ALIRHABDITIS INDICA N. GEN., N. SP. (RHABDITIDA: ALIRHABDITIDAE N. FAM), TAWDENEMA INDICUM N. GEN., N. SP. AND SYDELLA AURANGABADENSIS N. GEN., N. SP. (DIPLOGASTERIDAE) FROM MARATHWADA, INDIA 1)

BY

M. V. SURYAWANSHI
Department of Zoology, Marathwada University, Aurangabad, Maharashtra, India

Alirhabditidae n. fam. is proposed for Alirhabditis indica n. gen., n. sp., collected from soil around the roots of grass. It resembles Rhabditidae in possessing a cylindrical stoma, but differs from it and resembles Cephalobidae in the characters of female gonad and male tail. The lip region forms a labial disc at the anterior end. Tawdenema indicum n. gen., n. sp. and Syedella aurangabadensis n. gen., n. sp. were collected from soil around the roots of Colocasia esculenta Schott. Tawdenema n. gen. is close to Butlerius T. Goodey, 1929, but differs from it in having a monodelphic gonad, and in the characters of the dorsal metarhabdial tooth, spicules, gubernaculum and caudal papillae. Syedella n. gen. is close to Mononchoides Rahm, 1928/29, but differs from it in having an undivided lip-ring (cheilorhabdions), unarmed subventral metarhabdions and fused spicules.

ALIRHABDITIDAE N. FAM.

Diagnosis: Rhabditoidea. Body small. Cuticle finely transversely striated; lateral fields marked by incisures. Lip region narrow, amalgamated, forming a labial disc at the anterior end; papillae indistinct. Amphids on the posterior part of the lip region. Stoma cylindrical, circular in cross section; rhabdions not differentiated; glottoid apparatus absent. Oesophageal collar surrounds the base of the stoma. Corpus more or less cylindrical; isthmus followed by a posterior oesophageal bulb with distinct valvular apparatus. Tail similar in both sexes, elongate, filiform. Female: Vulva slightly posterior to the middle of the body. Gonad single, prodelphic, reflexed, ovary extending posterior to vulva. Short postvulval uterine sac present. Spermatheca at the flexure of the gonad. Male: Testis single, reflexed at the tip. Spicules arcuate. Gubernaculum present. Bursa absent. Caudal papillae paired, placed subventrally.

Type genus: Alirhabditis n. gen.

Diagnosis: With characters of the family.

Type species: Alirhabditis indica n. gen., n. sp.

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**Measurements**

Females (8): \( L = 0.37-0.40 \; \text{mm}; \; a = 23-28; \; b = 4.0-4.4; \; c = 4.1-4.7; \; V = 14^a-16^b51-53.\)

Males (5): \( L = 0.33-0.35 \; \text{mm}; \; a = 24-31; \; b = 3.6-3.8; \; c = 4.6-5.0; \; T = 38-39.\)

Holotype female: \( L = 0.37 \; \text{mm}; \; a = 23; \; b = 4; \; c = 4.3; \; V = 16^b53.\)

Allotype male: \( L = 0.34 \; \text{mm}; \; a = 31; \; b = 3.7; \; c = 4.6; \; T = 38.\)

**Description**

Female: Small sized nema, becoming ventrally arcuate in shape when relaxed. Body slender, cylindrical, tapering at both ends, more so posteriorly. Cuticle finely transversely striated, the average width of the annules being \( 1 \; \mu \) in the midbody. Lateral fields occupy about one-fifth of the body width, marked by three distinct incisures. Phasmids and deirids could not be observed.

Lip region narrow, about one-sixth as wide as the neck base, not set off from the body, but with amalgamated lips forming a labial disc at the anterior end. Cephalic sclerotization absent. Amphids seen in dorsoventral view, placed near the lip region base. Cephalic papillae not discernible. Stoma a narrow, cylindrical tube, 10.5-11.5 \( \mu \) long, circular in cross section. Stomatal rhabdions not differentiated; short cheilorhabdions being somewhat more refractive in some specimens. Glottoid apparatus absent. Oesophagus surrounds the stoma at its base. Corpus cylindrical, not swollen posteriorly to form median oesophageal bulb. Isthmus narrow, cylindrical, shorter than the corpus. Posterior oesophageal bulb with distinct valvular apparatus, occupying about two-thirds of the neck width. Excretory pore situated about 53 \( \mu \) behind the anterior end, in the anterior part of the isthmus. Excretory duct poorly cuticularized. Hemizonid situated just behind the excretory pore. Nerve ring encircles the isthmus near its anterior end, at the level of the excretory pore. Oesophago-intestinal junction with distinct, hemispherical cardia, about one-third as wide as the neck base. Intestine with narrow lumen. Rectum about one anal body width long. Tail long, tapering, filiform posteriorly, about as long as the vulva-anus distance.

Vulva a transverse slit. Vagina at right angles to the body axis, extending about one-fourth of the vulval body width. Gonad single, prodelpic, reflexed, ovary extending posterior to vulva. Oocytes arranged in a single row. A fairly large spermatheca arises at the flexure of the gonad, as in Cephalobidae, in the form of an elongate sac, with a length of one and a half times the body width, extending anteriorly. Posterior rudimentary uterine branch about half the vulval body width long.

Male: Similar to female in general body features. Testis single, reflexed at the terminus. Spicules arcuate, measuring 12 \( \mu \) in length along the curved median line; the right spicule is slightly less developed. Gubernaculum 5.5 \( \mu \) long. Tail