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A new species of *Pseudorhynchelmis* Hrabě, 1982 (Clitellata: Lumbriculidae) from Lake Baikal, with re-descriptions of *P. parva* and *P. olchonensis*

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Abstract

The recent rediscovery of specimens of the Baikalian lumbriculid *Pseudorhynchelmis olchonensis* (Burow et Koshow, 1932) led to the re-examination of (1) Michaelsen's hundred-year-old type specimens of *Lycodrilus parvus*, assumed, for a long time, to have been wrongly attributed to the Tubificidae instead of the Lumbriculidae, and of (2) type specimens used by Hrabě (1982) for his redescription of *Lycodrilus parvus* and its combination with the newly, subsequently created genus *Pseudolycodrilus* Hrabě, 1982. Surprisingly enough, the original description of *Pseudolycodrilus parvus* (Michaelsen, 1905) proved to be based on a mixing of two different species, *P. parva* and *Pseudorhynchelmis semernoyi* sp. nov., both of which are herein assigned to the recently re-established genus *Pseudorhynchelmis* Hrabě, 1982. As a result, the genus *Pseudolycodrilus* is invalidated and must be considered as a synonym of *Pseudorhynchelmis*. *P. parva* and *P. olchonensis* are re-described on the basis of neotypes and lectotypes, respectively. *P. semernoyi* sp. nov. is distinguished from other *Pseudorhynchelmis* by having a conical prostomium, a well-marked clitellum with a honeycomb-like structure, and genital, sucker-like papillae, associated with penial setae. The description of the new species *P. semernoyi*, plus a re-evaluation of *P. olchonensis*, called into question the taxonomical status of *Pseudorhynchelmis dissimilis* (Semernoy, 2004). This study provides new examples of genital setae in the Lumbriculidae although this character remains exceptional within the family.

Key words: Clitellata, Oligochaeta, Lumbriculidae, *Pseudorhynchelmis*, taxonomy, Lake Baikal

Introduction

Until recently, the genus *Rhynchelmis s. lat.* was defined as having spermathecae in VIII, a single pair of male pores in X, female pores at 11/12, and cylindrical atria covered with pear-shaped clusters of prostate glands (Cook, 1971; Fend & Brinkhurst, 2000; Fend, 2005). The genus comprised 30 species; most of them could be attributed to one of four species groups, considered genera by some authors *Rhynchelmis s. str.* (*sensu* Hrabě, 1936), *Sutroa* Eisen, 1888, *Rhynchelmoides* Hrabě, 1936 and *Pseudorhynchelmis* Hrabě, 1982. Fend and Brinkhurst (2000) investigated *Rhynchelmis s. lat.* groupings in detail and concluded that they were based on overall similarity, rather than formally proposed apomorphies. Acknowledging that some characters appeared distinctive enough to be considered apomorphies, they preferred to take the conservative approach of keeping *Rhynchelmis s. lat.*

Pseudorhynchelmis was a monotypic genus erected by Hrabě (1982) to accommodate the type-species *Rhynchelmis olchonensis* Burow & Koshow, 1932 from Lake Baikal. Giani and Martinez Ansemil (1984) refuted the validity of this taxon as they considered that only the length of posterior vasa deferentia seemed exclusive to this genus following their description of a new species from France, *Rhynchelmis paraolchonen-*

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