## Case 3031

# Paruroctonus Werner, 1934 (Arachnida, Scorpiones): proposed conservation

# W. David Sissom

Department of Life, Earth, and Environmental Sciences, West Texas A & M University, Box 808, Canyon, Texas 79016–0001, U.S.A.

# Victor Fet

Department of Biological Sciences, Marshall University, Huntington, West Virginia 25755–2510, U.S.A.

### Matt E. Braunwalder

Frauentalweg 97, CH-8045, Zürich, Switzerland

Abstract. The purpose of this application is to conserve the name *Paruroctonus* Werner, 1934 for a genus of some 30 species of scorpions (family VAEJOVIDAE) from the western side of North America, from southern Canada to Aguascalientes, Mexico. The name was proposed as a replacement for *Uroctonoides* Hoffmann, 1931 (a junior homonym of *Uroctonoides* Chamberlin, 1920) and has been in use since its original publication. It is threatened by the unused synonym *Hoffmanniellius* Mello-Leitão, 1934 (June), also a replacement for *Uroctonoides* Hoffmann, which under the Code is the senior synonym.

**Keywords.** Nomenclature; taxonomy; Arachnida; Scorpiones; VAEJOVIDAE; *Paruroctonus*; North America.

- 1. The genus *Uroctonoides* was established by Chamberlin (1920, p. 36, pl. 4, figs. 1 and 2) for his new species *U. fractus* from Quito, Ecuador (family VAEJOVIDAE). The type specimen of *U. fractus*, catalog no. 518, is deposited in the Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts. Soleglad (1973) considered *Uroctonoides fractus* to be a species of the genus *Teuthraustes* Simon, 1878 (family CHACTIDAE), and probably referable to *T. lojanus* Pocock, 1900. Thus, *Uroctonoides* Chamberlin, 1920 is a junior subjective synonym of *Teuthraustes* Simon, 1878.
- 2. In 1931, Hoffmann (p. 405, fig. 42), clearly unaware of Chamberlin's (1920) publication, established the new genus *Uroctonoides* for the single new species *U. gracilior* (p. 406, fig. 43), which he described from Aguascalientes, Mexico. Three specimens of original type material are deposited in the American Museum of Natural History, New York; Gertsch & Soleglad (1966, p. 29) designated no. 1 as the lectotype.
- 3. In a review of the world scorpion fauna, Werner (1934, p. 283) established the replacement name *Paruroctonus* for Hoffmann's (1931) name *Uroctonoides*. Werner published a very brief description of the genus in the key to the VAEJOVIDAE (p. 283), which was based on the description of *Uroctonoides gracilior* by Hoffmann (1931). An

illustration (Abb. 363) on the same page reproduced Hoffmann's drawing of the cheliceral chela of *P. gracilior*.

- 4. The name *Hoffmanniellius* Mello-Leitão (p. 80) was independently proposed as a replacement for *Uroctonoides* Hoffmann, also in 1934. Subsequent authors recognised *Paruroctonus* and *Hoffmanniellius* as (objective) synonyms and, following Stahnke (1957; see para. 5 below), all adopted *Paruroctonus* as the valid name (see, for example, the publications of Stahnke, 1957, p. 253; Gertsch & Soleglad, 1966, pp. 2, 3; Williams, 1972; the series of revisionary studies by Haradon, 1983, 1984a,
- 1984b, 1985; and Francke, 1985, pp. 9, 11).
  5. The title pages of part 2 of vol. 6 of
- 5. The title pages of part 2 of vol. 6 of the Annaes da Academia Brasileira de Sciencias and of Mello-Leitão's paper give the publication date as 30 June 1934. We were, however, unable to determine the month of publication of Werner's work, although this was indicated as January 1934 by Stahnke (1957, p. 253, footnote). The cover of Werner's monograph in H.G. Bronns Klassen und Ordnungen des Tierreichs bears the date '1935'. However, the work was issued in three parts and later bound in a single volume. The composition and year of publication of the parts are given on the wrapper of each part and are tabulated at the beginning of the volume; Lieferung 2 (pp. 161–316), which included the genus Paruroctonus (p. 283), is dated 1934 but the month is not stated. The publisher of the work, the Akademische Verlagsgesellschaft in Leipzig, did not survive the reunification of Germany in 1990; its archives are presumably lost or destroyed and there is no succeeding publisher. Under Article 21c of the Code the date 31 December 1934 must be adopted for Lieferung 2 of Werner's publication and the name Paruroctonus.
- 6. Under the Code the name *Paruroctonus* is junior to *Hoffmanniellius*. However, the latter name has not been used as valid since it was proposed, whereas the usage of *Paruroctonus*, either for a genus or a subgenus of *Vaejovis* C.L. Koch, 1836, has been constant and prolific since its publication and subsequent acceptance by Stahnke (1957). The name has appeared in dozens of taxonomic, ecological, behavioral and physiological publications, among them the recent works of Williams (1980) and Stockwell (1992), and a number of papers in each of the compilations by Polis (Ed., 1990, 1991) and Brownell & Polis (Eds., in press). A representative list of a further 47 references dating from 1961 to 1995 is held by the Commission Secretariat.
- 7. The subgenus *Smeringurus* Haradon, 1983, with four species, is traditonally included in *Paruroctonus* but was recently given generic rank (see Stockwell, 1992). The general acceptance of this arrangement is pending.
- 8. The International Commission on Zoological Nomenclature is accordingly asked:
  - (1) to use its plenary powers to suppress the name *Hoffmanniellius* Mello-Leitão, 1934 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name Paruroctonus Werner, 1934 (gender: masculine), type species by monotypy of the replaced nominal genus Uroctonoides Hoffmann, 1931, Uroctonoides gracilior Hoffmann, 1931;
- (3) to place on the Official List of Specific Names in Zoology the name gracilior Hoffmann, 1931, as published in the binomen *Uroctonoides gracilior* and as defined by the lectotype designated by Gertsch & Soleglad (1966);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Hoffmanniellius* Mello-Leitão, 1934, as suppressed in (1) above.

# Acknowledgement

We thank Dr Peter Sacher (*Blankenburg a.H., Germany*) who conducted research at our request as to the existence of archives of the Akademische Verlagsgesellschaft in Leipzig.

### References

- **Brownell, P.H. & Polis, G.A.** (Eds.). In press. *Scorpion biology and research*. Oxford University Press, Oxford.
- Chamberlin, R.V. 1920. South American Arachnida, chiefly from the Guano Islands of Peru. Science Bulletin. Museum of the Brooklyn Institute of Arts and Sciences, 3(2): 35-44.
- Francke, O.F. 1985. Conspectus genericus scorpionorum 1758–1982 (Arachnida: Scorpiones).

  Occasional Papers of the Museum, Texas Tech University, 98: 1–32.
- Gertsch, W.J. & Soleglad, M.E. 1966. The scorpions of the *Vejovis boreus* group (subgenus *Paruroctonus*) in North America (Scorpionida, Vejovidae). *American Museum Novitates*, 2278: 1–54.
- Haradon, R.M. 1983. Smeringurus, a new subgenus of Paruroctonus Werner (Scorpiones, Vaejovidae). Journal of Arachnology, 11: 251–270.
- Haradon, R.M. 1984a. New and redefined species belonging to the *Paruroctonus baergi* group (Scorpiones, Vaejovidae). *Journal of Arachnology*, 12: 205–221.
- Haradon, R.M. 1984b. New and redefined species belonging to the *Paruroctonus borregoensis* group (Scorpiones, Vaejovidae). *Journal of Arachnology*, 11: 317–339.
- Haradon, R.M. 1985. New groups and species belonging to the nominate subgenus *Paruroctonus* (Scorpiones, Vaejovidae). *Journal of Arachnology*, 13: 19–42.
- Hoffmann, C.C. 1931. Monografías para la entomología medica de México. Monografía Nom. 2, Los scorpiones de México. Primera parte: Diplocentridae, Chactidae, Vejovidae. Anales del Instituto de Biología, Universidad Nacional Autónoma de México, 2(4): 291–408.
- Mello-Leitão, C. de. 1934. A proposito de um novo Vejóvida do Brasil. Annaes da Academia Brasileira de Sciencias, 6(2): 75–82.
- Polis, G.A. (Ed.). 1990. The biology of scorpions. 587 pp. Stanford University, Stanford, California.
- Polis, G.A. (Ed.). 1991. The ecology of desert communities. 456 pp. University of Arizona, Tucson.
- Soleglad, M.E. 1973. Uroctonoides fractus a synonymy (Scorpionida: Chactidae). The Pan-Pacific Entomologist, 49(1): 60.
- Stahnke, H.L. 1957. A new species of scorpion of the Vejovidae, *Paruroctonus mesaensis*. *Entomological News*, **68**(10): 253–259.
- Stockwell, S.A. 1992. Systematic observations on North American Scorpionida with a key and checklist of the families and genera. *Journal of Medical Entomology*, **29**(3): 407–422.
- Werner, F. 1934, 1935. Scorpiones, Pedipalpi. H.G. Bronn's Klassen und Ordnungen des Tierreichs, Band 5 (Arthropoda), Abt. 4 (Arachnoidea), Buch 8 (Scorpiones, Pedipalpi), Lieferung 1–2, pp. 1–316 (Scorpiones, 1934); Lieferung 5, pp. 317–490 (Pedipalpi, 1935). Akademische Verlagsgesellschaft, Leipzig.
- Williams, S.C. 1972. Four new scorpion species belonging to the genus *Paruroctonus* (Scorpionidae, Vaejovidae). *Occasional Papers of the Californian Academy of Sciences*, 94: 1–16.
- Williams, S.C. 1980. Scorpions of Baja California, Mexico and adjacent islands. Occasional Papers of the California Academy of Sciences, 135: 1-127.



Sissom, W David, Fet, Victor, and Braunwalder, Matt E. 1998. "Paruroctonus Werner, 1934 (Arachnida, Scorpiones): Proposed Conservation." *The Bulletin of zoological nomenclature* 55, 17–19. <a href="https://doi.org/10.5962/bhl.part.134">https://doi.org/10.5962/bhl.part.134</a>.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/45027">https://www.biodiversitylibrary.org/item/45027</a>

**DOI:** <a href="https://doi.org/10.5962/bhl.part.134">https://doi.org/10.5962/bhl.part.134</a>

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/134">https://www.biodiversitylibrary.org/partpdf/134</a>

#### **Holding Institution**

Natural History Museum Library, London

#### Sponsored by

Natural History Museum Library, London

## **Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: International Commission on Zoological Nomenclature

License: <a href="http://creativecommons.org/licenses/by-nc-sa/3.0/">http://creativecommons.org/licenses/by-nc-sa/3.0/</a>

Rights: <a href="https://biodiversitylibrary.org/permissions">https://biodiversitylibrary.org/permissions</a>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.