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Chordodes combiareolatus*, a new species of horsehair worms (Nematomorpha) from Nagaland, India, with further comments on *Chordodes moutoni

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Abstract

The currently known diversity of horsehair worms (Nematomorpha) from India is only 17 species. We report here two female specimens found on two occasions on a terrace paddy field in Tsupo, Viswema, Kohima, Nagaland, India. Although found at the same location, both species differ in their cuticular structures. One is determined as *Chordodes moutoni*, a species known from China, Malaysia and India. The other specimen shows a new type of cuticular structure, the areoles, which combines characters of both simple areoles and tubercle areoles. This specimen is described as a new species, *C. combiareolatus*. Both specimens show arrangements on the cuticle, in which a circle of areoles surrounds a region of “naked” cuticle. We interpret these regions as artifacts caused by the breaking off of the central crowned areoles, leaving only the circumcluster areoles behind.

Key words: Nematomorpha, Gordiida, *Chordodes combiareolatus*, new species, hairworm

Introduction

India is a large country with very diverse natural environments. The known diversity of horsehair worms (Nematomorpha) is 17 species (see Schmidt-Rhaesa & Yadav 2013), certainly smaller than the existing diversity; and consequently a number of new species must await discovery. We report here the finding of two specimens of the genus *Chordodes*, one of which shows characters unknown so far. This specimen is described as a new species. The second specimen is determined as *Chordodes moutoni* Camerano, 1895, a species formerly reported from Northeast India (Schmidt-Rhaesa & Yadav 2013).

The genus *Chordodes* is distributed in tropical and subtropical regions and their hosts are usually praying mantids (Schmidt-Rhaesa & Ehrmann 2001). Representatives of this genus are rich in cuticular structures named areoles and we follow here the terminology of areoles according to Schmidt-Rhaesa *et al.* (2008). Discrimination of nematomorph species is still predominantly done with the aid of morphological characters, in particular by scanning electron microscopy (SEM) of their cuticular structures (Yadav 2014). Comparison of DNA sequences becomes more and more important (see, e.g. Chiu *et al.* 2011, Begay *et al.* 2012), but many findings of nematomorphs are unique records of single specimens, sometimes in remote places, where molecular work is hardly possible.

Methods

The two specimens for the present study were collected in a terrace paddy field in Tsupo, Viswema, Kohima, Nagaland, India (25°34'50.59"N/94°09'56.89"E), elevation: 4175 feet. The specimens were collected at two different times on 18 September 2013 by Mrs. Zakrusunu Toso Longchar. They were preserved in 2.5%

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