



The cosmopolitan spider *Cryptachaea blattea* (Urquhart 1886) (Araneae: Theridiidae): Redescription, including COI sequence, and new synonymy

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Abstract

Cryptachaea blattea (Urquhart 1886) **new combination**, a cosmopolitan species of the spider family Theridiidae, is redescribed, including notes on its distribution and DNA sequences from the mitochondrial gene cytochrome c oxidase subunit 1. Based on morphological evidence and mitochondrial DNA sequences, *Cryptachaea acorensis* Berland 1932 is a junior synonym of *Cryptachaea blattea*.

Key words: cytochrome c oxidase subunit 1 (COI), DNA, introduced species, new combination

Introduction

In 1886, A.T. Urquhart, a farmer and one of New Zealand's first resident arachnologists, described *Theridium blatteus*, a spider that he had collected at Karaka, 30 km south of Auckland in the North Island of New Zealand (Urquhart 1886). *Theridium blatteus* has been described under three other names (Urquhart 1886, 1887), and was transferred to *Achaearana* Strand 1929 by Fitzgerald and Sirvid (2003). Berland (1932) described *Theridion acorensis* from a female collected in the Azores; this species was transferred to *Achaearana* by Denis (1962), and then to *Cryptachaea* Archer 1946 by Yoshida (2008). *Cryptachaea acorensis* has also been described under other names in North America and Chile (Levi 1955, 1967b) and is considered to be a cosmopolitan species (Platnick 2009), which has been recorded from the Azores, Madeira, Saint Helena, Republic of Cape Verde, Portugal, Belgium, Hawaii, North America (California, Washington, British Columbia), Chile and New Zealand (Machado 1941; Denis 1962; Levi 1963, 1967a, 1967b; Sedgwick 1973; Crawford 1988; Cardoso 2000; Vanuytven 2006; Arnedo *et al.* 2007; Paquin *et al.* submitted). It was the claim by Levi (1967a) that *C. acorensis* had been collected in New Zealand that piqued our interest in this species. Levi (1963) had also noted “a female *Achaearana* from New Zealand determined as *Theridion tubercula* (Urquhart) [now a junior synonym of *Cryptachaea blattea*] by Miss E. B. Bryant seems to be this species [*C. acorensis*]”. Other than Levi's records (Levi 1963; 1967a), which did not specify specimens or localities, *C. acorensis* had not been reported from New Zealand; however, the illustrations of the male