

A New Marine Nematode Species, *Metalinhomoeus ramsarensis* (Linhomoeidae Filipjev, 1922) from Kuching Wetland National Park, Sarawak, Malaysia

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ABSTRACT

A new marine nematode species from the genus *Metalinhomoeus* (de Man, 1907) was found in Kuching Wetland National Park (KWNP). The total body size of *Metalinhomoeus ramsarensis* sp. nov. was extremely long. The head was recorded to be round with four cephalic setae followed by four sub cephalic setae. The inner and outer labial papillae were not clearly observed. An oesophageal bulb was present at the end of the oesophagus. Spicules were known to have central cuticularized strip. Tail of *Metalinhomoeus ramsarensis* sp. nov. was short and blunt.

Keywords: *Metalinhomoeus*, marine nematode, RAMSAR, Sarawak, Kuching Wetland National Park

INTRODUCTION

Malaysia is renowned with the richness of biodiversity yet the documentations of free-living marine nematodes are still inadequate. Several efforts were carried out to document the diversity of free-living marine nematode in Malaysia: ecology (Chen *et al.*, 2012a & b; Sasekumar, 1994; Shabdin & Othman, 1999 & 2005) and taxonomy (Chen, 2015; Norliana *et al.*, 2013; Shabdin *et al.*, 2013). This is followed by the new genus *Pseudoplatycoma malaysianis*, which was lately described by Chen (2015) in Sabah, a new marine nematode species from the genus *Metalinhomoeus* was found in Kuching Wetland National Park (KWNP).

Genus *Metalinhomoeus* was erected by de Man in 1907 in order to separate *Metalinhomoeus typicus* from *Paralinhomoeus*. Both genera were generally known to have several similar characteristics such as small buccal cavity which were unarmed, presence of sub cephalic setae, amphid circular and gubernaculum with apophysis. The two genera (*Metalinhomoeus* and *Paralinhomoeus*) basically can be distinguished by the different numbers of cephalic setae and presence of posterior oesophageal bulb (number of cephalic

setae: 4 vs 10; bulb: present vs absent) (de Man, 1907; Platt & Warwick, 1983).

MATERIALS & METHODS

Only one male specimen was collected from Loba Kilong (N 01°41.375' E110°12.572'), Kuching, Sarawak, Malaysia by the first author on April 2011. The present species was found in subtidal muddy samples during high tide.

A grab sampler was used to collect the subtidal samples. Samples were preserved in 5% formalin in the field and were brought back to the laboratory for further analysis and identification. Samples were sieved using a 500 µm mesh size sieve and rinsed with tap water to remove the formalin. Residues that retained on the sieve were transferred to a Petri dish and sorted under stereomicroscope. Then, they were mounted on slide using standard method as in Chen and Shabdin (2015).

The nematode morphology and characteristic were observed and drawn using compound microscope equipped with Camera Lucida (Model Olympus BX 51). The identifications were based on several keys of identification (Warwick *et al.*, 1998). The following abbreviations were used in the present study:

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