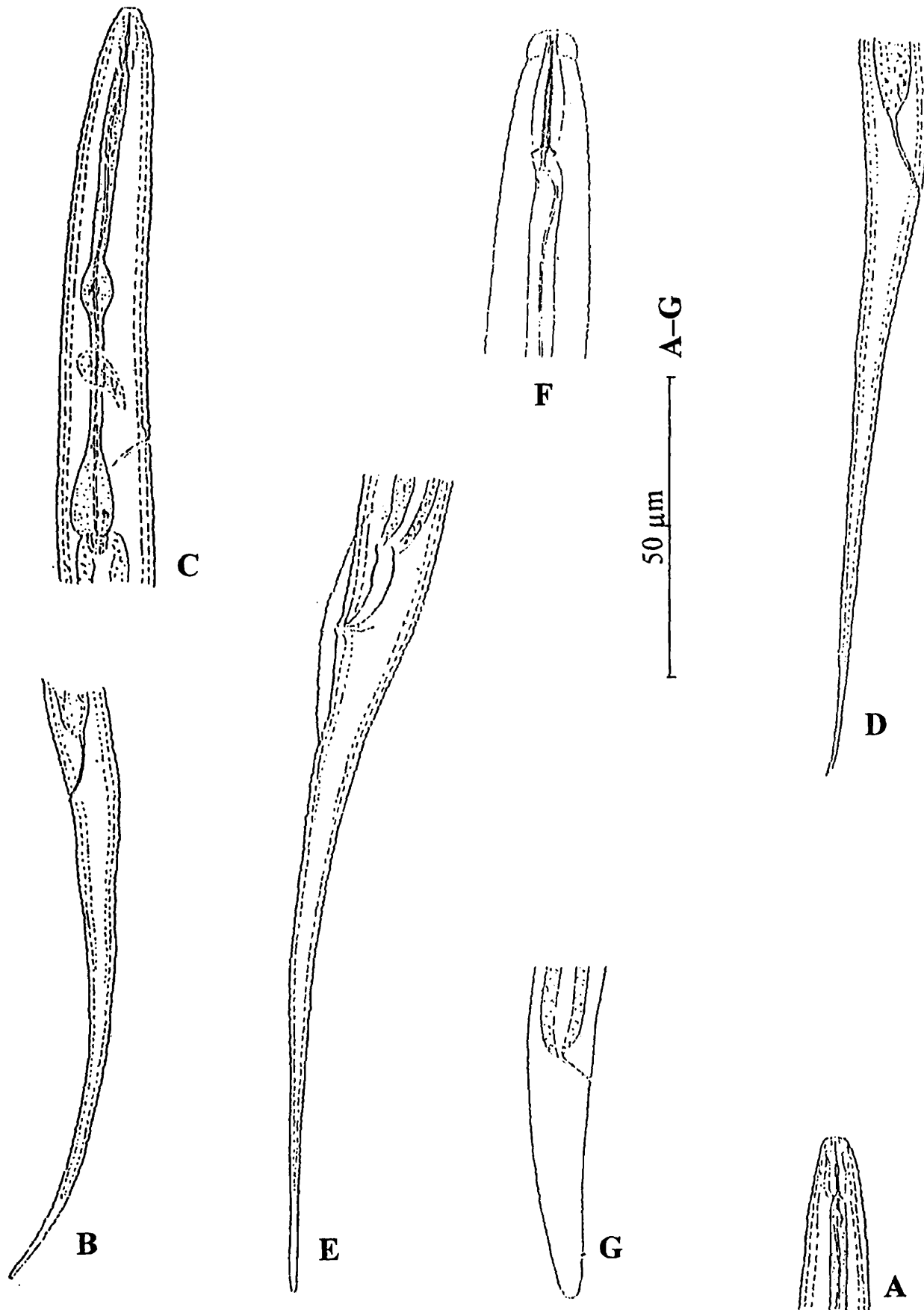


Fig. 1. A-B : *Filenchus vulgaris* (Brezeski, 1963) Lownsbery & Lownsbery, 1985 A-Female anterior end; B-Female tail.
 C-E : *Basiria graminophila* Siddiqi, 1959. C-Oesophageal region; D-Female tail; E-Male tail.
 F-G : *Telotylenchus aerolatus* Baqri & Jairajpuri, 1969. F-Female anterior end; G-Female tail.

Family PSILENCHIDAE Paramonov, 1967 (Khan, 1969)

4. *Psilenchus hilarulus* de Man, 1921

(Fig. 2, D-E)

Measurements : Females (2) : L = 1.25–1.30 mm; a = 28–30; b = 7; c = 11.5–11.8; c' = 4.9–5.0; V = $6\text{--}747\text{--}54^{8\text{--}9}$

Description : *Female* : Body more or less straight upon fixation. Cuticle finely striated, striae 1 μm apart. Lip region elevated, dome-shaped, smooth, continuous. Amphidial apertures transverse, slit-like. Stylet cylindrical, 18–20 μm long, without basal knobs. Dorsal oesophageal gland opening 6–7 μm posterior to stylet base. Median oesophageal bulb prominent, oval. Basal bulb small pyriform. Cardia conoid, obscure. Female reproductive system amphidelphic. Ovaries outstretched. Tail elongate with clavate terminus, 108–110 μm long or 4.9–5.0 anal body-width long. Phasmids less than one anal body-width posterior to anus.

Male : Not found.

Habitat and Locality : Collected from soil around roots of wheat (*Triticum aestivum*) at Pipali Ki Dhani, district Jaipur.

Order DORYLAIMIDA Pearse, 1942

Family DORYLAIMIDAE de Man, 1876

5. *Mesodorylaimus mesonyctius* (Kreis, 1930) Andrassy, 1959

(Fig. 2, A-C)

Syn. *Dorylaimus mesonyctius* Kreis, 1930. II. *Zool. Ans. Leipzig*; 87(3-6); 67–87

Dorylaimus subulatus Thorne & Swanger, 1936. *Capita zool.* 6, 223p.

Measurements *Females* (4) L = 1.09–1.42 mm; a = 36–40; b = 4.1–5.0; c = 17–18; V = $11\text{--}1350\text{--}51^{11\text{--}13}$

Males (2) : L = 1.23–1.25 mm; a = 27–28; b = 4.4–5.0; c = 44–45; T = 45–50.

Description : *Female* : Body almost straight upon fixation. Cuticle finely striated, 2–4 μm thick (thickest at tail). Lips separate, head region marked by a constriction. Odontostyle 12–14 μm or as long as lip region-width; aperture 3–4 μm or 25–28% of odontostyle length. Odontophore 16–18 μm long. Guiding ring single, situated at 7–8 μm from anterior end. Oesophagus expands gradually to form the basal extended portion which occupies 39–45% of total oesophageal length. Vulva a transverse slit. Vagina 17–21 μm long or 1/3rd of corresponding body-width. Female reproductive system amphidelphic; ovaries reflexed. Prerectum 80–105 μm or 4.0–4.3 anal body-width long. Rectum 40–42 μm or 1.5–1.6 anal body-width long. Tail 60–75 μm or 3.0–3.5 anal body-width long, conoid then spicate, with two caudal pores on each side.

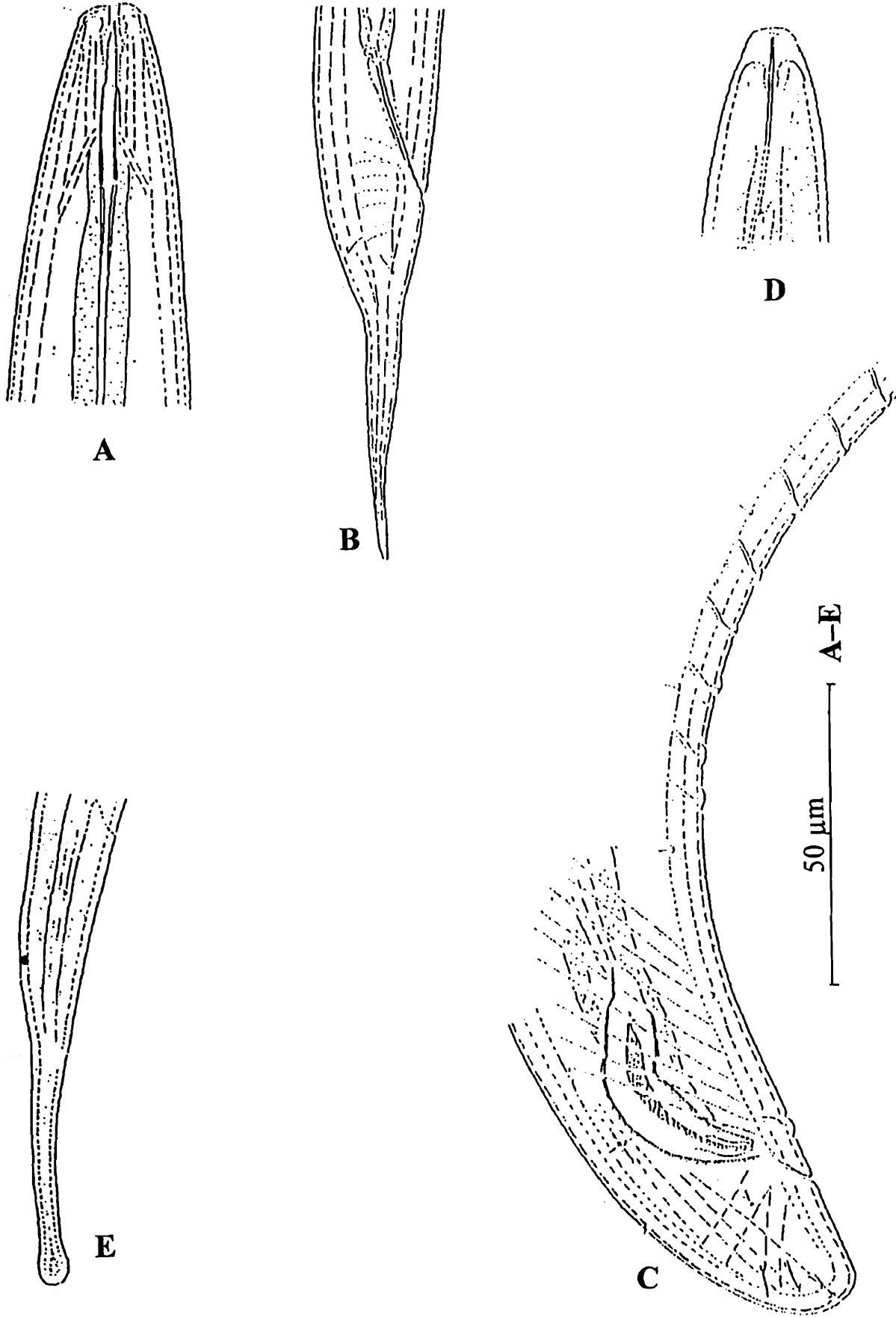


Fig. 2. A-C : *Mesodorylaimus mesonyctius* (Kreis, 1930) Andrassy, 1959. A-Female anterior end; B-Female tail; C-Male tail. D-E : *Psilenchus hilarulus* de Man, 1921. D-Female anterior end; E-Female tail.

Male : Similar to female in general morphology except in tail shape and reproductive system. Spicules 38–40 μm long. Ventromedian supplements nine, spaced irregularly. Submedian papillae seven, irregularly spaced. Tail short, rounded conoid 27–28 μm long or 0.9–1.2 anal body-width.

Habitat and Locality : Collected from soil around roots of wheat (*Triticum aestivum*) at Darrah, district Kota.

Family QUDSIANEMATIDAE Jairajpuri, 1965

6. *Discolaimium mukhtarpuriense* Baqri & Jairajpuri, 1969

(Fig. 3, A-B)

Measurements : Females (4) : L = 0.80–0.87 mm; a = 25–32, b = 3.8–4.2; c = 28–29; V = 10^{10} – 11^{53} – 55^{10-11} .

Description : Female : Body slender, slightly tapering in posterior third of its length upon fixation. Cuticle smooth. Lateral chords 1/5th–1/4th of the body-width- with well developed 60–70 glandular bodies. Lip region set off. Odontostyle 14–16 μm long; its aperture 5–6 μm . Guiding ring single. Odontophore 15–17 μm long. Basal expanded part of oesophagus occupies 33–36% of total neck region. Vulva transverse. Vagina 9–10 μm or about one third of corresponding body-width. Female reproductive system amphidelphic. Ovaries reflexed. Prerectum 72–102 μm or about 3–5 anal body-width long. Rectum 30–32 or about one anal body width long. Tail 28–30 μm or 1.2 anal body-width long, convex-conoid, with a rounded terminus.

Male : Not found.

Habitat and Locality : Collected from soil around roots of maize (*Zea mays*) at Gogunda, district Udaipur and five females were also collected around roots of millet (*Pennisetum typhoides*) at Peeh, district Nagaur and Nasirabad Road, district Ajmer.

7. *Latocephalus smithi* (Heyns, 1963) Patil & Khan, 1982

(Fig. 3, C-D)

Syn. *Discolaimoides smithi* Heyns, 1963. *South Africa J. Agr. Sci.* 6 : 289–302.

Discolaimium smithi (Heyns, 1963) Das, Khan & Loof, 1969. *Nematologica*, 15 : 473–491.

Measurements : Female (1) : L = 1.60 mm; a = 51.7; b = 4.5; c = 32; V = 40^8 .

Description : Female : Body slightly tapering in neck region. Cuticle finely striated transversely. Lip region expanded. Lateral chords about 1/4th of body-width having 65 glandular organs. Stylet 12 μm long; aperture 5 μm or 41% of odontostyle length. Odontophore 20 μm . Basal expanded part of oesophagus occupies 51% of total oesophageal length. Vulva a transverse slit. Vagina 11 μm or

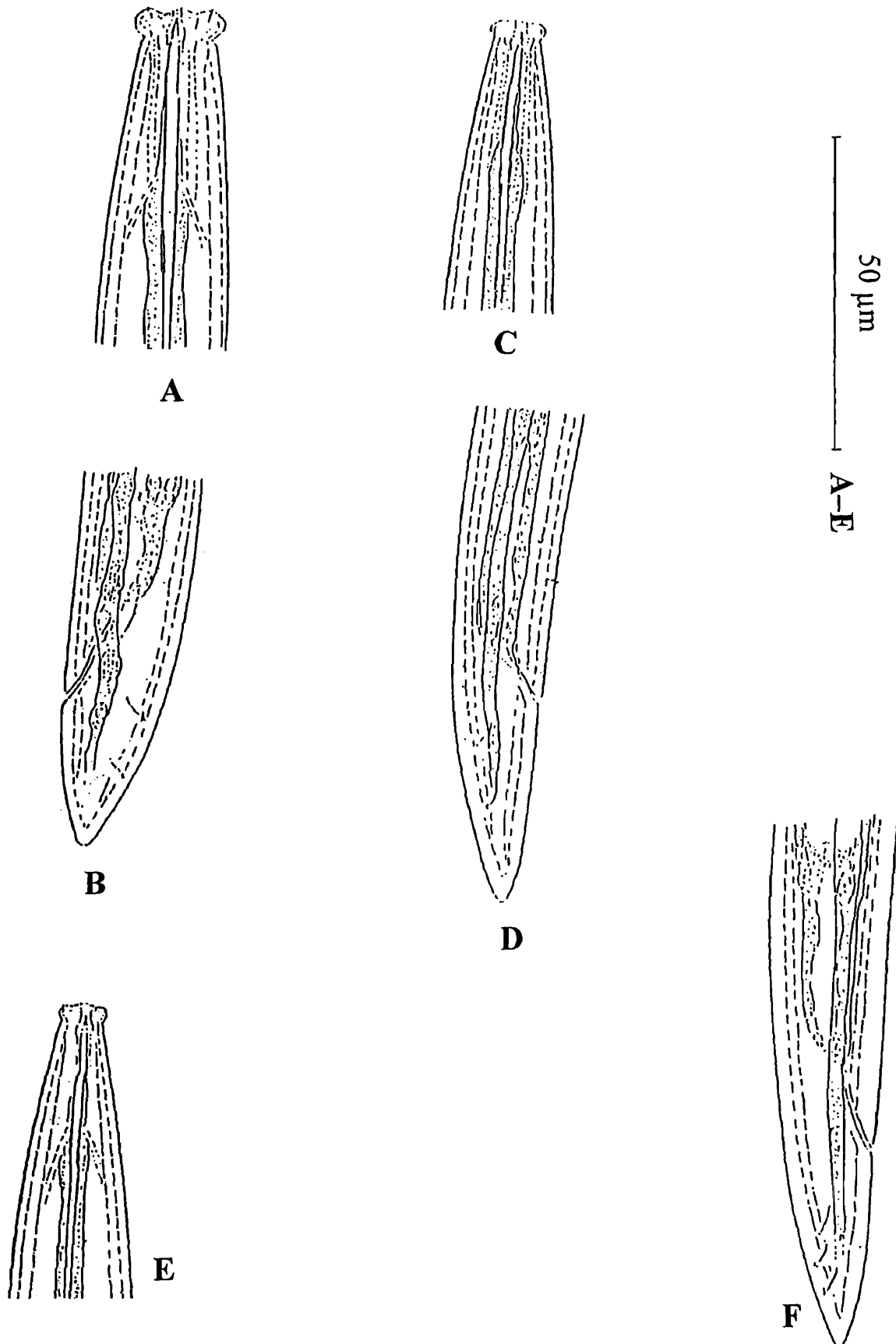


Fig. 3. A-B : *Discolaimium mukhtarpuriense* Baqri & Jairajpuri, 1969. A-Female anterior end; B-Female tail.
 C-D : *Latocephalus smithi* (Heyns, 1963) Patil & Khan, 1982. C-Female anterior end; D-Female tail.
 E-F : *Latocephalus ooetenbrinki* (Ali, Suryawanshi & Prabha, 1973) Patil & Khan, 1982. E-Female anterior end; F-Female tail.

about 1/3rd of corresponding body width. Female reproductive system mono-opisthodelphic. Ovary reflexed. Prerectum 55 μm or 2.7 anal body-width long. Rectum 30 μm or 1.6 anal body-width long. Tail 50 μm or 2.5 anal body-width, long, convex-conoid with rounded terminus.

Male : Not found.

Habitat and Locality Collected from soil around roots of millet (*Pennisetum typhoides*) at Dikwala, district Jalore.

8. *Latocephalus oostenbrinki*

(Ali, Suryawanshi & Prabha, 1973) Patil & Khan, 1982

(Fig. 3, E-F)

Syn. *Discolaimium oostenbrinki* Ali, Suryawanshi & Prabha, 1973 *Nematologica* **19** : 190–194.

Measurements : Female (1) L = 1.77 mm; a = 53; b = 5.4; c = 42; V = 38⁸.

Description : Female : Body slender, slightly ventrally curved in posterior third region. Cuticle transversely striated. Lateral chords about 1/4th of body-width near middle, with 30 glandular organs on each side. Lip region set off from body by a deep constriction; lips separate. Odontostyle 12 μm long; aperture 4 μm or about 1/3rd of odontostyle length. Odontophore 15 μm long. Basal expanded part of oesophagus occupies 50% of neck region. Vulva a transverse slit. Vagina slightly posteriorly directed and about 1/3rd of corresponding body-width. Female reproductive system mono-opisthodelphic. Anterior uterine sac absent. Prerectum 50 μm or 2.5 anal body-width long. Rectum 20 μm or one anal body-width long. Tail elongate conoid, 42 μm long or 2.1 anal body-width long, with rounded terminus.

Male Not found.

Habitat and Locality Collected from soil around roots of millet (*Pennisetum typhoides*) around Bijawal, district Jodhpur.

Family CARCHAROLAIMIDAE Thorne, 1967

9. *Carcharolaimus masoodi*, Jairajpuri, 1968

(Fig. 4)

Measurements : Females (2) : L = 1.59–1.60 mm; a = 48–49; b = 4.2–4.5; c = 64–72; V = 5⁴–50–51⁴⁻⁵

Description : Female : Body tapering slightly towards extremities. Outer cuticle 2–4 μm thick (thickest at tail). Lateral chords about 1/4th of body-width at mid-body. Lateral glandular organs vary from 102–130, more conspicuous on tail. Of these, 20–27 are in oesophageal region. Lips large, angular, labial papillae visible 21–22 μm wide or as wide as about 2/3rd of body-width at the base of

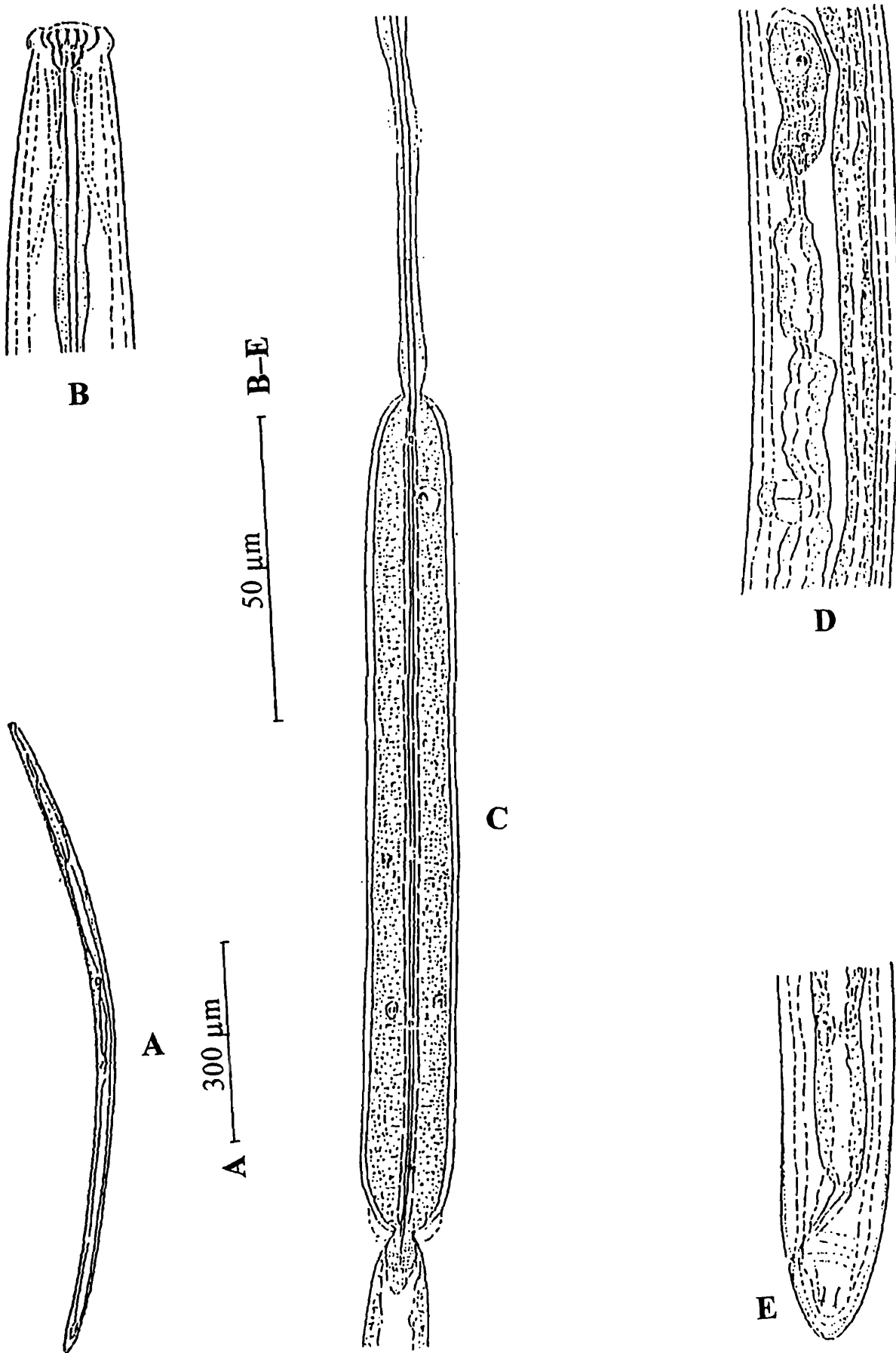


Fig. 4. A-E : *Carcharolaimus masoodi* Jairajpuri, 1968. A-Entire female; B-Anterior end; C-Oesophageal region; D-Anterior sexual branch; E-Female tail.

oesophagus. Amphids cup-shaped, situated 7–9 μm from anterior end, 6–7 μm wide. Odontostyle 11–13 μm long; aperture 5–6 μm or 45–46% of odontostyle length. Guiding ring 9–11 μm from anterior end. Odontophore 20–24 μm long. Nerve ring encircles oesophagus at about 93–102 μm from anterior end. Basal expanded part of oesophagus occupies 55–60% of total neck region. Oesophageal lumen sclerotized, 2–4 μm wide. The location of oesophageal gland nuclei and their orifices are as follows : $DO = 42.43\text{--}43.24$; $DN = 44.20\text{--}45.50$; $DO\text{-}DN = 1.77\text{--}2.26$; $S_1N_1 = 60.00\text{--}62.16$; $S_2N = 81.62\text{--}82.43$; $S_2O = 82.78\text{--}83.32$. Cardia hemispheroid. Prerectum 35–50 μm long or 1.5–1.6 anal body-width long. Rectum 19–23 μm or 0.9–1.1 anal body-width long.

Female reproductive system amphidelphic. Vulva a transverse slit. Vagina 13–15 μm or 1/3rd of to 1/4th of corresponding body-width long. Both genital branches are equally developed. Ovaries reflexed. Tail rounded conoid, 22–25 μm long or 1.1–1.2 anal body-width long, with two caudal pores on each side.

Male : Not found.

Habitat and Locality : Collected from soil around roots of millet (*Pennisetum typhoides*) and wheat (*Triticum aestivum*) at Dikwala, district Jalore and Jhunjhunu respectively.

Remark : The information about the position of Oesophageal gland nuclei and their orifices in *C. masoodi* has been added for the first time.

Family BELONDIRIDAE Thorne, 1939

10. *Dorylaimellus (Belondorylaimellus) discocephalus* Siddiqi, 1964

(Fig. 5, A-B)

Measurements Females (3) : $L = 1.03\text{--}1.31$ mm; $a = 37\text{--}38$; $b = 4.2\text{--}4.5$; $c = 39\text{--}46$; $V = {}^{8\text{--}9}50\text{--}52^{7\text{--}8}$.

Description : Female Body ventrally curved upon fixation. Lateral hypodermal chords 1/4th–1/3rd of body-width in mid-body. Lateral glandular organs conspicuous, 70–72 in number, variable in size and irregular in arrangements. Lip region well set off. Amphidial apertures 4–5 μm wide or about 3/4th of corresponding body-width. Odontostyle 6–7 μm , its aperture 2–3 μm or 33–42% of odontostyle length. Odontophore 9–11 μm long. Basal expanded part of oesophagus occupies 55–57% of neck region.

Vulva longitudinal. Vagina 10–12 μm or extending less than 1/2 of corresponding body-width. Female reproductive system amphidelphic. Ovaries reflexed. Prerectum 50–60 μm about 2–3 anal body-width long. Rectum 22–25 μm or 0.7–0.8 anal body-width long. Tail 26–28 μm , cylindrical with bluntly rounded terminus, about 1.4 anal body-width long.

Male : Not found.

Habitat and Locality : Collected from soil around roots of millet (*Pennisetum typhoides*) at Nagaur.

Family LEPTONCHIDAE Thorne, 1935

11. *Leptonchus granulosis* Cobb, 1920

(Fig. 5, C-D)

Measurements : Females (5) : L = 0.98–1.14 mm; a = 24–30; b = 5–6; c = 57; V = ⁷⁻⁹59–60⁶⁻⁹

Description : Female : Body almost straight upon fixation. Cuticle finely striated, inner cuticle coarsely striated, usually loose and folded. Radial refractive elements present. Lip region set off by constriction. Lips and papillae distinct. Labial framework prominent. Amphids duplex. Odontostyle 9–10 μm long; with narrow lumen and small aperture. Odontophore 10–12 μm long, arcuate. Oesophagus typical of the genus. Basal pyriform bulb occupies 18–25% of neck region. Vulva a transverse slit. Vagina 12–15 μm , extending inwards about 1/4th of corresponding body-width. Female reproductive system amphidelphic; ovaries reflexed. Intestine-prerectum junction located anterior to vulva; prerectum 420–450 μm or 16–21 anal body-width long. Rectum 20–24 μm or 0.8–1.0 anal body-width long. Tail bluntly conoid, 17–20 μm or about one anal body-width long.

Male : Not found.

Habitat and Locality : Collected from soil around roots of sorghum (*Sorghum vulgare*) and millet (*Pennisetum typhoides*) at Jas Nagar, district Nagaur.

Family MYDONOMIDAE Thorne, 1964

12. *Dorylaimoides (Digidorylaimoides) pakistanensis* Siddiqi, 1964

(Fig. 5, E-F)

Measurements : Females (4) : L = 0.79–1.00 mm; a = 40–43; b = 5.2–5.5; c = 4.7–5.8; V = ¹⁴⁻¹⁵38–41¹⁵⁻¹⁷.

Description : Female : Body ventrally arcuate upon fixation. Cuticle with fine transverse striations. Lip region rounded, set off from body by a constriction. Odontostyle 7–8 μm or 1/3rd of odontostyle length. Odontophore 14–15 μm long. Guiding ring, 6–7 μm from anterior end. Oesophagus typical to the genus. Basal expanded part of oesophagus occupies 40–42% of neck region. Vulva a transverse slit. Vagina 20–22 μm or extending inwards about 2/5th of corresponding body-width. Female reproductive system amphidelphic. Ovaries reflexed. Prerectum 95–98 μm or 3.8–4.1 anal body-width long. Rectum 25–26 μm or one anal body-width long. Tail elongate, regularly conoid to rounded terminus, 165–170 μm or 7.0–7.1 anal body-width long.

Male : Not found.

Habitat and Locality : Collected from soil around roots of wheat (*Triticum aestivum*) at Kota.

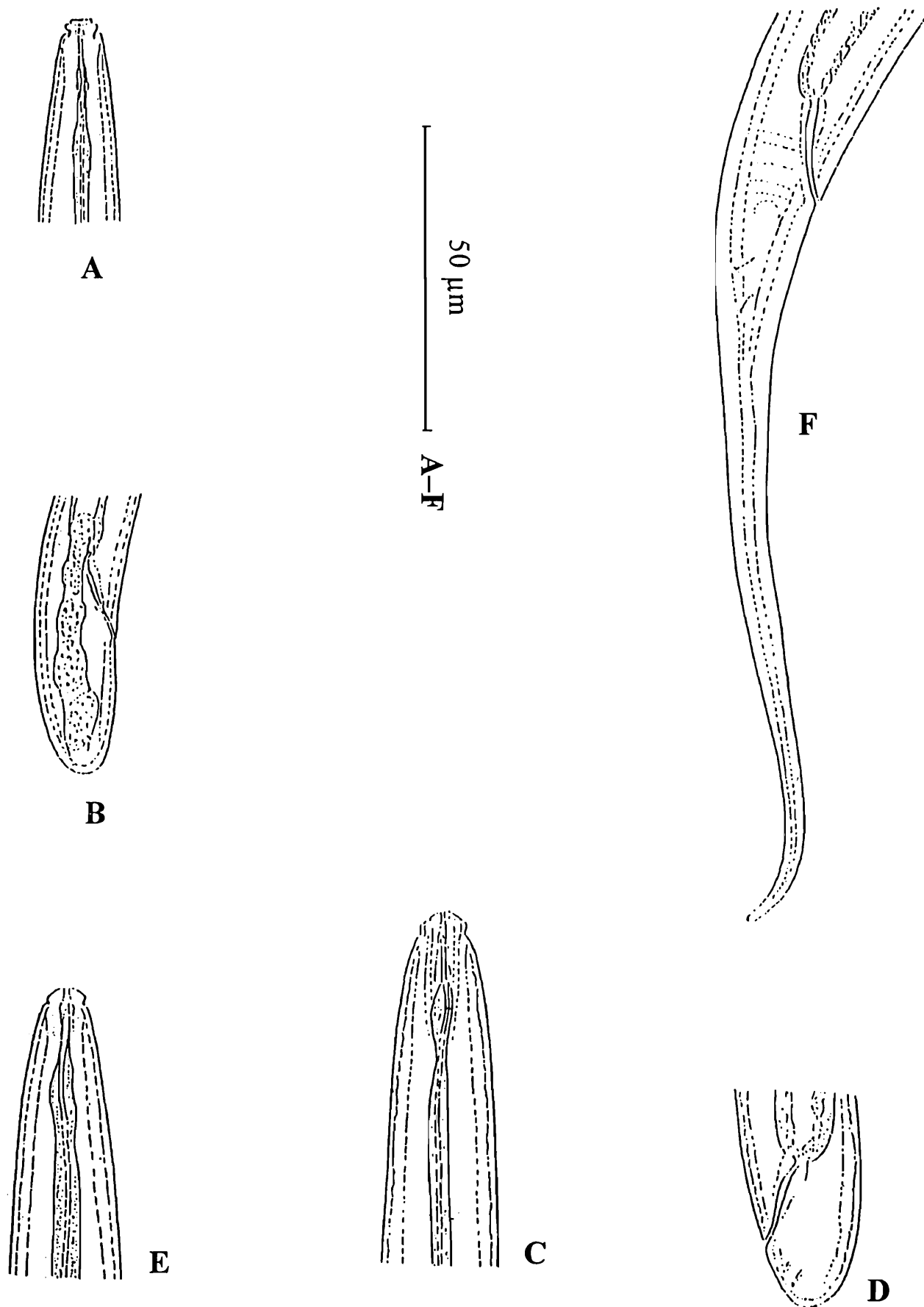


Fig. 5. A-B : *Dorylaimullus (Belondorylaimellus) discocephalus* Siddiqi, 1964. A-Female anterior end; B-Female tail.
 C-D : *Leptonchus granulatus* Cobb, 1920. C-Female anterior end; D-Female tail.
 E-F : *Dorylaimoides (Digidorylaimoides) pakistanensis* Siddiqi, 1964. E-Female anterior end; F-Female tail.

Suborder NYGOLAIMINA Ahmad & Jairajpuri, 1935

Family NYGOLAIMIDAE Thorne, 1935

13. *Nygolaimus harishi* Ahmad & Jairajpuri, 1980

(Fig. 6, A-E)

Measurements : Females (6) : L = 1.25–1.30 mm; a = 3.0–3.5; b = 3.9–4.2; c = 65–69; V = ⁴⁻⁵42–45⁶⁻⁷

Description : Female : Body almost straight upon fixation. Cuticle finely striated. Lip region set off from body by constriction. Tooth deltoid, 6–7 μ m long. Odontophore rod-like. Basal expanded part of oesophagus occupies 52–53% of neck region. Sheath surrounding basal expanded part of oesophagus inconspicuous. Vulva a transverse slit. Vagina 12–13 μ m, extending inwards about half of corresponding body-width. Female reproductive system amphidelphic. Anterior reproductive branch reduced. Prerectum 30–34 μ m or 1.5–1.7 anal body-width long. Rectum 18–20 μ m or about one anal body-width long. Tail straight conoid with blunt terminus, 18–20 μ m or 1.0–1.2 anal body-width long, with two caudal pores on each side.

Male : Not found.

*Habitat and Locality : Collected from soil around roots of wheat (*Triticum aestivum*) and millet (*Pennisetum typhoides*) at Sambhar, district Jaipur and Jhunjhunu.*

Order MONONCHIDA Jairajpuri, 1969

Family MYLONCHULIDAE Jairajpuri, 1969

14. *Mylonchulus minor* (Cobb, 1893) Andrassy, 1958

(Fig. 7, A-B)

Measurements : Females (2) : L = 0.95–0.98 mm; a = 21–25; b = 3.4–3.7; c = 30–31; V = ⁸⁻⁹54–55⁷⁻⁸

Description : Female : Body ventrally curved in posterior third upon fixation, tapering gradually anterior to base of oesophagus but more behind vulva. Cuticle 2–3 μ m thick (thickest on tail). Lip region 22–25 μ m wide, 7–8 μ m high. Buccal cavity 21–22 \times 14–15 μ m. Apex of dorsal tooth at 17–18 μ m from base of stoma. Transverse rows of denticles 5 to 6; submedian tooth present. Rectum 18–25 μ m or less than one anal body-width long. Female reproductive system amphidelphic. Tail 30–32 μ m long, arcuate conoid with rounded terminus. Spinneret terminal.

Male : Not found.

*Habitat and Locality : Collected from soil around roots of maize (*Zea mays*) at Gogunda, district Udaipur.*

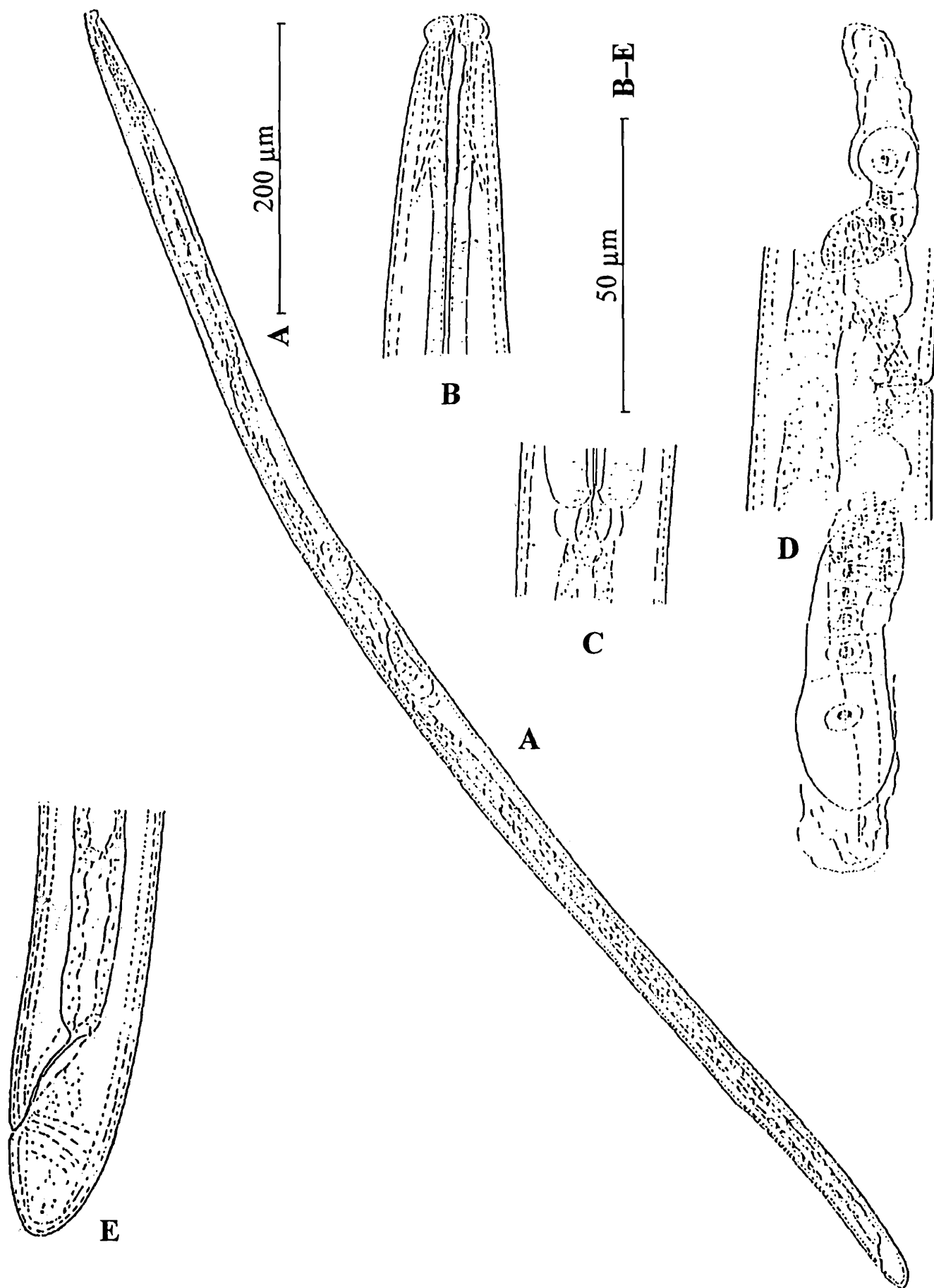


Fig. 6. A-E : *Nygolaimus harishi* Ahmad & Jairajpuri, 1980. A-Entire female; B-Anterior end; C-Oesophago intestinal junction; D-Female reproductive organ. E-Female tail.

15. *Mylonchulus branchyuris* (Butschli, 1873) Andrassy, 1958

(Fig. 7, C-D)

Measurements : Females (2) : L = 0.74–0.98 mm; a = 25–30; b = 2.3–3.4; c = 29–32; V = ⁸⁻⁹60–65⁸⁻⁹.

Description : Female : Body ventrally arcuate upon fixation, tapering towards both extremities. Cuticle 2–3 μm thick. Lip region 20–24 μm wide, 5–6 μm high. Buccal cavity 21–23 \times 12–15 μm . Apex of dorsal tooth 15–18 μm from base of stoma. Transverse rows of denticles 6–7. Submedian teeth present. Rectum 18–23 μm or about one anal body-width long. Female reproductive system amphidelphic. Tail 25–30 μm or 1.0–1.5 anal body-width long conoid, ventrally arcuate, terminus blunt. Spinneret subdorsal.

Male : Not found.

Habitat and Locality : Collected from soil around roots of rice (*Oryza sativa*) at Gogunda, district Udaipur.

16. *Mylonchulus lacustris* (N. A. Cobb in M. V. Cobb, 1915) Andrassy, 1958

(Fig. 7, E-F)

Measurements : Female (1) : L = 0.92 mm; a = 25; b = 3.2; c = 18.4; V = ⁶55⁶.

Description : Female : Body ventrally curved upon fixation; tapering towards slightly both ends. Cuticle 2 μm thick. Lip region 20 μm wide, 7 μm high. Buccal cavity 25 \times 14 μm . Apex of dorsal tooth 20 μm from base of stoma. Six transverse rows of denticles, submedian teeth present. Rectum 30 μm ; less than one anal body-width long. Female reproductive system amphidelphic. Tail 50 μm long, arcuate, conoid. Caudal glands tandem. Spinneret terminal.

Male : Not found.

Habitat and Locality : Collected from soil around roots of rice (*Oryza sativa*) at Gogunda, district Udaipur.

17. *Mylonchulus contractus* Jairajpuri, 1970

(Fig. 7, G-H)

Measurements : Female (1) : L = 0.95 mm; a = 29; b = 3.5; c = 25; V = ⁷56⁷.

Description : Female : Body ventrally arcuate upon fixation, tapering towards both extremities. Cuticle 2 μm thick. Lip region 20 μm wide and 2 μm high. Buccal cavity 21 \times 12 μm . Apex of dorsal tooth 15 μm from the base of stoma. Five transverse rows of denticles. Submedian teeth small. Rectum 20 μm long or less than one anal body-width long. Female reproductive system amphidelphic; ovaries reflexed, intestine contracted dorsally in the region of gonads. Uterus small. Cuticularised pieces present at vulva-vagina junction. Tail 37 μm or one and half anal body-width long, arcuate-conoid with blunt terminus. Caudal glands grouped. Spinneret subdorsal.

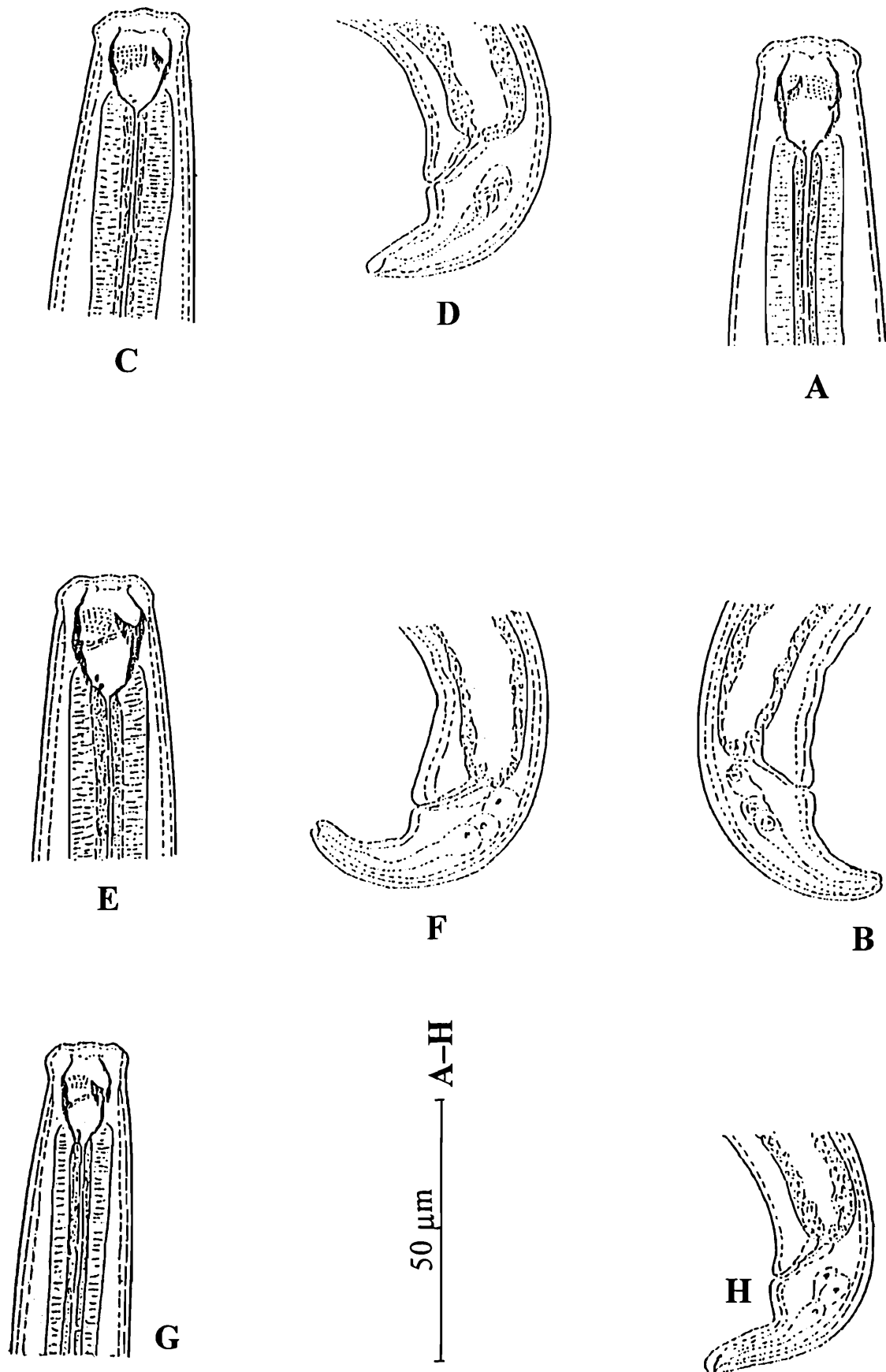


Fig. 7. A-B : *Mylonchulus minor* (Cobb, 1893) Andrassy, 1958. A-Female anterior end; B-Female tail.
 C-D : *Mylonchulus brachyuris* (Biitschli, 1873) Andrassy, 1958. C-Female anterior end; B-Female tail.
 E-F : *Mylonchulus lacustris* (N. A. Cobb in M. V. Cobb, 1915) Andrassy, 1958. E-Female anterior end;
 F-Female tail.
 G-H : *Mylonchulus contractus* Jairajpuri, 1970. G-Female anterior end; H-Female tail.

Male : Not found.

Habitat and Locality : Collected from soil around roots of rice (*Oryza sativa*) at Dholaghati, district Udaipur.

RESULTS AND DISCUSSION

The following Seventeen species of plant and soil nematodes belonging to the orders Tylenchida, Dorylaimida and Mononchida have been reported :

Tylenchida : *Filenchus vulgaris* (Brezeski, 1963) Lownsbery & Lownsbery, 1985; *Basira graminophila* Siddiqi, 1959; *Telotylenchus aerolatus* Baqri & Jairajpuri, 1969; *Psilenchus hilarulus* de Man, 1921.

Dorylaimida : *Mesodorylaimus mesonyctius* (Kreis, 1930) Andrassy, 1959; *Discolaimium mukhtarpuriense* Baqri & Jairajpuri, 1969; *Latocephalus simithi* (Heyns, 1963) Patel & Khan, 1982; *Latocephalus oostenbrinki* (Ali, Suryawanshi & Prabha, 1937) Patil & Khan, 1982; *Carcharolaimus masoodi* Jairajpuri, 1968; *Dorylaimellus (Belondorylaimellus) discocephalus* Siddiqi, 1964; *Leptonchus granulatus* Cobb, 1920; *Dorylaimoides (Digidorylaimoides) pakistanensis* Siddiqi, 1964; *Nygolaimus harishi* Ahmad & Jairaipuri, 1980.

Monochida : *Mylonchulus minor* (Cobb, 1893) Andrassy, 1958; *Mylonchulus brachyuris* (Biitschli, 1873) Andrassy, 1958; *Mylonchulus lacustris* (N. A. Cobb in M. V. Cobb, 1915) Andrassy, 1958; *Mylonchulus contractus* Jairajpuri, 1970.

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