



Article

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Redescription and generic placement of the spider *Cryptachaea gigantipes* (Keyserling, 1890) (Araneae: Theridiidae) and notes on related synanthropic species in Australasia

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Abstract

Cryptachaea gigantipes (Keyserling, 1890) **n. comb.** is redescribed from fresh material, the female is described for the first time and notes on biology are given. *Cryptachaea gigantipes* has been recorded from natural habitats in south-eastern Australia, but is also commonly encountered around houses and other built structures, there and in the North Island of New Zealand. The earliest New Zealand records are from the year 2000 and it would appear that the species has been accidentally introduced due to its synanthropic tendencies. The idea of a recent and limited initial introduction is supported by cytochrome *c* oxidase subunit 1 (COI) sequences, which are extremely homogeneous from New Zealand specimens compared to those from Australia. A comparison of *Cryptachaea gigantipes* with *Cryptachaea veruculata* (Urquhart, 1886) shows the two species are closely related. *Theridion calyciferum* Urquhart, 1886 from New Zealand and *Achaearanea extrilida* (Keyserling, 1890) from Australia are placed in synonymy under *C. veruculata* **n. syn.**

Key words: COI, Australia, New Zealand, bites, biology

Introduction

'*Theridion*' *gigantipes* Keyserling, 1890 is a long-legged theridiid that is common on the exterior of houses in some parts of eastern Australia. The species has often been misidentified as either the cosmopolitan *Parasteatoda tepidariorum* (C. L. Koch, 1841) (e.g. Crowe 2007), or *Cryptachaea veruculata* (Urquhart, 1886), which has rather similar genitalia (e.g. Isbister & Gray 2003). Investigations during the present study have revealed that '*Theridion*' *gigantipes* belongs in the genus *Cryptachaea* Archer, 1946 and has been recorded in New Zealand only since 2000, but may have been present in Auckland as early as the 1980s (D.J. Court pers. comm.). In the course of a comparison between *C. gigantipes* and *C. veruculata*, it became evident that *Achaearanea extrilida* (Keyserling, 1890), from near Sydney, and *Theridion calyciferum* Urquhart, 1886 (currently a junior synonym of *Theridion cruciferum* Urquhart, 1886), from New Zealand, should be synonymised with *C. veruculata*.

In this paper we transfer *T. gigantipes* to *Cryptachaea*. We redescribe the male and describe the female for the first time. As this species is synanthropic and may be capable of anthropogenic dispersal we use COI sequences to compare the diversity of Australian and New Zealand specimens to attempt to find the origin of the New Zealand populations. We record data pertinent to this potentially invasive species and bring it to the attention of arachnologists in other places where it might flourish. We also redress the misplacement of *T. calyciferum* and propose that *Achaearanea extrilida* should be placed as a junior synonym of *Cryptachaea veruculata*.