

## Redescription of Australian crab spider *Diaea pulleinei* Rainbow, 1915 (Araneae: Thomisidae)

## PAWEŁ SZYMKOWIAK

Department of Animal Taxonomy and Ecology, Institute of Environmental Biology, Faculty of Biology, Collegium Biologicum, Umultowska 89, 61–614 Poznañ, Poland. E-mail: szymkowi@amu.edu.pl

## Abstract

Species richness of described crab spiders (Family Thomisidae) in Australia is low. Altogether 123 species of the family are known from this continent. One of the most abundantly represented genera of crab spiders in Australia is *Diaea* (31 recognized species). This paper revises knowledge of one species of this genus, *Diaea pulleinei* Rainbow, 1915, supplementing its description with the hitherto unknown female.

Key words: Diaea pulleinei, taxonomy, redescription, description, male, female

## Introduction

According to Hawkeswood (2003), and Raven et al. (2002) about 2000 spider species have been recorded from Australia, but knowledge of many of them remains insufficient. Although intensive zoogeographic and systematic studies have recently been conducted for some taxa from Australia and the surrounding islands (Platnick & Forster 1989; Żabka 1991; Patoleta & Żabka 1999), many additional species are in need of a thorough examination. The Thomisidae remain poorly studied, with some 123 valid species being recorded to date. However, its real diversity seems to be several times higher than that figure, as it happened with Salticidae (Żabka 1991).

Since the original descriptions, no comprehensive revision has been conducted for Australian species of Thomisidae, apart from two revisional works (Dondale 1966, Shield & Strudwick 2000). Recently Lehtinen (2004) in one of his worldwide revision of some genera of Thomisidae presented a few interesting taxonomic remarks on the Palearctic and Oriental Misumenini (including some notes on Australian *Diaea*).

*Diaea* is the most numerous genus in the family Thomisidae in the world. It comprises 31 species in Australia (39% of the world fauna of the genus, including the hitherto unreported *Diaea praetexta* (L. Koch, 1865) from Bowen, Queensland found in material of the Museum of Natural History in Vienna — NMW 1882, II 23), one species in Lord Howe Island and one in New Caledonia. *Diaea* species live mainly on flowers and foliage of different species of shrubs and trees. In the reproductive period the female lays a cocoon in a curled leaf. They are usually small spiders no greater than 7-8 mm in length. The most conspicuous feature of representatives of this genus is the green but sometimes white and yellow coloration of the prosoma and legs. This cryptic coloration ensures a good masking effect in the surrounding environment.

The unclear taxonomic status of the genus *Diaea* has been analysed by Lehtinen (2002, 2004), who has been working on a worldwide generic revision of Thomisidae. Many Australian species included in the genus *Diaea* show great morphological diversity and probably certain species should be excluded from this genus in future. Until the phylogenetic relationships are correctly established I will be treating the genus *Diaea* collectively.