



One new and two known species of Dorylaimoidea (Nematoda) from West Bengal, India

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ABSTRACT

Small populations of *Laimydorus istvani* sp. n., *Laimydorus baldus* Baqri & Jana, 1982 and *Dorylaimus* sp. were collected from the soil around the roots of guava at south 24-Parganas district, West Bengal, India. *Laimydorus istvani* sp. n. is characterized by its odontostyle being distinctly thicker than the cuticle at the same level, cardia shape: rounded-conoid, wide at pharyngo-intestinal junction, enveloped by intestinal tissue which forms a conical projection extending into the lumen of intestine; delicate ring-like structure between the pharyngeal base and the proper cardia. *Laimydorus istvani* sp. n. comes close to *L. multialaeus* (Khera, 1970) Baqri, 1985, *L. siddiqii* Baqri & Jana, 1982 and *L. baldus* Baqri & Jana, 1982, but can be distinguished from these species on the basis of different morphometric measurements. The new species differs from *L. multialaeus* in having higher *a* value, lower *b* value and longer odontostyle in females, and, longer body, lateral guiding pieces and tail in males. From *L. siddiqii* the new species differs in having a shorter tail in relation to body length, shorter cardia with different shape, shorter prerectum and longer rectum in female, different number of ventromedian supplements and shorter spicules in males. From *L. baldus*, it differs in having a longer body, greater *a*-value, longer odontostyle and odontophore and longer tail in females. *Laimydorus istvani* sp. n. differs from the males of *L. baldus* by its longer body, greater *c* value and in the number of ventromedian supplements. The population of *L. baldus* from West Bengal agrees well with the original description except for some variations in body, odontophore, prerectum and tail length. New data on male characters have been provided in the present study. The specimens of *Dorylaimus* sp. come close to *D. geraerti* Baqri & Jana, 1986 except in some morphometric measurements including: *b* (4.2–5.1 vs. 4.3–4.7), odontophore length (33–54 µm vs. 40–43 µm, prerectum length in females (120–160 µm vs. 196–241 µm and tail length in females (247.5–294 µm vs. 249–406 µm). In males, the supplements (36 in number) occur in a contiguous series (as is usually seen in the genus *Dorylaimus* Dujardin, 1845), whereas in the type specimens of *D. geraerti* 35–38 supplements are largely contiguous except for a set of 4–5 spaced supplements in the middle of the series, showing a resemblance with the genus *Ischiodorylaimus* Andrassy, 1969.

Key words: *Laimydorus istvani* sp. n., *Laimydorus baldus*, *Dorylaimus* sp., description, Taxonomy

INTRODUCTION

Andrassy (1988) thoroughly reviewed the superfamily Dorylaimoidea de Man, 1876 and synonymised as well as transferred many species from one genus to another on the basis of morphological similarities and dissimilarities. He also opined that, in its general appearance, *Laimydorus* Siddiqi, 1969 much resembles *Dorylaimus* Dujardin, 1845, except that the cuticle is devoid of longitudinal ridges; *Laimydorus* also comes close to *Mesodorylaimus* Andrassy, 1959, specially the smaller species. Andrassy (1988) put forward characters such as a double guiding ring, absence of a yellowish spot at the base of the odontostyle, a very long prerectum in males originating well before the supplements, contiguous ventromedian supplements, and plump, short, rounded tail in males as the distinguishing characters of the genus *Laimydorus*. He also suggested that *Laimydorus* is badly in need of a revision. Loof (1985) transferred all the monosexual species of *Laimydorus* to *Prodorylaimus* Andrassy, 1959, whereas Jairajpuri and Ahmad (1992) advocated that the placement of these species in *Laimydorus* is better justified. A number of *Laimydorus* species have been described by Baqri and Jana (1982), Dey and Baqri (1986), Baqri (1991), and Baniyamuddin and Ahmad (2006) from West Bengal and north-eastern states of India