



Two new species of *Leydigia* Kurz, 1875 (Chydoridae, Cladocera) from Spain

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Abstract

We describe two new species of *Leydigia* Kurz, 1875 (Chydoridae, Cladocera) from Spain. *L. (Neoleydia) iberica* **sp. nov.** has a series of traits rarely observed in well-studied species of the subgenus *L. (Neoleydia)*, and never in this combination: (1) PP distance large; (2) numerous, low hillocks on preanal margin of postabdomen; (3) numerous setae in lateral fascicles on postabdomen, plus distalmost and next setae subequal in size; (4) sensory seta shifted to distal end of antenna I, but not so markedly as in *L. microps*; (5) fully setulated basal segment of distalmost scraper on limb III; (6) 5 setae on exopodite III. *L. (N.) korovchinskyi* **sp. nov.** has seven setae on limb III exopodite, characteristic for only two species of the subgenus *L. (Neoleydia)* Kotov, 2009, namely *L. (N.) propinqua* and *L. (N.) microps*, but the former differs from both latter taxa in: (1) absence of a “coarse” striation; (2) rounded apex of labral keel and (3) longer setae 3-4 of exopodite III. At this moment, each species was found in a single locality. Both species are rare and seem endemic of Iberian Peninsula (but may be found in some surrounded Mediterranean territories); they could be regarded as relicts sensu Korovchinsky (2006).

Key words: Chydoridae, Anomopoda, Cladocera, Branchiopoda, Crustacea, *Leydigia*, new species, morphology, taxonomy, Spain

Introduction

Cladoceran biodiversity is significantly underestimated, with the real number of taxa 2-4 times that known to date (Forró *et al.* 2009). Among these cladocerans, the large family Chydoridae Dybowski & Grochowski, 1894 emend. Frey, 1967 has attracted the attention of recent cladoceran taxonomists, representing the majority of new taxa described during the first decade of the 21st century. Investigations of the chydorids has also resulted in redescriptions of “old” species and the creation of new taxa of generic rank (Van Damme & Dumont 2008; Van Damme *et al.* 2010; Kotov *et al.* 2010).

Recently Kotov (2009) performed a revision of *Leydigia* Kurz, 1875 (Chydoridae, Cladocera) and subdivided this genus into two subgenera. But some taxa were not included in this revision, due to absence of a sufficient material. Among them was a remarkable species from Spain, previously misidentified by Alonso (1996) as “*L. acanthocercoides* (Fischer, 1854)”. Kotov (2009) did not name this species, leaving the task to M. Alonso. In addition, a re-examination of all Spanish populations earlier determined as *L. acanthocercoides*, resulted in the discovery of another population with a very unusual trait, seven setae on exopodite III, diagnostic of a taxon new to science. The aim of this communication is to formally describe these two new species.

Material and methods

Samples were collected using a plankton net with 100 µm of mesh size and fixed in 4% formaldehyde. Specimens were selected and dissected under stereomicroscope for the study of appendages and