



New data on *Labronemella labiata* Andrassy, 1985 (Dorylaimida: Qudsianematidae) from Iran, with SEM study and a compendium of the genus

REYES PEÑA-SANTIAGO^{1*}, JOAQUÍN ABOLAFIA¹ & MAJID PEDRAM²

¹ Departamento de Biología Animal, Vegetal y Ecología, Universidad de Jaén, Campus 'Las Lagunillas' s/n, Edificio B3, 23071 Jaén, Spain

² College of Agriculture, Plant Pathology Department, University of Tarbiat Modares, Tehran, Iran

*Corresponding author: rpena@ujaen.es

Abstract

Labronemella labiata, the type species of its genus, is described after studying an Iranian population. An emended diagnosis of the species is provided, with new morphological and morphometrical features. The lip region, the most distinctive character of *Labronemella* is observed under SEM by the first time and its detailed morphology elucidated. Anterior surface (oral field) appears distinctly sunken and with its inner (perioral) area differentiated in six large, separated liplets protruding on oral field. The lateral, perioral liplets are trapezoidal and visibly larger than subdorsal and subventral ones, which are triangular, consequently the lip region shows a bi-radial symmetry. Inner labial papillae migrate to the margin of labial disc, being located close to outer labial and cephalic papillae. The systematics of *Labronemella* is briefly discussed, including diagnosis, updated list of species, key to their identification as well as a compendium of their main measurements and morphometrics.

Key words: Compendium, description, diagnosis, key to species, *Labronemella*, morphology, nematodes, SEM, taxonomy.

Introduction

Andrassy (1985) proposed the genus *Labronemella* to accommodate one new and type species, *L. labiata*, as well as three known ones transferred from *Labronema* Thorne, 1939, namely *L. loofi* Ahmad & Jairajpuri, 1982, *L. paesleri* Paetzold, 1955 and *L. ruttneri* (Schneider, 1937) Thorne, 1939; and one from *Discolaimium* Thorne, 1939, namely *D. andrassyi* Baqri & Khera, 1975. Later, other species were added to the list: *L. octodurensis* (Altherr, 1950), *L. czernowitzensis* (Micoletzky, 1922) and *L. enigmata* (Baniyamuddin & Ahmad, 2007), transferred also from *Labronema* by Andrassy in 1991, 2002 and 2009, respectively; *L. hemicaudata*, described by Baqri (1991); *L. georgiensis*, described by Eliava and Kuchova (2001); and *L. pusilla*, transferred from *Takamangai* Yeates, 1967 by Peña-Santiago and Ciobanu (2008).

After its original description, *Labronemella* was never a subject of a monographic study or revision. The most relevant, diagnostic features of *Labronemella* are the sucker-like lip region with sunk oral field bearing six well developed perioral liplets, and its slender odontostyle with double guiding ring. Its representatives are rounded-tailed forms, classified under the family Qudsianematidae Jairajpuri, 1965. The type species of the genus, *L. labiata* was originally described on the base of only one male from Hungary, while, very recently, Ciobanu *et al.* (2010) recorded one female specimen from Romania.

During an extensive survey conducted in October 2009 to study the diversity of dorylaims in Iranian fauna, a population of *L. labiata* was collected in northern Iran. Its study allows a better characterization of type species of the genus and the examination of its very peculiar lip region under SEM by the first time. The results of this study are presented below.