

A new genus of neonine jumping spiders (Araneae: Salticidae: Neonini) from Australia

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ABSTRACT. The Neonini is a tribe of small (1–5 mm) jumping spiders found in the Holarctic, East Asia and Australasia. They are very common in Australia where they make up the smallest sized salticids in the litter fauna. A new genus of neonine jumping spiders is described from the wetter parts of south-eastern Australia. *Australoneon* **n. gen.** is very common and includes five new species, namely, *Australoneon christineae* **n. sp.**, *A. keyserlingi* **n. sp.**, *A. kochi* **n. sp.**, *A. wanlessi* **n. sp.**, and *A. zabkai* **n. sp.** *Neon taylori* Richardson 2013 is also transferred to the new genus as *Australoneon taylori* **n. comb.** All species are found in litter or moss and with a strong preference for *Nothofagus* forest.

Introduction

The Neonini is a tribe of jumping spiders found in the Holarctic, East Asia and Australasia (Maddison, 2015). They are small (1–5 mm) salticids, the cephalothorax has vertical sides, similar to those found in euophryines, and is rectangular to rhomboid-shaped in plan. The embolus arises on the prolateral or dorsal-terminal side of the palp beside the tegulum and may pass directly along the distal edge of the tegulum (e.g. Richardson, 2013, fig. 35) or form a spiral first (e.g. Richardson 2013, fig. 27). Worldwide, the tribe includes less than forty described species presently placed in two genera. The genus *Neon* Simon, 1876 is found in the Holarctic and Oriental Regions, as well as Australia. It includes two subgenera, *Neon* (*Neon*) found in the northern hemisphere and *Neon* (*Dicroneon*) Lohmander, 1945 (Logunov, 1998) found in the northern hemisphere and Australia (Richardson, 2013). The second genus, *Papuaneon* Maddison, 2016, is found in New Guinea and Australia (Maddison, 2016, Richardson, 2022).

Neonine jumping spiders are very common in Australia where they make up the smallest sized salticids in the litter fauna. As well as the very common, small (1–2 mm)

Neon (*Dicroneon*) species, the Australasian fauna includes two genera of relatively larger animals (2.5–5.5 mm); one described genus, *Papuaneon*, and an undescribed genus. The latter, *Australoneon* **n. gen.** and five new species belonging to this genus were discovered during the present, larger scale study of Australian neonine salticids, and are described here. As well, a previously described species, *Neon taylori* Richardson 2013 is transferred to the new genus.

Taxonomists should be unambiguous in their taxonomic publications by reporting, for example, the species hypothesis they have used and the degree to which their species constructs were integrative (e.g. Bond *et al.*, 2021). Here, the same approach has been used as in the previous study of *Papuaneon* (Richardson, 2022).

Material and methods

Material in the collections of AMS (Australian Museum, Sydney), ANIC (Australian National Insect Collection, CSIRO, Canberra), MVMA (Museum of Victoria, Melbourne), QMB (Queensland Museum, Brisbane), SAMA (South Australian Museum, Adelaide), TMAG

Keywords: BIOCLIM, *Neon*, *Dicroneon*, *Papuaneon*

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