

Short note

Morphology and taxonomy of the genus *Fictor* Paramonov, 1952 (Rhabditida: Diplogasteridae)

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Morphological characteristics of nematodes belonging to the genera *Fictor* Paramonov, 1952 and *Koerneria* Meyl, 1960 were reviewed using published data and original observations (Korner, 1954; Meyl, 1961; Gagarin & Lemsina, 1982; Gagarin, 1983; Andrassy, 1984; Ebsary, 1986; Shoshin, 1989). Our analysis revealed that the structure of the buccal cavity, and of the copulatory apparatus in males, are of primary taxonomic importance. Previously, these two genera were distinguished principally by the structure of the telostom and of the metastomal armature. In *Fictor* species the telostom is much reduced, whereas, *Koerneria* species have a prominent, funnel-shaped, telostom with subventral spherical sclerotia. The metastom in *Fictor* species contains two claw-like teeth and a slightly cuticularized serrate plate, and in *Koerneria* species the two teeth are accompanied by a small cuticular projection.

Our analysis of the morphology of *Fictor* and *Koerneria* species inhabiting fresh water habitats, mosses and wet soil revealed that all these species may be considered as belonging to the genus *Fictor* Paramonov, 1952. In all species from the above mentioned habitats the telostom is funnel-shaped, of varying length, contains a spherical cuticular sclerotia and there are always two onchia and a serrated plate in the metastoma (Fig. 1). Thus, we propose a new diagnosis for the genus *Fictor*.

Fictor Paramonov, 1952

(Syn. *Diplogasterium* Paramonov, 1952; *Paradiplogaster* Paramonov, 1952; nec. Sch. Stekhoven & Teunissen, 1938; *Holodiplogaster* Meyl, 1961).

Neodiplogasterinae. Body length 0.5-2.5 mm. Cuticle annulated, rarely smooth, with longitudinal ridges arising from joined sclerotia. Lips absent, 6 setiform labial papillae. Amphids with prominent opening, pocket-like, at level of the stoma bottom. Buccal cavity divided in two parts; larger anterior part consisting of cheilostom, promesostom and metastom, and smaller posterior part containing telostom only. Cheilorhabdions are divided into 12 sectors, of 4 cuticular rods each. Telostom funnel-shaped. Dorsal telorhabdion strongly cuticularized, both subventral telorhabdions delicate, but with spherical sclerotia. The telostom more or less elongated. Two onchia: dorsal with additional spike near the tip and right subventral without additional spike. Left subventral plate singular or divided in two parts, anterior edge always serrate. Didelphous with amphidromous ovaries. Spicules separate, slightly curved, with prominent manubria. Gubernaculum present. Bursa rudimentary, with 3 pairs precloacal and 6 pairs postcloacal rays. Tail long, with filiform terminus in both sexes. Free-living species in fresh-water, rarely in water with increased content of salts, also in soil, mosses, rarely present in rotten wood or in manure.

Based on the diagnosis presented here there are nineteen valid species in the genus *Fictor*. These

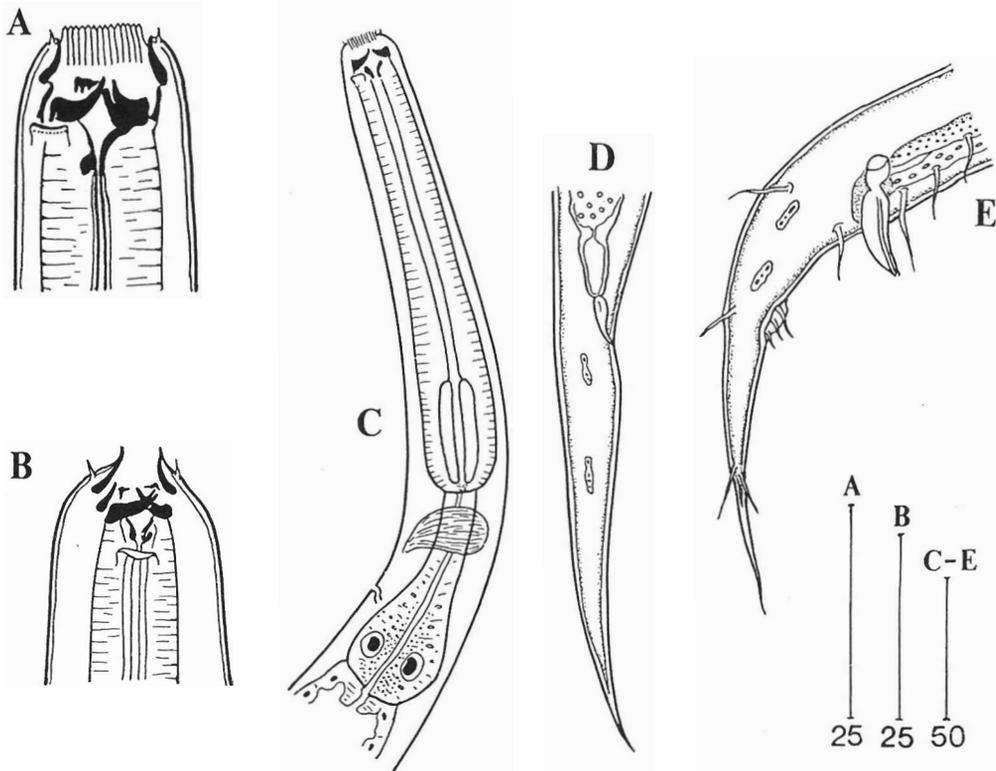


Fig. 1. *Fictor ivanegai* (Gagarin, 1983) and *Fictor tsalolikhini* (Gagarin & Lemsina, 1982). A: *F. ivanegai* female head end; B: *F. tsalolikhini* female, head end; C: *F. ivanegai* female anterior end; D: *F. tsalolikhini* female tail; E: *F. ivanegai* male tail. Scale bars in μm .

include the eight species which had been included previously, *F. vorax* (Goodey, 1929) - type species, *F. faecalis* (Weingartner in Meyl, 1956), *F. fictor* (Bastian, 1865), *F. robinicola* (Ruhm, 1956), *F. similis* (Butschli, 1875), *F. sphagni* (Soos, 1938), *F. stercorarius* (Bovien, 1937), *F. tsalolochini* (Gagarin & Lemsina, 1982) and another eleven species here transferred from the genus *Koerneria*: *F. mulveyi* (Ebsary, 1986) comb. n., *F. terranovus* (Ebsary, 1986) comb. n., *F. baicalensis* (Tsalolikhin, 1972) comb. n., *F. angarensis* (Gagarin, 1983), *F. ivanegae* (Gagarin, 1983), *F. ruriculus* (Gagarin, 1983) comb. n., *F. strenuus* (Gagarin, 1983), *F. lupata* (Shoshin, 1989) comb. n., *F. mordax* (Shoshin, 1989) comb. n., *F. pantolaba* (Shoshin, 1989) comb. n. and *F. regia* (Shoshin, 1989) comb. n.

The genus *Koerneria* Meyl, 1961 retains only 10 species, all of which have been reported from detritus in the galleries of several, different wood-inhabiting beetles (*Dorcus*, *Geotrupes*, *Hylobius*, *Lucanus*, *Pyssodes* and *Synodendronus*) (Andrassy, 1984).

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