PECKHAMIA 238.1, 4 June 2021, 1—4 ISSN 2161—8526 (print)
LSID urn:lsid:zoobank.org:pub:D3CD7F12-20E1-470B-AE01-AC14AB1FCA54 (registered 02 JUN 2021) ISSN 1944—8120 (online)

A new synonym of *Titanattus parvus* (Mello-Leitão, 1945) (Araneae: Salticidae: Thiodinini)

Gonzalo D. Rubio[1]

[1]National Research Council of Argentina (CONICET), Experimental Station of Agriculture (EEA-INTA), R 14, Km 836, Cerro Azul, Misiones, Argentina, *email* gonzalodrubio@gmail.com; https://orcid.org/0000-0002-4223-2980

Abstract. Most thiodinines are rare in collections, and this can lead to fragmented knowledge and some mistakes. In this brief contribution *Titanattus acanjuba* Bustamante & Ruiz is newly synonymized with *T. parvus* (Mello-Leitão) and is illustrated by new photographs and drawings. Diagnostic characters for its recognition are provided.

Keywords. jumping spider, thiodinines, *Titanattus acanjuba*

Introduction

Bustamante and Ruiz (2017) took a first big step towards understanding the diversity of the tribe Thiodinini Simon, 1901. Spiders of this tribe seem to have a widespread distribution in the Americas, from southern United States to southern Chile (Bustamante & Ruiz, 2017). Nevertheless, thiodinines are rare in collections, and this can lead to fragmented knowledge and some mistakes.

In 1945 Mello-Leitão described the thiodinine species *Nebridia parva* Mello-Leitão, 1945 based on only one female from southern Misiones, Argentina. For a long time (70 years) this species was under the genus *Nebridia* Simon, 1902 until a molecular analysis resulted in synonymy with the euophryine *Amphidraus* Simon, 1900 (Zhang & Maddison, 2015). This was rejected by Prószyński (2017) for the lack of support by diagnostic drawings of respective type species. Finally Salgado and Ruiz (2017) transferred this species to the genus *Titanattus* Peckham & Peckham, 1885. Almost simultaneously Bustamante and Ruiz (2017) described *T. acanjuba* Bustamante & Ruiz, 2017, but later realized its similarity to *T. parvus* (A. A. Bustamante, 2021, personal communication). In this brief contribution *T. acanjuba* is synonymized with *T. parvus* (Mello-Leitão, 1945) and is illustrated with new drawings and photographs.

Material and methods

The format and morphological terms used here follow Bustamante and Ruiz (2017). Female genitalia were examined after digestion in a hot 10–20% NaOH solution, or clarified in clove oil. Expansion and clearing of the male palps were done by placing the pieces in a 10% NaOH solution for several minutes and then transferring them to distilled water several times, until full expansion. Temporary preparations were observed and photographed using a Leica DM500 compound microscope and a Leica M60 stereomicroscope. Structures were sketched from incident light photograph models using a computer system for drawing and treatment of the image (Wacom digitizer tablet with GIMP, free software).

Measurements were taken directly from a microscope ocular lens with an ocular micrometer and are expressed in millimeters. Specimens are deposited at the arachnological collection of the Museo de la Plata, Buenos Aires (MLP, L. Pereira) and the Instituto de Biología Subtropical, Misiones (IBSI-Ara, G. Rubio).

Taxonomy

Family **Salticidae** Blackwall, 1841
Subfamily **Salticinae** Blackwall, 1841
Clade **Amycoida** Maddison & Hedin, 2003
Tribe **Thiodinini** Simon, 1901
Genus ***Titanattus*** Peckham & Peckham, 1885

Titanattus parvus (Mello-Leitão, 1945)

Figures 1-16

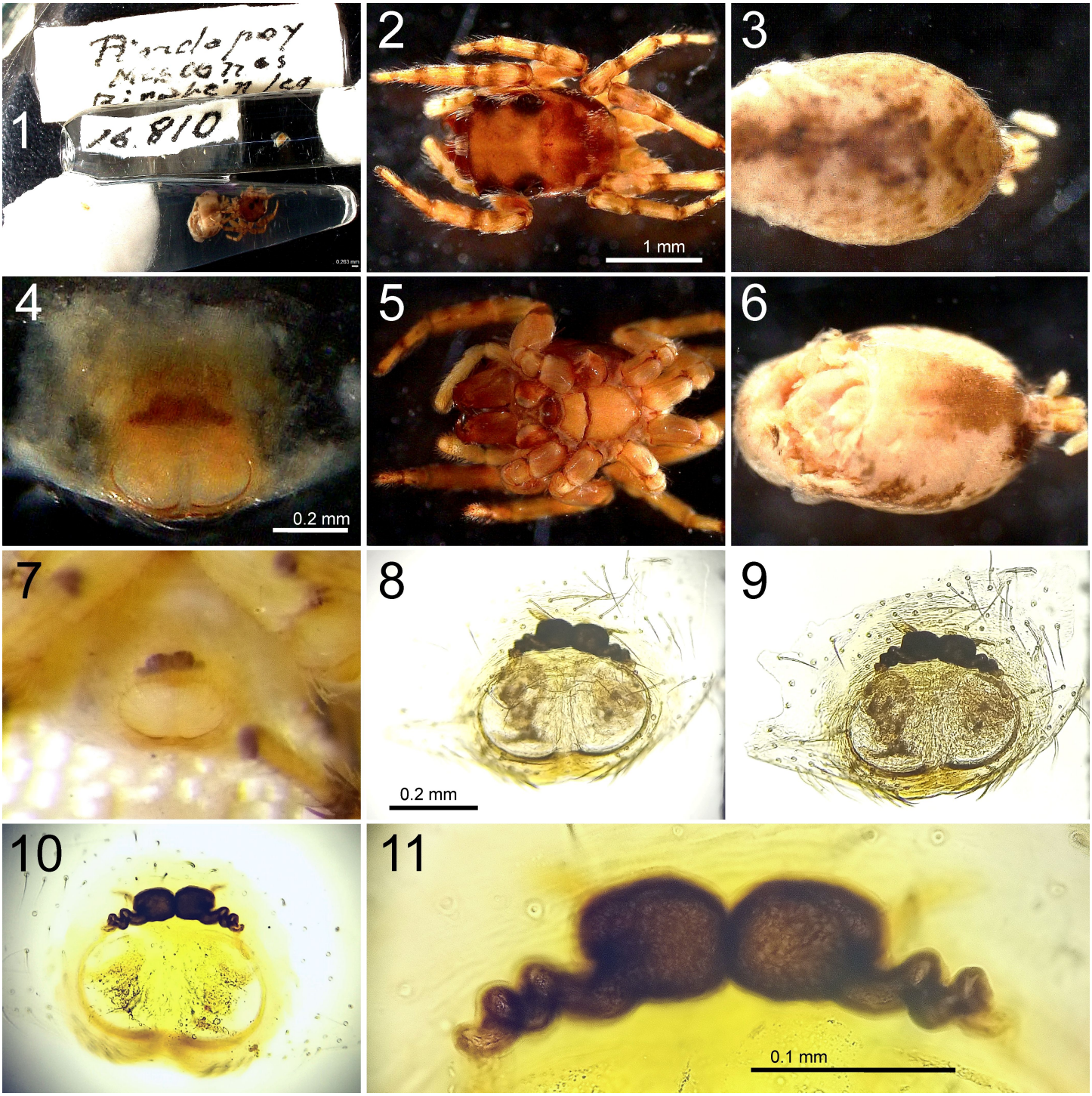
Nebridia parva Mello-Leitão, 1945: 289, fig. 79 (female holotype deposited in MLP 16.810, from Pindapoy, Misiones, Argentina, Birabén coll., examined).
Amphidraus parvus Zhang & Maddison, 2015: 22.
Titanattus parvus Salgado & Ruiz, 2017: 430, fig. 27E.; World Spider Catalog 2021.
Titanattus acanjuba Bustamante & Ruiz, 2017: 339, fig. 29 (female paratype IBSP 86.162, from Subregiões Miranda e Abobral, Mato Grosso do Sul, Brazil, VI.1998–XI.1999, Raizer et al. coll., examined by photographs). **New synonymy**.

Note. The MLP collection has one glass tube for the holotype *T. parvus* (sub *Nebridia*: *N. parva*), labeled as "Pindapoy, Misiones, Birabén leg. 16.810" and containing one female specimen in fairly good condition but the sternum is broken and the cephalothorax is separated from the abdomen (Figures 1–6). The same lot has a small glass vial containing the dissected epigyne (Figure 1).

Justification of the synonymy. Bustamante & Ruiz (2017) described *T. acanjuba* based on one male (holotype) and one female (paratype) collected in Mato Grosso do Sul, Brazil. Detailed examination of the types showed no differences between this species and *T. parvus*. The thin median septum in the epigyne of *T. acanjuba* and the size and shape of the spermathecae are the same as those of the holotype for *T. parvus* (Compare Figure 4 with Bustamante & Ruiz, 2017: figs. 29D, E). This is a species widely distributed in northeastern Argentina, and the discovery of specimens of both sexes in a locality very close to the type locality of *T. parvus* (less than 30 km distant) led us to notice that there are no differences between the males at this locality and the holotype of *T acanjuba* (Compare Figures 12–15 with Bustamante & Ruiz, 2017: figs. 29A–C). Therefore I consider *T. acanjuba* to be a junior synonym of *T. parvus*.

Diagnosis and description. See Bustamante & Ruiz (2017) and Mello-Leitão (1945). Photographs of the holotype for *T. parvus* and other specimens (Figures 1-11) and additional illustrations (Figures 12–16) are given here.

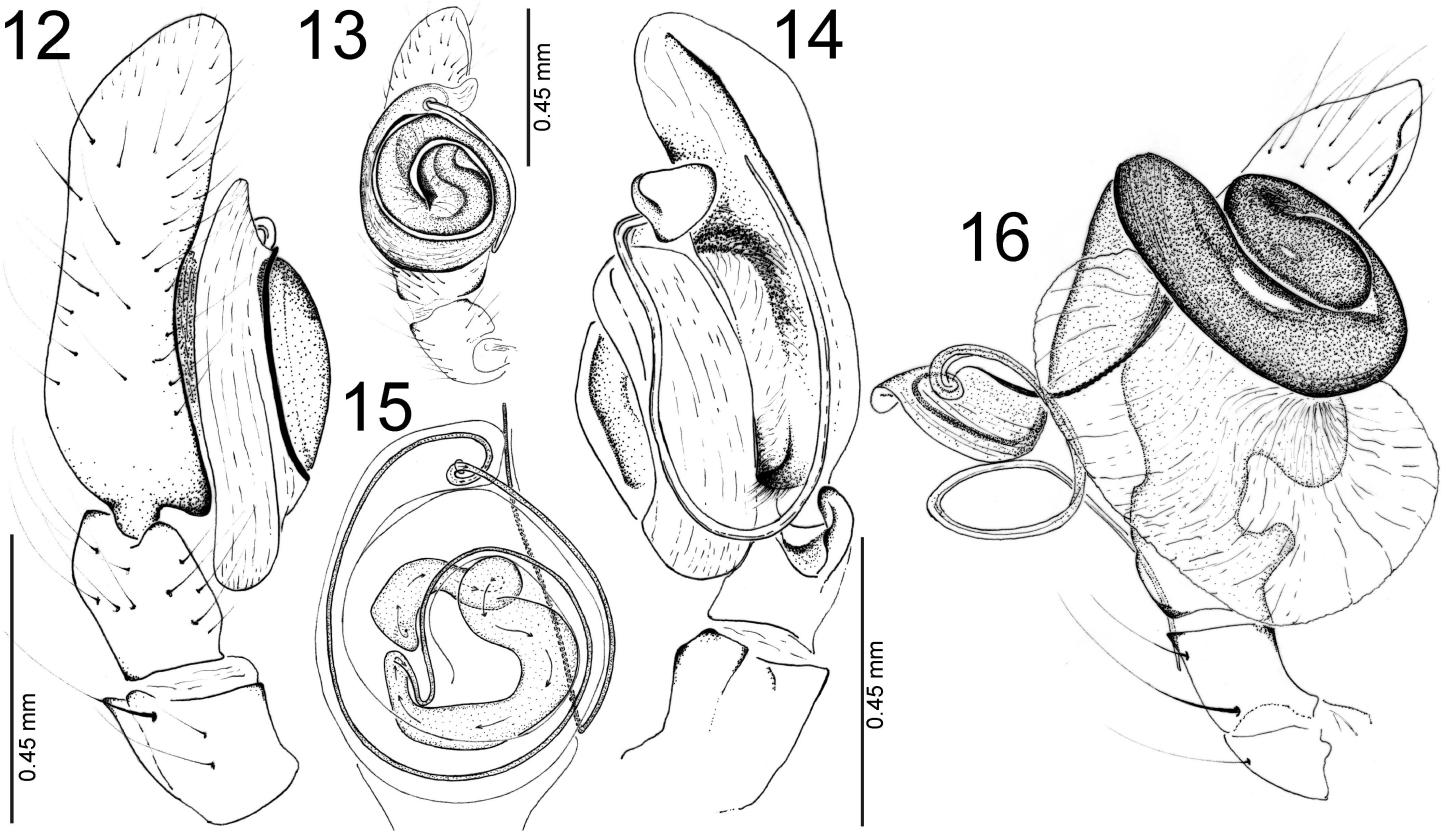
Distribution. Known from Brazil and Argentina; some new records for Argentina are listed here.



Figures 1-11. Female of *Titanattus parvus* (Mello-Leitão). **1-6,** Holotype (MLP 16.810). **1,** Glass vial containing specimen. **2,** Carapace and legs, dorsal view. **3,** Abdomen, dorsal view. **4,** Epigyne, ventral view. **5,** Cephalothorax, ventral view. **6,** Abdomen, ventral view. **7,** Specimen from Chaco (IBSI-Ara 1552), epigyne, ventral view. **8-11,** Specimen from Misiones (IBSI-Ara 1340). **8-9,** Cleared epigyne, ventral view. **10,** Same, dorsal view. **11,** Same, detail of spermathecae.

Additional material examined. ARGENTINA: ***Misiones:*** 1 female, Karadya Reserve (S25.859584°, W53.960847°), 419 m asl, 14.I.2016, J. Baigorria coll. (IBSI-Ara 0484); 1 male, same locality and collector, 30.XI.2015 (IBSI-Ara 0498); 1 male, same locality and collector, 07.X.2015 (IBSI-Ara 0513); 1 male, same locality and collector, 05.X.2016 (IBSI-Ara 0816); 1 female, same locality and collector, III.2018 (IBSI-Ara 1168); 1 female, Cerro Azul, INTA Experimental Station, tea crop (S27.657515°, W55.437466°), 280 m asl, 22.X.2018, G. Rubio coll. (IBSI-Ara 1340); 1 male, same data, 01.X.2015 (IBSI-Ara 1553); ***Chaco:*** 1 male, 1

female, near Las Garcitas (S26.575460°, W59.756837°), 87 m asl, 09.III.2017, M. Nadal coll. (IBSI-Ara 1552); ***Corrientes:*** 1 female, Galarza, Iberá (S28.096503°, W56.6907°), 81 m asl, 04.IV.2006, G. Avalos & G. Rubio coll. (IBSI-Ara 0696).



Figures 12-16. Male of *Titanattus parvus* (Mello-Leitão). **12-16,** Specimen from Misiones (IBSI-Ara 1553). **12,** Palp, prolateral view. **13,** Same, ventral view. **14,** Same, retrolateral view. **15,** Same, cleared ventral view. **16,** Same, expanded prolateral ventral view.

Acknowledgments

I wish to thank the MLP staff: Victor Hugo Merlo Alvarez for assistance and access to the studied type specimen, Luis Alberto Pereira (head of the section) and Mónica Tassara (manager of the collection).

References

Bustamante, A. A. and G. R. S. Ruiz. 2017. Systematics of Thiodinini (Araneae: Salticidae: Salticinae), with description of a new genus and twelve new species. Zootaxa 4362 (3): 301-347. doi:10.11646/zootaxa. 4362.3.1

Mello-Leitão, C. F. de. 1945. Arañas de Misiones, Corrientes y Entre Ríos. Revista del Museo de La Plata (N. S., Zool.) 4: 213-302.

Prószyński, J. 2017. Pragmatic classification of the world's Salticidae (Araneae). Ecologica Montenegrina 12: 1-133. doi:10.37828/em.2017.12.1

Salgado, A. and G. R. S. Ruiz. 2017. Ten new species of *Amphidraus* Simon, 1900 (Araneae: Salticidae: Euophryini) and three new combinations. Zootaxa 4312 (3): 401-437. doi:10.11646/zootaxa.4312.3.1

World Spider Catalog. 2021. World Spider Catalog. Version 22.0. Natural History Museum Bern, *online* at http://wsc.nmbe.ch, accessed on 1 June 2021. doi: 10.24436/2

Zhang, J. X. and W. P. Maddison. 2015. Genera of euophryine jumping spiders (Araneae: Salticidae), with a combined molecular-morphological phylogeny. Zootaxa 3938 (1): 1-147. doi:10.11646/zootaxa.3938.1.1