

OCCURRENCE OF THE EARTHWORM *GLYPHIDRILUS ANNANDALEI* IN GADANA RIVER, KALAKKAD-MUNDANTHURAI TIGER RESERVE, TAMIL NADU

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Earthworms are found in all terrestrial ecosystems including swamps and deserts (Stephensen, 1923; Julka, 1988; Pavlicek *et al.*, 1997). The first modern record of earthworms in the Indian subcontinent was provided by Templeton (1844). Well documented reports and oligochaete taxonomic monographs on the majority of Indian earthworms have been provided by Stephensen (1923), Gates (1972) and Julka (1988). So far, about 509 species of earthworms in 67 genera and 10 families are reported from the Indian subcontinent (Julka, 1993). There are sporadic reports on the study of earthworm fauna from several unexplored regions in the Indian subcontinent. However, reports on the occurrence and biology of earthworms in Tamil Nadu are lacking. Since the earthworms of the Western Ghats remain largely unexplored the present study was carried out.

Gadana River (8°48'N & 77°19'E) and its tributaries flow in the buffer zone of Kalakkad-Mundanthurai Tiger Reserve from a sub basin of a major river called Tamirabarani in the southern Western Ghats. The river systems of Tamirabarani sub basins are not explored for the occurrence and distribution of earthworms. *Glyphidrilus annandalei* of the Almididae family and members of this family are mud dwellers, hydrophilous and found in more or less submerged habitat. Most of them prefer neutral soils, but some can tolerate acid or alkaline soil.

External characters

Nephropores, on b, are recognizable only from xiv or xv even though nephridia are present from ix posteriorly. Female pores are on xiv, on b nearer the setal equator than xiii/xiv. The wings are 1.25-1.50mm high. Genital markings are located as follows: rims of markings are conspicuously raised peripherally so as to form deep cups within which the central tubercle is equally protuberant. The central tubercle of four markings, on xiv-xv, is doubled.

Earlier records

Michaelsen (1910), Stephenson (1925), Rao (1922) and Hora (1938) recorded this species from Bangalore, Bhadravathi and along the edge of Bhavani River (Mettupalayam, Tamil Nadu) respectively. The reports are mostly from the northern parts of Tamil Nadu and southern parts of Karnataka. Therefore the present record of this earthworm *Glyphidrilus annandalei* in the Gadana River shows the extended range of distribution in southern Tamil Nadu.

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