Zootaxa 3664 (1): 001–044
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.3664.1.1
http://zoobank.org/urn:lsid:zoobank.org:pub:C8136C89-7787-477D-BC64-97AA6C16057B

New species of *Rhyacodrilus* (Annelida: Clitellata: Rhyacodrilinae) of North America, with re-description of *R. sodalis* (Eisen, 1879)

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Abstract

Six new Nearctic species of the aquatic oligochaete genus *Rhyacodrilus* (Annelida, Clitellata, Rhyacodrilinae), are described, five (*R. saelonae* **sp. n.**, *R. quileuticus* **sp. n.**, *R. clio* **sp. n.**, *R. alcyoneus* **sp. n.** and *R. longichaeta* **sp. n.**) from western and one (*R. propiporus* **sp. n.**) from eastern North America. The taxonomy of the most common *Rhyacodrilus* species reported in the Nearctic region has been based largely on chaetal characters, which has generated certain confusion. The new species give a new perspective on the genus *Rhyacodrilus* in North America, suggesting a much higher diversity than previously expected. The description of *R. longichaeta* **sp. n.** questions the taxonomic status of *R. montana* (Brinkhurst), which is here regarded as *species inquirenda*. The taxonomic status of *R. sodalis* (Eisen) is discussed based on characters of the reproductive system, the existing Lake Tahoe neotype series is invalidated, and a neotype is described from Eisen's type locality. Based on the discussion of the characters of the genus *Rhyacodrilus*, the genus *Stochidrilus* Martínez-Ansemil *et al.* is proposed as a junior synonym of that genus. The presence of the widely reported species *R. coccineus* has not been confirmed in the study collections, although the species requires a sound revision. A key to the species bearing hair chaetae is provided, based mainly on features of the reproductive system.

Key words: Oligochaeta, *Rhyacodrilus*, taxonomy, North America, new species

Accepted by R. Schmelz: 12 Mar. 2013; published: 23 May 2013