

A place for everything, and everything in its place: A new genus for the spiny Australian crab spiders (Araneae: Thomisidae)

MIGUEL MACHADO  AND RENATO AUGUSTO TEIXEIRA 

Pontifícia Universidade Católica do Rio Grande do Sul, Escola de Ciências da Saúde e da Vida,
Museu de Ciências e Tecnologia, Laboratório de Aracnologia, Porto Alegre, RS, Brazil.

ABSTRACT. Recent phylogenetic analyses have shown consistent evidence that the composition of some Stephanopinae genera, as well as their distribution, were wrongly assigned throughout the 20th century. Inaccurate descriptions and vague diagnoses resulted in groups that are actually formed by multiple genera, which were repeatedly recovered as polyphylies. The present work is part of a long-term morphological study that aims to better understand and delineate the taxonomic boundaries of the Australian stephanopines. Hereinafter, we present a new combination for a group of spiders hitherto considered as part of *Sidymella* Strand, 1942, officially elevating it to a generic rank and highlighting its diagnostic features. The genus *Spinaarachne* gen. nov. is proposed not only to comprise the new species *S. aculeata* sp. nov. and *S. pilosa* sp. nov. but also to accommodate the transference of *S. hirsuta* (L. Koch, 1874) comb. nov. Brief notes regarding the plausible reasons of why *S. hirsuta* comb. nov. was previously attributed to a Neotropical genus are presented, and new distribution records are also provided.

Introduction

The taxonomy of the subfamily Stephanopinae (Araneae: Thomisidae) has proved to be a challenge since the first attempts to propose the group and describe its component species. Early naturalists like Simon (1895), Pickard-Cambridge (1869) and Mello-Leitão (1929) presented the basis regarding the first generic organisations in this subfamily. However, due to limitations imposed by the available technology at that time, these studies were published with little detailed sketches of somatic characters and diagnostic features of the spiders. Most Neotropical, African and Australian Stephanopinae genera remained taxonomically entangled until recent revisions (Benjamin, 2013, 2015, 2024; Machado *et al.*, 2018; Machado *et al.*, 2019a, 2019b, 2021, 2023; Prado *et al.*, 2018). Phylogenetic analyses have also enlightened new information about the relationships in Stephanopinae (Benjamin *et al.*, 2008;

Benjamin, 2011; Ramírez, 2014; Machado *et al.*, 2017; Wheeler *et al.*, 2017; Machado & Teixeira, 2021).

New data indicate that until recently some genera like *Stephanopis* O. Pickard-Cambridge, 1869 and *Sidymella* Strand, 1942 were composed of species that did not necessarily share a close evolutive history. As suggested by Machado and Teixeira (2021), there is a possibility that they were merely grouped based on somatic resemblances. For instance, the genus *Sidymella* was recovered as polyphyletic and the “arrow-shaped” abdomen that used to be considered diagnostic for its component species is now seen as an insufficient feature to characterise the genus (Machado & Teixeira 2021). Machado and Teixeira (2021) recommended that only the Neotropical species should be considered as *Sidymella* (*stricto sensu*), while the ones with Australian distribution, although still part of the genus, should be treated as “dissident clades” until future works propose them as new genera. Hereinafter, the aims of this study were to: 1)

Keywords: Stephanopinae; taxonomy; new species; *Stephanopis*; *Sidymella*

ZooBank registration: urn:lsid:zoobank.org:pub:09ED089A-DF7D-42AE-A626-AD58CD168A90

ORCID iD: Machado, 0000-0003-3193-9830; Teixeira, 0000-0002-1756-9821

Corresponding author: Miguel Machado **Email:** machadom.arachno@gmail.com

Submitted: 24 June 2025 **Accepted:** 25 September 2025 **Published:** 26 November 2025 (in print and online simultaneously)

Publisher: The Australian Museum, Sydney, Australia (a statutory authority of, and principally funded by, the NSW State Government)

Citation: Machado, M. and R. A. Teixeira. 2025. A place for everything, and everything in its place: A new genus for the spiny Australian crab spiders (Araneae: Thomisidae). *Records of the Australian Museum* 77(5): 271–283. <https://doi.org/10.3853/j.2201-4349.77.2025.1913>

Copyright: © 2025 Machado, Teixeira. This is an open access article licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original authors and source are credited.

