



Conference Abstract

A new *Aporcelinus* species (Nematoda, Aporcelaimidae) from Livingston Island - first record of the genus from the Maritime Antarctic

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Abstract

The genus *Aporcelinus* Andrassy, 2009 was erected to accommodate species with characteristic cuticle and other aporcelaimid features such as the lip region, odontostyle and guiding apparatus structure, which have been previously described under *Allodorylaimus*/*Eudorylaimus*. In respect to the cuticle structure, the genus is similar to only two other aporcelaimid genera – *Aporcelaimellus* Heyns, 1965 and *Makatinus* Heyns, 1965. The genus *Aporcelinus* currently contains 27 species and is a wide-spread aporcelaimid taxon (Peña-Santiago and Varela-Benavides 2019), reported to occur in all continents except Australia and Antarctica. Nine specimens from one unknown species belonging to this genus were recovered from moss communities on Livingston Island, Antarctica and studied by an integrative approach (molecular phylogeny and morphology). *Aporcelinus* sp. is characterised by females with medium body size (1.85–2.12 mm), lip region 18–21 µm wide, set off from the adjoining body by constriction, odontostyle and odontophore 23 µm and 30–33 µm long, respectively, vulva transverse slit ($V=50–54\%$), *pars refringens vaginae* consisting of (in lateral view) two trapezoid sclerotised pieces, uteri differentiated tri-partite, tail ventrally arcuate with rounded terminus (45–60 µm long, $c=33.6–42.6$, $c'=1.4–1.8$). It differs from all other species of the genus by its tri-partite uteri

with very long and convoluted middle tubular part. *Aporcelinus* sp. represents a new geographical record for Antarctica.

Keywords

18S and D2-D3 28S rDNA, morphology, phylogeny

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References

- Peña-Santiago R, Varela-Benavides I (2019) Phylogeny of the genus *Aporcelinus* Andrassy. *Journal of Zoological Systematics and Evolutionary Research* 57 (240-257): 10-1111.