One new species and a new record of the genus *Chordodes* (Nematomorpha: Gordiida) from North-East India

ANDREAS SCHMIDT-RHAESA¹,³ & ARUN K. YADA V²

¹Zoological Museum, University Hamburg, Martin-Luther-King-Platz 3, 20146 Hamburg, Germany. E-mail: andreas.schmidt-rhaesa@uni-hamburg.de
²Department of Zoology, North-Eastern Hill University, Shillong 793 022, India. E-mail: akynehu@hotmail.com
³Corresponding author. E-mail: andreas.schmidt-rhaesa@uni-hamburg.de

Abstract

Fifteen species of freshwater Nematomorpha have been described from India, five of which belong to the genus *Chordodes*. This paper describes one new species of horsehair worms (Nematomorpha): *Chordodes lasuboni* and a new record, *C. moutoni* from North-East India, which raises the total number of described species from India to 17. *Chordodes lasuboni* is characterized by a novel cuticular pattern in the head region and by the presence of slender, hooked thorn areoles on the body cuticle. Compared to the large size and ecological diversity of India, the nematomorph fauna is regarded as under-sampled and several new species are to be expected.

Key words: Nematomorpha, Gordiida, Mantodea, taxonomy, biodiversity

Introduction

Among all the animal parasitic phyla, the phylum Nematomorpha has received comparatively less attention from investigators in India. With about 350 species of Nematomorpha known globally (Schmidt-Rhaesa 2012), so far only 15 species have been described from India (Schmidt-Rhaesa & Yadav 2004, Schmidt-Rhaesa & Lalramliana 2011). This accounts for only about 4.2% of the species of the gordiids currently known. The paucity of work on Indian nematomorphs can be inferred from the fact that with two exceptions (Rajaram & Rajulu 1975, Schmidt-Rhaesa & Lalramliana 2011) and one undetermined *Gordius* species (Dasgupta & Khawas 1986), all reports pertaining to gordian species in India are earlier than 1912 (Schmidt-Rhaesa & Yadav 2004). Further, the documentation of most of these species is less than thorough and they require re-examination by taxonomists. More detailed studies of this phylum in India would reveal a truer picture of nematomorph fauna in the country and provide interesting information about endemic species. In recent years, some efforts have been made to systematically study a few gordiid worms from India and two species, *Chordodes cf. furnessi* and *C. mizoramensis*, have been described, using scanning electron microscopy (Schmidt-Rhaesa & Yadav 2004, Schmidt-Rhaesa & Lalramliana 2011). Scanning electron microscopy is the method of choice when investigating gordiids, because only with this method can the cuticular characters important for species description be reliably documented. Measurements such as length and diameter as well as colour patterns are regarded as quite variable, leaving cuticular ornamentations the main characters for species determination. Here we report one new species from the Northeastern region of India. The description is based on a single specimen. Larger numbers of specimens are certainly desirable, but nematomorph species are quite often found as by-product of other projects in very small numbers. Therefore, species are regularly described from single specimens. A distinct difference in characters, particularly cuticle morphology, is regarded as the indication for separate species, although character variation may occur and the presence of morphologically very similar species does occur (see Chiu et al. 2011).

The species reported here belong to the genus *Chordodes*, which with 96 currently described species is one of the larger (in terms of species number) genera among Nematomorpha (Schmidt-Rhaesa et al. 2008, Schmidt-