

NEW SITE RECORD OF AN EARTHWORM *PONTODRILUS LITORALIS* IN THE TUTICORIN BACKWATER AREA

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Distribution of earthworms in the soil may be normal, random or aggregated and is sometimes influenced by the type of soil. Earthworms thrive best in moist soils and for this reason there are few worms in arid and semi arid soils. Some earthworms (e.g *Glyphirilus*, *Ocnerodrilus*, *Malabariare*, *Thatonia* and *Perionyx*) are very hydrophilous and are usually associated with more or less submerged habitats. Soil pH has a distinct influence on the distribution of earthworms, with most of them preferring neutral soils. Some are known to tolerate acidic or alkaline soil while few others are ubiquitous that can withstand both acid and alkaline soils. *Pontodrilus litoralis* is known to occur in mud with large content of organic matter and salt, on seashores and margins of estuaries, and brackish water lakes.

Distribution: *Pontodrilus litoralis* is circumundane on shorelines in the tropics and warmer parts of continents and islands in the Atlantic, Pacific and Indian Oceans, and in the Mediterranean, Red Ssea and South China Sea (Blakemore, 2000; Gates, 1972; Julka & Senapati, 1987; Stephenson, 1923).

One species is lacustrine, found in New Zealand while two other species with one in Sri Lanka and one in China are terrestrial. A fifth species, the newly described littoral species *Pontodrilus primoris* Blakemore (2000) is from northeastern Tasmania. Presence of a second littoral species in Tasmania puts Australia, with its large and often tropical coastline in contention for the provenance of this genus.

Information available on *Pontodrilus litoralis* of the Tuticorin backwater area is scant. Tuticorin (8°40'50"N & 78°6'45"E) called the Pearl City, located in southern India has lot of seafood industries and saltpans. This species had previously been recorded from Kovalam (Aiyer, 1929) and Stephenson (1917) isolated and identified this species from near Chiquilim point, Mormugao bay. During our research in Tuticorin we found the occurrence of *Pontodrilus litoralis*, which is described here. It is noteworthy that *Pontodrilus litoralis* has not so far been recorded from this area, and is a new site record.

Diagnosis: Length 60-140mm; diameter 2-3mm, 80-130 segments. Prostomium epilobic, tongue open, dorsal pores absent. Clitellum saddle shaped, xiii-xvii. Setae ornamented ectally, spermathecal pores paired in 7/8/9, genital markings transversly oval unpaired, median usually in 19/20, sometimes in 12/13, 13/14. Nephridiopores inconspicuous. Intestine begins in xvii. Last pair of hearts in xiii. Holandric, testes and male funnels

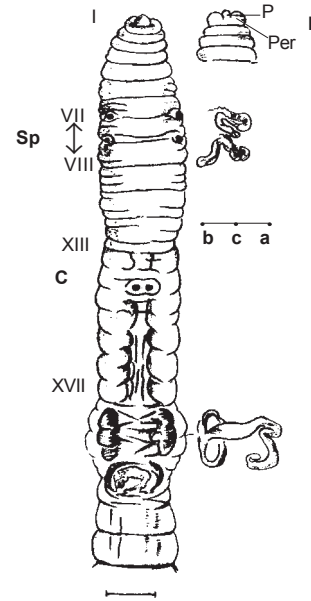


Figure 1. *Pontodrilus litoralis*
P - Prostomium; Per - Peristomium; Sp - Spermathecal pore;
C - Clitellum

free in x and xi. Tubular prostates, lumbricine setae, penial setae absent, spermatheca paired in vii and ix with club shaped diverticulum (Fig. 1).

Remarks: *Pontodrilus litoralis* appears to fit under family Megascolecidae (Blakemore, 2000) rather than Acanthodrilidae where it had been placed by some earlier workers.

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ACKNOWLEDGEMENT

The authors gratefully acknowledge Dr. J.M. Julka, Solan, Himachal Pradesh for identification of the earthworms.

