



<http://www.biodiversitylibrary.org/>

The Bulletin of zoological nomenclature.

London, International Trust for Zoological Nomenclature.

<http://www.biodiversitylibrary.org/bibliography/51603>

v. 59 2002: <http://www.biodiversitylibrary.org/item/107013>

Page(s): Page 176, Page 177, Page 178, Page 179

Contributed by: Smithsonian Institution Libraries

Sponsored by: Biodiversity Heritage Library

Generated 29 March 2013 11:15 PM

<http://www.biodiversitylibrary.org/pdf4/016538500107013>

This page intentionally left blank.

Case 3213***Bothriurus alticola* Pocock, 1899 (Arachnida, Scorpiones): proposed precedence of the specific name over the subspecific name of *Cercophonius brachycentrus bivittatus* Thorell, 1877**

Luis E. Acosta

CONICET – Cátedra de Diversidad Animal I, Facultad de Ciencias Exactas, Físicas y Naturales, Universidad Nacional de Córdoba, Av. Vélez Sarsfield 299, 5000 Córdoba, Argentina (e-mail: lacosta@com.uncor.edu)

Abstract. The purpose of this application under Articles 23.9.3 and 81.2.3 of the Code is to conserve the well known specific name of *Bothriurus alticola* Pocock, 1899 for a scorpion (family BOTHRIURIDAE) from Argentina by giving it precedence over the little used subspecific name *Cercophonius brachycentrus bivittatus* Thorell, 1877. Pocock's nominal species is the type of *Orobothriurus* Maury, 1976 — a genus currently including 10 species from Andean and sub-Andean localities in Argentina and Peru, most occurring at high altitude.

Keywords. Nomenclature; taxonomy; Arachnida; Scorpiones; BOTHRIURIDAE; *Urophonius*; *Orobothriurus*; *Cercophonius brachycentrus bivittatus*; *Bothriurus alticola*; Argentina.

1. Thorell (1877a, p. 180) described the new species *Cercophonius brachycentrus* (currently placed in *Urophonius* Pocock, 1893) and followed it with a description of a juvenile specimen, which he denoted (p. 183) as a variety of the species, Var. β , *bivittatum* [recte *bivittatus*]. Thorell suggested that the specimen, which is deposited in the Naturhistoriska Riksmuseet in Stockholm, might represent a distinct species.

2. All contemporary authors ignored the variety and, for example, in their publications Thorell (1877b, 1878), Pocock (1893) and Kraepelin (1894, 1899) did not mention *bivittatus*. Mello-Leitão (1931, p. 100) was the first author to cite the taxon as a subspecies, *Urophonius brachycentrus bivittatus*. Thereafter, Mello-Leitão (1933, 1934, 1938, 1939, 1945) and Abalos (1959, 1963) cited the trinomen, in all cases either just as part of a list or in referring to Thorell's (1877a) description.

3. As part of a revision of *Urophonius brachycentrus*, Maury (1977, p. 148) was the first author to re-examine the type of *U. b. bivittatus*. Despite poor preservation of the single specimen (several legs had been lost), he was able to determine that it did not belong in the genus *Urophonius* but most probably represented a juvenile specimen of *Bothriurus alticola* Pocock, 1899 (p. 357, fig. 1), described from Mendoza in the high Andes of Argentina and the type species of *Orobothriurus* Maury, 1976 (p. 14) by original designation. Maury (1977), however, made no comment on the

valid name for the specimen. Subsequently, Acosta & Maury (1998) cited *U. b. bivittatus* as of doubtful status, whereas Lowe & Fet (2000) continued to list the subspecies as valid in *Urophonius*.

4. I have examined the type specimen (paras. 1 and 3 above) of *C. b. bivittatus* Thorell, 1877 and can confirm Maury's (1977) suggestion that it is a specimen of *Orobothriurus alticola* (Pocock, 1899). The names *bivittatus* and *alticola* are therefore synonyms and a strict following of priority would result in *bivittatus* becoming the valid name for the species currently known as *alticola*. This would threaten nomenclatural stability. Nearly all citations of the name *bivittatus* are either included in lists or just quote Thorell's (1877a) original description. No new material has ever been attributed to the taxon and those authors mentioning it have incorrectly cited it as a subspecies within *Urophonius* and not in the sense of the genus *Orobothriurus*. In other words, with the exception of Maury (1977), no author knew for certain what taxon the name *bivittatus* represented. In contrast, the original description of *Bothriurus alticola* by Pocock (1899) is good, based on an adult male and an adult female specimen deposited in The Natural History Museum, London, and includes a general illustration of the female (fig. 1). Maury's (1976) redescription of *alticola* was complete, with many illustrations of the type material. Lowe & Fet (2000, p. 35) listed 10 authors in 20 publications, with one exception (1911) dating from the 1930s onwards, as having adopted the name *alticola* for the species. In recent years in further revisionary work on *Orobothriurus*, I have consistently cited the species under this name (see Acosta & Ochoa, 2000, 2001; Ochoa & Acosta, 2002).

5. The type specimen of *Cercophonius brachycentrus bivittatus* Thorell, 1877 is a small juvenile and the taxonomic status of the species might be considered uncertain by some authors. Occurrences of species of *Orobothriurus* in Argentina are in high montane localities so that, at the present state of knowledge, the existence of further species cannot be discounted. I therefore propose that the name *Bothriurus alticola* Pocock, 1899 be given conditional precedence over *C. b. bivittatus*, in accordance with Article 81.2.3 of the Code. Commission approval will mean that if the two names are considered to be synonyms, *alticola* becomes the valid name for the taxon. The name *bivittatus* will remain available for use if taxonomically required for a species or subspecies distinct from *alticola*.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *alticola* Pocock, 1899, as published in the binomen *Bothriurus alticola*, precedence over the name *bivittatus* Thorell, 1877, as published in the trinomen *Cercophonius brachycentrus bivittatus*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the name *Orobothriurus* Maury, 1976 (gender: masculine), type species by original designation *Bothriurus alticola* Pocock, 1899;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *alticola* Pocock, 1899, as published in the binomen *Bothriurus alticola*, with the endorsement that it is to be given precedence over the name *bivittatus* Thorell, 1877, as published in the trinomen *Cercophonius brachycentrus bivittatus*, whenever the two are considered to be synonyms;

- (b) *bivittatus* Thorell, 1877, as published in the trinomen *Cercophonius brachycentrus bivittatus*, with the endorsement that it is not to be given priority over the name *alticola* Pocock, 1899, as published in the binomen *Bothriurus alticola*, whenever the two are considered to be synonyms.

Acknowledgements

I am indebted to Dr Torbjörn Kronestedt (NRS) for the loan of the holotype of *Cercophonius brachycentrus bivittatus*, and to Drs W. David Sissom and Wilson R. Lourenço for comments on an early draft of this proposal.

References

- Abalos, J.W. 1959. Scorpionida. *Primeras Jornadas Entomoepidemiológicas Argentinas*, **2**: 591–593.
- Abalos, J.W. 1963. Scorpions of Argentina. Pp. 111–117 in Keegan, H.L. & MacFarlane, W.V. (Eds.), *Venomous and poisonous animals and noxious plants of the Pacific region*. Pergamon Press.
- Acosta, L.E. & Maury, E.A. 1998. Scorpiones. Pp. 545–559 in Morrone, J.J. & Coscarón, S. (Dirs.), *Biodiversidad de Artrópodos argentinos. Una perspectiva biotaxonómica*. Ed. Sur, La Plata.
- Acosta, L.E. & Ochoa, J.A. 2000. Nueva especie de *Orobothriurus* Maury del Perú (Scorpiones, Bothriuridae). *Revue Arachnologique*, **13**(10): 135–144.
- Acosta, L.E. & Ochoa, J.A. 2001. Two new species of *Orobothriurus* from Argentina and Peru, with comments on the genus systematics (Scorpiones, Bothriuridae). Fet, V. & Selden, P. (Eds.), *Scorpions 2001*. British Arachnological Society.
- Kraepelin, K. 1894. Revision der Scorpione. II. Scorpionidae und Bothriuridae. *Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten*, **11**(1): 1–248.
- Kraepelin, K. 1899. Scorpiones und Pedipalpi. *Das Tierreich*, **8**: 1–265.
- Lowe, G. & Fet, V. 2000. Family Bothriuridae Simon, 1880. Pp. 17–53 in Fet, V., Sissom, W.D., Lowe, G. & Braunwalder, M.E., *Catalog of the scorpions of the world (1758–1998)*. v, 690 pp. New York Entomological Society.
- Maury, E.A. 1976. Escorpiones y escorpionismo en el Perú. V: *Orobothriurus*, un nuevo género de escorpiones altoandinos. *Revista Peruana de Entomología*, **18**: 14–25.
- Maury, E.A. 1977. Comentario sobre dos especies de escorpiones del género *Urophonius* (Bothriuridae). *Revista del Museo Argentino de Ciencias Naturales 'Bernardino Rivadavia'*, Entomología, **5**(7): 143–160.
- Mello-Leitão, C. 1931. Nota sobre os Bothriuridas sul-americanos. *Archivos do Museu Nacional*, **33**: 75–113.
- Mello-Leitão, C. 1933. Notas sobre escorpiões sul-americanos. *Archivos do Museu Nacional*, **34**: 9–46.
- Mello-Leitão, C. 1934. Estudio monografico dos escorpiões da Republica Argentina. *Octava Reunión de la Sociedad Argentina de Patología Regional del Norte (1933)*. 97 pp.
- Mello-Leitão, C. 1938. Notas sobre alacranes argentinos. *Notas del Museo de La Plata*, Zoología, **3**(9): 83–95.
- Mello-Leitão, C. 1939. Les arachnides et la zoogeographie de l'Argentine. *Physis*, **17**(49): 601–630.
- Mello-Leitão, C. 1945. Escorpiões sul-americanos. *Arquivos do Museu Nacional*, **40**: 1–468.
- Ochoa, J.A. & Acosta, L.E. 2002. *Orobothriurus atiquipa*, a new bothriurid species (Scorpiones) from Lomas in southern Peru. *The Journal of Arachnology*, **30**.
- Pocock, R.I. 1893. A contribution to the study of Neotropical scorpions. *Annals and Magazine of Natural History*, (6)**12**(68): 77–103.

- Pocock, R.I.** 1899. Scorpions and spiders. Pp. 356–360 in Fitz Gerald, E.A., *The highest Andes, a record of the first ascent of Aconcagua and Tupungato in Argentina, and the exploration of the surrounding valleys*. xvi, 390 pp., 48 pls. Methuen, London.
- Thorell, T.** 1877a. Études scorpiologiques. *Atti della Società Italiana di Scienze Naturali*, **19**: 75–272.
- Thorell, T.** 1877b. Sobre algunos arácnidos de la República Argentina. *Periodico Zoológico*, **2**(4): 201–218.
- Thorell, T.** 1878. Sobre algunos arácnidos de la República Argentina. *Boletín de la Academia Nacional de Ciencias, Córdoba*, **2**(3): 255–272.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).