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Studies on the genus *Aporcelaimellus* Heyns, 1965 (Nematoda, Dorylaimida, Aporcelaimidae). Four atypical species with simple uterus from Southern Iberian Peninsula

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Abstract

Three new and one known species of the genus *Aporcelaimellus*, collected mainly in natural areas from the Iberian Peninsula and characterized by having a simple uterus and atypical caudal region are described and illustrated, including line drawings, LM pictures and/or SEM pictures. *Aporcelaimellus deserticola* **sp. n.** is distinguished by its body 1.79–2.43 mm long, lip region 14–16 µm broad and offset by expansion rather than by constriction, odontostyle 18–21 µm long, neck 464–555 µm long, pharyngeal expansion 234–283 µm long or 49–52% of total neck length, a dorsal cell mass present at level of anterior end of intestine, uterus 34–67 µm long or 0.6–1.1 times the corresponding body diameter, $V = 49–55$, tail conical with rounded terminus (29–43 µm, $c = 47–66$, $c' = 0.9–1.4$) and bearing a short but perceptible hyaline portion, and male unknown. *Aporcelaimellus hyalinus* **sp. n.** is characterized by its body 1.49–2.23 mm long, lip region offset by constriction and 13–16 µm broad, odontostyle 14–16 µm long, neck 389–474 µm long, pharyngeal expansion 183–242 µm long or 45–53% of total neck length, uterus 44–106 µm long or 0.7–1.8 times the corresponding body diameter, $V = 48–55$, tail conical with rounded terminus (27–41 µm, $c = 38–68$, $c' = 1.0–1.4$) and short inner core, spicules 56 µm long, and seven irregularly spaced ventromedian supplements. *Aporcelaimellus rarus* **sp. n.** is distinguished by its body 1.96–2.34 mm long, lip region offset by constriction and 14–16 µm broad, odontostyle 15–16 µm long, neck 411–518 µm long, pharyngeal expansion 196–270 µm long or 48–52% of total neck length, a dorsal cellular mass at a short distance behind the cardia, uterus 63–96 µm long or 0.8–1.5 times the corresponding body diameter, $V = 51–56$, female tail short and conical (28–40 µm, $c = 50–74$, $c' = 0.7–0.9$) with rounded terminus and bearing a dorsal concavity at its posterior half, and males unknown. New data are provided for *A. salicinus*. A discussion of these atypical species is also provided.

Key words: description, dorylaims, morphology, morphometrics, new species, SEM, taxonomy

Introduction

This is the fourth in a series of contributions (Álvarez-Ortega *et al.*, 2012 & 2013a; Álvarez-Ortega & Peña-Santiago, 2012) devoted to studying species of the genus *Aporcelaimellus* from the Iberian Peninsula. For further detailed information about the aims of this work we refer the reader to the first contribution of the series (Álvarez-Ortega *et al.*, 2012). It deals with four species, three new and one known, characterized by having simple uterus and atypical caudal region.

Nematodes were collected mainly in natural areas of the Southeastern Iberian Peninsula during several nematological surveys. The techniques and protocols used for extraction and mounting of nematodes, light microscopy, and SEM observation were as described by Álvarez-Ortega *et al.* (2012).