

Article



http://dx.doi.org/10.11646/zootaxa.3716.3.8 http://zoobank.org/urn:lsid:zoobank.org:pub:B406C8D0-7F2F-4BDA-B142-D26295D70FEF

New unidentate jumping spider genera (Araneae: Salticidae) from Australia

BARRY J. RICHARDSON

CSIRO Ecosystem Sciences, GPO Box 1700, Canberra ACT 2601, Australia. E-mail: barry.richardson@csiro.au

Abstract

The Australian fauna includes large numbers of undescribed, tiny, litter-living, jumping spiders. In this paper four monotypic new genera (Ananeon howardensis n. g. n. sp., Barraina anfracta n. g. n.sp., Frewena maculata n.g. n.s., and Pungalina weiri n.g, n.sp.) are described. Two species (Neon taylori n.sp. and Neon australis n. sp.) representing the two distinctive morphological patterns found in Australian species of this genus are also described. The former, similar in the morphology of the palp and genitalia to that found in many species from eastern Australia, is most similar in morphology to N. sumatranus Logunov 1998 from Indonesia and N. kovblyuki Logunov 2004 from the Crimea. The latter, and other similar species from South Australia and Western Australia, has palp morphology and fringing on L1 very similar to that seen in *N. nojimai* Ikeda 1995 from Japan.

Key words: Ananeon n. g., Barraina n. g., Frewena n. g., Neon Simon 1876, Pungalina n. g. new genera, new species

Introduction

The Museums and Art Galleries of the Northern Territory, Darwin and in the Australian National Insect Collection, CSIRO, Canberra hold examples of an extensive fauna of quite small unidentate species, mostly found in litter. These have not been previously studied other than to note in passing the presence of *Neon* Simon 1876 (Richardson and Zabka 2003). Of the many undescribed genera and species of small salticids, four are represented by examples of both sexes. These four new genera, Ananeon n. g., Barraina n. g., Frewena n. g. and Pungalina n. g. are described here. The Australian National Insect Collection also included at least eight species of the genus Neon from eastern Australia and three from South and Western Australia. Two of the species, representing two distinct groups of species with markedly different palp and genital morphologies, are also described. As well as these small, unidentate genera, some Australian pluridentate and fissidentate genera (e.g. in Jacksonoides) include similarly small forms.

The five genera seem to have little in common when the structures of the male and female genitalia are compared, other than their small size and unidentate dentition. According to recent studies (Maddison and Hedin 2003; Maddison et al. 2008; Bodner and Maddison 2012), Neon probably belongs to a large Australian clade, the Astioida, that developed approximately 32mya. Ananeon, Barraina and Frewena, however, are provisionally placed in the Euophryinae, based on the general morphology of the palp and female genitalia. This clade is thought to have derived from an Afro-Eurasian radiation and would have reached Australia from Asia less than 15mya. Euophrines are quite common in Australia, being represented by many genera (e.g. Maratus). The placement of Pungalina is uncertain, it may be either an astioid or a member of the Hasarinae. As a consequence of their different origins, these genera of small litter-living spiders do not constitute a single evolutionary radiation within the litter habitat.

The purpose of this work was to describe several of the many unknown genera present in Australia as part of the preliminary work to the preparation of a LUCID key to the genera of Australian jumping spiders.