

Copyright © 2013 Magnolia Press

# Correspondence



http://dx.doi.org/10.11646/zootaxa.3750.2.8

http://zoobank.org/urn:lsid:zoobank.org:pub:9515170F-60D0-43D3-A936-81E16EBEE6C3

# On the Australian linyphiid spider *Alaxchelicera ordinaria* Butler, 1932 (Araneae)

# NIKOLAJ SCHARFF<sup>1</sup> & GUSTAVO HORMIGA<sup>2</sup>

<sup>1</sup>Natural History Museum of Denmark, Zoological Museum and Center for Macroecology, Evolution and Climate, Universitetsparken 15, DK-2100 Copenhagen, Denmark. E-mail: nscharff@snm.ku.dk <sup>2</sup>Department of Biological Sciences, The George Washington University, Washington, D.C. 20052, USA. E-mail: hormiga@gwu.edu

Very few studies have addressed the linyphild fauna of Australia. Most of the existing taxonomic work on Australian linyphilds consists of isolated species descriptions (e.g., Rainbow 1912) or at most are based on small number of species also described outside a revisionary context (e.g., Wunderlich 1976) (but see van Helsdingen 1972 for a revision of the Australian species of the genera *Laperousea* Dalmas, 1917 and *Laetesia* Simon, 1908).

*Microctenonyx subitaneus* (O. P.-Cambridge, 1875) is a Holarctic erigonine (Linyphiidae) which has been introduced in many parts of the world, including Australia (Brennan 2004). In this paper we report a new junior synonym of *Microctenonyx subitaneus* described by Butler (1932) under the name *Alaxchelicera ordinaria* Butler, 1932.

In 1932 L.S.G. Butler, a Melbourne-based arachnologist, published a paper in which he described six new spider genera from Victoria and New South Wales, all of them monotypic. Three of these new genera (*Microlinypheus*, *Plectochetos* and *Alaxchelicera*) he placed in the family Linyphiidae, the remaining three (*Platycephala, Eterosonycha* and *Perissopmeros*) were placed in Zodariidae. Subsequent taxonomic work demonstrated that most of his original familial placements were erroneous (references in Platnick 2013). *Alaxchelicera* is indeed a linyphiid, but the genus is a junior synonym of *Microctenonyx* Dahl, 1866. *Platycephala* may be a zodariid, but the name is a junior homonym of *Platycephala* Fallén, 1820 (Chloropidae, Diptera) and it is currently listed as a *nomen dubium* under the replacement name *Macedoniola* Strand, 1932 (Platnick 2013). The type species of *Microlinypheus* and *Plectochetos* are members of the anapid genus *Micropholcomma* Crosby & Bishop, 1927. *Eterosonycha* is also a micropholcommatine anapid, not a zodariid. *Perissopmeros* is not a zodariid either, but a malkarid, and also a junior synonym of a genus (*Sternodes* Butler, 1929) that Butler himself had described in the family Palpimanidae (Moran 1986). And in yet in another nomenclatorial twist, the name *Sternodes* turned out to be preoccupied in the Coleoptera and in the Hymenoptera, so the valid genus name for this malkarid group is *Perissopmeros*.

We have had the opportunity to study the holotype of *Alaxchelicera ordinaria* and we report here its new taxonomic status.

# Materials and methods

The study specimen was examined and photographed using a Leica M205A stereoscopic microscope equipped with a Leica DFC425 camera and LAS software. Further details were studied using a Leica DMRM compound microscope; a camera lucida was used with the latter microscope to illustrate the pedipalp. Additional photographs were taken with a BK+ Imaging System from Visionary Digital (http://www.visionarydigital.com) equipped with a Canon EOS 7D camera. Single images were combined with Helicon Focus (version 5.3; www.heliconsoft.com) software from Helicon Soft Ltd., to increase depth of field. Setae and macrosetae are not depicted in the palp drawing. All morphological measurements are in millimetres. The synonymy sections are taken in abbreviated form from Platnick (2013).

#### Taxonomy

# Microctenonyx Dahl, 1886

Type species by original designation *Erigone subitanea* O. P.-Cambridge, 1875. N.B.: Dahl (1866: 80) designated only implicitly *subitanea* as the type species (by listing it as the first species of the three that he treated under his new genus, as he had done with the other genera included in his monograph). F. O.-Cambridge (1903: 47) explicitly selected *subitanea* as the type species.

*Aulacocyba* Simon, 1926 (Prószyński & Starega, 1971: 176; through transfer of the type species). *Alaxchelicera* Butler, 1932 (type species by monotypy *Alaxchelicera ordinaria* Butler, 1932). **New Synonymy.** 

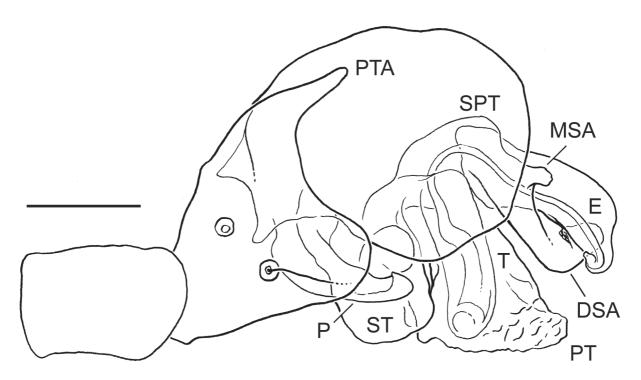
*Microctenonyx subitaneus* (O. P.-Cambridge, 1875) See Platnick (2013) for full details on synonyms.

*M. alexandrina* (O. P.-Cambridge, 1872, transferred from *Tapinocyba*) (older name suppressed for lack of use under ICZN Article 79).

M. maderianus (Schenkel, 1938, transferred from Gongylidiellum).
M. parisiensis (Simon, 1884).
M. pulicarius (Thorell, 1875, transferred from Diplocephalus).
Alaxchelicera ordinaria Butler, 1932. New Synonymy.

The holotype male is mounted on a slide (Figs 1–3) and the somatic morphology is therefore not easily observed. The prosoma is compressed and cracked, and one leg and several leg articles are missing. The left pedipalp is also missing. However, the left postocular sulcus is clearly present (Fig. 2, arrow) and the male pedipalp has a morphology that agrees with *Microctenonyx subitaneus* (O.P.-Cambridge, 1875), including a long prolateral tibial apophysis, an S-shaped embolic division (radix and embolus) with a distal hook, a suprategulum (SPT) with a long slender blunt distal suprategular apophysis (DSA) as well as a small knob-shaped marginal suprategular apophysis (MSA). For comparison see Wiehle (1960: figs 851, 852) and Miller (2007: figs 123 A–C).

**Note on type material:** The holotype male from Lorne, Victoria, Australia (catalogue number K-106) is deposited at the Museum Victoria (Melbourne). The slide has two labels: one with the text "Type – S. Butler Melbourne" and the other with the text "Male *Alaxchelicera ordinaria* K-106."



**FIGURE 1.** Holotype of *Alaxchelicera ordinaria* Butler, 1932. Right pedipalp (partly expanded). Abbreviations: DSA, distal suprategular apophysis; E, embolus; MSA, marginal suprategular apophysis; P, paracymbium; PT, protegulum; PTA, prolateral tibial apophysis; SPT, suprategulum; ST, subtegulum; T, tegulum. Scale bar: 0.05 mm.



**FIGURE 2.** Holotype of *Alaxchelicera ordinaria* Butler, 1932. Male habitus, ventral view (mounted on slide). Scale bar: 1 mm.

**FIGURE 3.** Holotype of *Alaxchelicera ordinaria* Butler, 1932. Cephalothorax, ventral view (mounted on slide). Scale bar: 0.2 mm.

#### Acknowledgments

We would like to thank Mr. Peter Lillywhite (Museum Victoria, Melbourne) for the loan of the type material. NS acknowledges the Danish National Research Foundation for support to the Center for Macroecology, Evolution and Climate. Funding for this research was also provided by grants from the Danish Agency for Science, Technology and Innovation (Project 272-08-0480 to NS). This research was also supported by US NSF grants DEB 1144492 and DEB 114417 (to GH and Gonzalo Giribet), a Selective Excellence Grant from The George Washington University, and a Carlsberg Foundation research grants 2010-0-0186 (to NS and GH) and 2009-01-0616 (to NS). GH's work at the University of Copenhagen (Zoological Museum) was supported by a scholarship from Danmarks Nationalbank.

# Literature

- Brennan, K.E.C. (2004) A further record of the spider *Microctenonyx subitaneus* (Araneae: Linyphiidae: Erigoninae) in Australia. *Records of the Western Australian Museum*, 22, 163–164.
- Cambridge, F.O.P. (1903) A revision of the genera of the Araneae or spiders, with reference to their type species. *The Annals and Magazine of Natural History*, 7, 32–51.

http://dx.doi.org/10.1080/00222930308678718

- Dahl, F. (1886) Monographie der *Erigone*-Arten im Thorell'schen. Sinne, nebst anderen Beiträgen zur Spinnenfauna Schleswig-Holsteins. *Schriften des Naturwissenschaftlischen Vereins für Schleswig-Holstein*, 6, 65–102.
- Butler, L.S.G. (1929) Studies in Victorian spiders. No. 1. Proceedings of the Royal Society of Victoria (N.S.), 42, 41–52.
- Butler, L.S.G. (1932) Studies in Australian spiders. No. 2. Proceedings of the Royal Society of Victoria (N.S.), 44, 103–117.
- Helsdingen, P.J. van. (1972) An account of money spiders from down under (Araneida, Linyphiidae). Zoologische Mededelingen, 47, 369–390.

Miller, J.A. (2007) Review of erigonine spider genera in the Neotropics (Araneae: Linyphiidae, Erigoninae). Zoological Journal of Linnean Society, 149 (Suppl. 1), 1–263.

http://dx.doi.org/10.1111/j.1096-3642.2007.00233.x

Platnick, N.I. (2013) The world spider catalog, version 14.0. American Museum of Natural History. Available from: http://research.amnh.org/entomology/spiders/catalog/index.html (accessed 27 November 2013)

Prószyński, J. & Starega, W. (1971) Pajaki-Aranei. Katalog fauny Polski, 33, 1–382.

Rainbow, W.J. (1912) Araneidae from the Blackall Ranges. Memoirs of the Queensland Museum, 1, 190-202.

- Wiehle, H. (1960) Spinnentiere oder Arachnoidea (Araneae). XI. Micryphantidae-Zwergspinnen. *Tierwelt Deutschlands*, 47, 1–620.
- Wunderlich, J. (1976) Spinnen aus Australien. 2. Linyphiidae (Arachnida: Araneida). Senckenbergiana biologica, 57, 125–142.