



Gastro-intestinal invasion in *Hemidactylus flaviviridis* with a new species of *Parapharyngodon* (Oxyuroidea : Pharyngodonidae)

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Abstract

Parapharyngodon hemidactylus n. sp. (Nematoda : Oxyuridae) from the rectum of the Indian wall lizard *Hemidactylus flaviviridis* (n=359) is described. The parasite occurred at 79.10% (Prevalence) and 5 par/host (Mean intensity). It is compared critically with the earlier reported species based on its taxo-metric assessment. The differences in smaller size of male and female worm [male : 0.755 (0.47–0.96); female : 3.47 (2.47–4.05)], position of vulva [1.44 (1.20–1.7)], tail measurements [male : 0.065 (0.01–0.09); female : 0.11 x 0.063 (0.075–0.135 x 0.045–0.10)], absence of caudal papillae and oval shaped eggs of the nematode from *H. flaviviridis* merits new species status.

Key words: Taxometry, morphogenesis, nematode, rectum

Introduction

Many investigations have been made on reptiles of India, their great variety acting as a stimulant for such studies (Murthy, 1990). However, little is known about the helminth parasites inhabiting the reptiles of Uttar Pradesh, India. The genus *Thelandros* was divided into two subgenera, *Parapharyngodon* possessing lateral alae (Chatterji, 1933) and *Thelandros* without lateral alae (Wedl, 1862) by Yamaguti (1961). The genus *Thelandros* Wedl, 1861 is a commonly occurring nematode parasite of herbivorous and omnivorous reptiles.

During the past decades, a few species of *Thelandros* have been reported from Indian lizards : *T. maplestoni* (Agarwal, 1966), *T. striatus* (Singh & Malhotra, 1986), *T. fotedari* (Nanda & Malhotra, 1989) from *Hemidactylus flaviviridis* and *T. alatus* (Johnson, 1967) from *Uromastyx hardwickii*.

A systematic study on oxyurid nematodes was initiated by the authors and *Parapharyngodon* was identified from the infected hosts. The purpose of the present communication is to describe a new species of *Parapharyngodon* based on taxometric and cytomorphic comparison with the earlier reported species.

Materials and methods

Hemidactylus flaviviridis were collected with hand nets from Bareilly, Mirzapur and Chandausi cities of U. P. India, and maintained under laboratory conditions in the Department of Animal Science M. J. P. Rohilkhand University, Bareilly. The hosts were pithed and the gastrointestinal tract teased carefully for the presence of parasites. The nematode parasites were collected in normal saline, examined alive and washed several times in saline prior to fixing. Nematodes were fixed in 70% alcohol and dehydrated in dessicators containing anhydrous calcium chloride at room temperature for 2–3 weeks. The dehydrated nematodes were mounted in anhydrous glycerine on glass slides. Camera lucida drawings were made and measured under known magnification. Photographs were taken under LEICA DMLB photoautomat and OLYMPUS trinocular (CX-R