

Leydigia glabra sp.n. from Nicaragua
(Crustacea: Anomopoda: Chydoridae)

Leydigia glabra sp.n. из Никарагуа
(Crustacea: Anomopoda: Chydoridae)

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КЛЮЧЕВЫЕ СЛОВА: *Leydigia glabra* sp.n., Chydoridae, Anomopoda.

ABSTRACT: A new species from Lake Cochibolca, Nicaragua, is described obviously belonging to the genus *Leydigia* Kurz, 1875, but possessing ancestral features. *L. glabra* sp.n. is the most primitive species in the genus which may be used for examining relationships of this genus with other chydorid genera.

РЕЗЮМЕ: Описан новый вид из озера Кочиболка, Никарагуа, очевидно принадлежащий к роду *Leydigia* Kurz, 1875, но обладающий анцестральными признаками. *L. glabra* sp.n. — наиболее примитивный вид этого рода, который может способствовать выяснению родственных отношений данного рода с другими родами хидорид.

The described species was collected by H. Garcia Ponce in Lake Cochibolca at Las Limas in Nicaragua (July 12, 1995). It was studied by N. Smirnov at Gent University while the Training Course on Tropical Zooplankton was held, and detailed drawings were prepared by M. Silva-Briano. It was not possible to collect more specimens in subsequent years. The animal is so remarkable, being a primitive *Leydigia* Kurz, 1875, that it has to be published without further delay.

Family Chydoridae

Leydigia glabra sp.n.

Figs 1–10.

MATERIAL. Two females (one damaged) from lake Cochibolca at Las Limas in Nicaragua.

Holotype. One whole parthenogenetic female in possession of H. Garcia Ponce (Centro para la Investigacion en Recursos Acuaticos, Managua, Nicaragua).

Female. Body outline in lateral view widely oval, the highest in its posterior half. Ventro-posterior angle without denticles. There are three interconnected and closely situated major head pores, the middle pore is smaller than the others. Lateral head pores as small dots situated very close to major pores. All pores are situated on a general field. Ventral setae of valve rather long, differently setulated on different parts of ventral margin: bare on the anterior part, slightly unilaterally setulated in the middle, and unilaterally plumose in the posterior part. Labral lamella small, triangular. Postabdomen wide, with a short preanal margin and with a large and wide postanal part. Postanal margin with numerous (several dozen) clear, though small anal teeth. No trace of lateral setae. Claw with a clearly developed basal spine.

Antennule almost reaches the tip of rostral part of head shield, its esthetascs protrude beyond it. Antenna with setae 0-0-3/1-1-3, spines 1-0-1/3-3-1. Thoracic limb I with Inner Distal Lobe having 2 long setae and 1 short (about 2/3 of the length of longer setae) seta. The distal part of all setae is unilaterally setulated. Gnathobasic filtering fan in limb II with 7 setae, in limb III with 5 setae. Ocellus and eye almost equal in size.

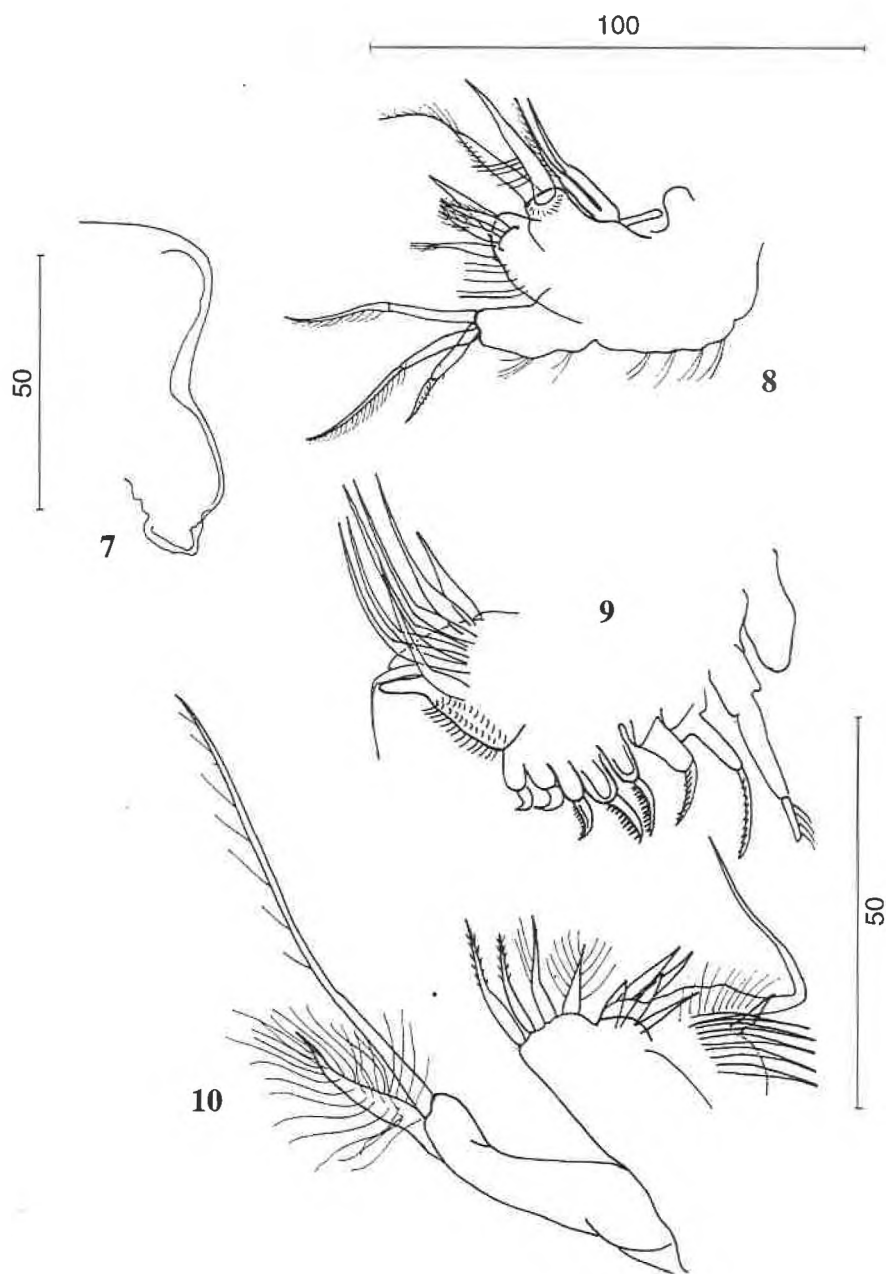
Length. Ca 0.5 mm.

Male. Unknown.

TYPE LOCALITY. Lake Cochibolca at Las Limas, Nicaragua.

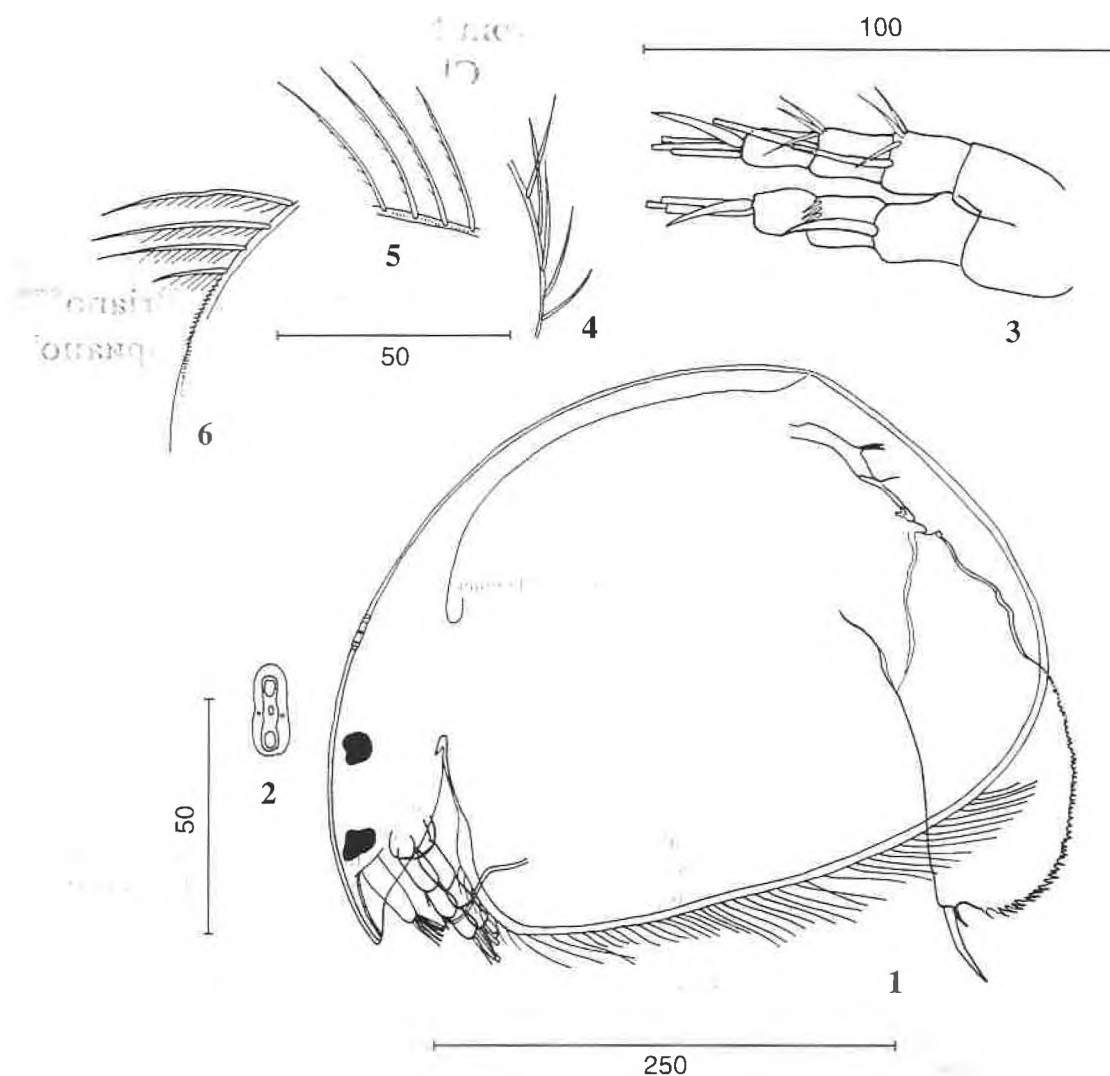
DIFFERENTIAL DIAGNOSIS. *Leydigia glabra* sp.n. is distinguished by the wide postabdomen with numerous small anal teeth without lateral setae. Antennal spines in this species are 1-0-1/3-3-1. There are three interconnected major head pores. Lateral head pores as small dots situated closely to major pores. Claw with a comparatively well developed basal spine. Ocellus and eye almost equal in size. Nearest species are those belonging to the genus *Leydigia*, but *L. glabra* sp.n. differs in the absence of lateral setae on postabdomen and presence of small but clear numerous anal teeth.

REMARKS. This species differs from all known *Leydigia* species but it should be attributed to this genus by reason of



Figs 7–10. *Leydigia glabra* sp.n.: 7 — labrum, 8 — thoracic limb I, 9 — limb II, 10 — limb III. Original drawings by M Silva-Briano. Scale bars in micrometers.

Рис. 7–10. *Leydigia glabra* sp.n.: 7 — лабрум, 8 — грудная конечность I, 9 — конечность II, 10 — конечность III. Ориг. рис. М. Сильва-Бриано. Масштабные линейки в мкм.



Figs 1-6. *Leydigia glabra* sp.n.: 1 — left side view, 2 — head pores, 3 — setae on the anterior valve margin, 4 — setae on the middle valve margin, 5 — setae on posterior valve margin, 6 — antenna. Original drawings by M. Silva-Briano. Scale bars in micrometers.

Рис. 1-6 *Leydigia glabra* sp.n.: 1 — вид слева сбоку, 2 — головные поры, 3 — щетинки на краю передней вальвы, 4 — щетинки на краю средней вальвы, 5 — щетинки на краю задней вальвы, 6 — антенна. Ориг. рис. М. Сильва-Бриано. Масштабные линейки в мкм

its general body form, the wide postadomen with a short preanal margin, and antennal spines 1-0-1/3-3-1. Head pores are of the pattern characteristic of the genus *Leydigia*. Thoracic limb I with IDL with 3 setae, characteristic of this genus in their form.

The main differences are a small labral lamella, the absence of lateral setae on postadomen, and approximately equal size of ocellus and eye. In most *Leydigia* species the basal spine of claw is small or absent. In the present case the basal spine is comparatively large.

In the genus *Leydigia*, the most specialized species possess [Smirnov, 1971] extremely large lateral setae on postadomen, while anal teeth are very small, the claw without basal spine, enlarged ocellus and reduced in size eye.

Thus *Leydigia glabra* sp.n. seems to represent an unspecialized form, supplementing the morphological series in this genus and supplying material for examining relationships of this genus with other chydorid genera. This and other *Leydigia* species are, however, unique in the number of spines of the antenna, which is 1-0-1/3-3-1.

Reference

- Smirnov N.N. 1971. *Rakoobraznye* (Crustacea). Vol.1. Part 2 [Chydoridae of the World's fauna] // Fauna SSSR. № 101. Leningrad: Nauka Publ. 531 pp. [in Russian], [English translation of the same, Wiley, 1974].