



**HAL**  
open science

## **Paratropis tortue sp. nov., a new species of mud spider from French Guiana (Araneae: Paratropididae)**

Danniella Sherwood, Sylvia M. Lucas, Antonio D. Brescovit

### ► To cite this version:

Danniella Sherwood, Sylvia M. Lucas, Antonio D. Brescovit. Paratropis tortue sp. nov., a new species of mud spider from French Guiana (Araneae: Paratropididae). Faunitaxys, 2023, 11 (10), pp.1-3. hal-03965634

**HAL Id: hal-03965634**

**<https://hal.science/hal-03965634v1>**

Submitted on 31 Jan 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - NonCommercial - NoDerivatives 4.0 International License

# Faunitaxys

*Revue de Faunistique, Taxonomie et Systématique  
morphologique et moléculaire*



Volume 11  
Numéro 10

Janvier 2023

ISSN: 2269 - 6016  
Dépôt légal: Janvier 2023

# Faunitaxys

*Revue de Faunistique, Taxonomie et Systématique  
morphologique et moléculaire*

ZooBank : <http://zoobank.org/79A36B2E-F645-4F9A-AE2B-ED32CE6771CC>

Directeur de la publication, rédacteur, conception graphique et PAO:

*Lionel Delaunay*

Cette revue ne peut pas être vendue

Elle est distribuée par échange aux institutions (version papier)

et sur simple demande aux particuliers (format PDF)

à l'adresse suivante:

AFCFF (Association française de Cartographie de la Faune et de la Flore)

28, rue Voltaire, F- 42100 Saint Etienne

E-mail: [faunitaxys.journal@gmail.com](mailto:faunitaxys.journal@gmail.com)

Elle est disponible librement au téléchargement à partir du site:

<http://faunitaxys.fr/>

La parution de *Faunitaxys* est apériodique

*Faunitaxys* est indexé dans / *Faunitaxys* is indexed in:

- **Zoological Record**

Articles and nomenclatural novelties are referenced by:

- **ZooBank** (<http://zoobank.org>)

Online Archives:

- **HAL** (<https://hal.archives-ouvertes.fr>)

- **Internet Archive** (<https://archive.org>)

Imprimée sur les presses de SPEED COPIE, 6, rue Tréfilerie, F- 42100 Saint-Etienne

**Imprimé le 30 janvier 2023**

# *Paratropis tortue* sp. nov., a new species of mud spider from French Guiana (Araneae: Paratropididae)

DANNIELLA SHERWOOD (1, 2,\*), SYLVIA M. LUCAS (3, 4) & ANTONIO D. BRESCOVIT (3, 5)

(1) Arachnology Research Association, London, United Kingdom.

- Email: [danni.sherwood@hotmail.com](mailto:danni.sherwood@hotmail.com) - Orcid: <https://orcid.org/0000-0001-8170-9529>

- ZooBank: <http://zoobank.org/0E91B200-D748-4EF3-A93D-68880F2D5CC6>

(2) Fundación Ariguanabo, San Antonio de Los Baños, Cuba.

(3) Laboratório de Coleções Zoológicas, Instituto Butantan, Av. Vital Brazil, 1500, São Paulo, Brazil.

(4) - ZooBank: <http://zoobank.org/247B0362-71F7-42B3-9586-4BF36D166E1A> - Orcid: <https://orcid.org/0000-0002-4001-4744>

(5) - ZooBank: <http://zoobank.org/30F51455-6E88-4E1F-8395-FE724A797790> - Orcid : <https://orcid.org/0000-0002-1511-5324>

\* Corresponding author.

## Keywords:

Araneae; biogeography;  
Paratropididae; new species;  
*Paratropis*; description;  
taxonomy; French Guiana.  
morphology;

**Abstract.** – A new species of *Paratropis* Simon, 1889, *P. tortue* sp. nov., based on the holotype male, is described from Petites Montagnes Tortue Biological Reserve, French Guiana.

Sherwood D., Lucas S.M. & Brescovit A. D., 2023. – *Paratropis tortue* sp. nov., a new species of mud spider from French Guiana (Araneae: Paratropididae). *Faunitaxys*, 11(10): 1 – 3.

DOI: [https://doi.org/10.57800/faunitaxys-11\(10\)](https://doi.org/10.57800/faunitaxys-11(10))

ZooBank: <http://zoobank.org/94625A95-2DFE-4CE3-91BB-7DEAF3BC3462>

Received: 10/01/2023 – Revised: 22/01/2023 – Accepted: 23/01/2023

## Introduction

The genus *Paratropis* Simon, 1889 was established by Simon (1889) for *Paratropis scruposa* Simon, 1889 and is the type genus of the family Paratropididae Simon, 1889. *Paratropis* currently contains 10 species (World Spider Catalog 2023), the history of nine of which was discussed in the introduction of Sherwood, Lucas & Brescovit (2022). During the proof stages of that article, another new species was described: *Paratropis minuscula* Almeida & de Morais, 2022 based on both sexes from Guyana (Almeida & de Morais 2022). This species is unique in the presence of six eyes and was the fifth species to be known from both sexes. Five species, including the type species, still remain known from only the female sex, namely: *P. florezi* Peráfan, Galvis & Pérez-Miles, 2019 from Colombia, *P. otonga* Dupérré & Tapia, 2020 from Ecuador, *P. sanguinea* Mello-Leitão, 1923 from Brazil, *P. scruposa* Simon, 1889 from Peru, and *P. seminermis* Caporiacco, 1955 from Venezuela. In this work, we describe a new species of *Paratropis* from French Guiana, based on a holotype male with a distinctly elongate and sinuous palpal bulb, similar only to *Paratropis papilligera* F. O. Pickard-Cambridge, 1896 but with a clear difference in the morphology of the tip of the embolus.

## Materials and methods

Specimens were examined under a Leica MZ12.5 binocular stereomicroscope, photographs of spermathecae, leg segments and palpal bulbs were made using a Leica M125C auto-montage with images stacked using Helicon Focus software. Description style follows Sherwood, Lucas & Brescovit (2022).

## Abbreviations

### Institutions

IBSP = Instituto Butantan, São Paulo, Brazil.

### Morphology

ALE = anterior lateral eyes;

AME = anterior median eyes;

d = dorsal;

imm. = immature;

ITC = inferior tarsal claw;

PLE = posterior lateral eyes;

PLS = posterior lateral spinnerets;

PME = posterior median eyes;

PMS = posterior median spinnerets;

v = ventral.

## Reviewers :

Michaël Dierkens (France) - ZooBank: <http://zoobank.org/EB0DE162-6610-4397-B785-0440D4FF4863>

Nadine Dupérré (Museum of Nature Hamburg, Germany) - ZooBank: <http://zoobank.org/F15E1FF2-2DF5-479A-AD10-8076CE96E911> - Orcid: <https://orcid.org/0000-0003-2195-878X>

Bastian Drolshagen (Germany) - ZooBank: <http://zoobank.org/4B37AE80-1180-4FDD-ADE8-1C5463B1FA89> - Orcid: <https://orcid.org/0000-0001-7539-5068>

Shuqiang Li (Chinese Academy of Sciences, Beijing, China) - ZooBank: <http://zoobank.org/86DE7438-7D54-455E-8592-5D81F56723AF> - Orcid: <https://orcid.org/0000-0002-3290-5416>



This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

Copyright 2023 The Authors. *Faunitaxys* published by Lionel Delaunay on behalf of the AFCFF (Association française de Cartographie de la Faune et de la Flore).

**Other**

**coll.** = collector;  
**colln.** = collection.

- Spines are considered as emerging from a dark base and are counted regardless of whether their apex is light or dark. Thorn-like setae (*sensu* Perafán, Galvis & Pérez-Miles, 2019) are considered to be all stout setae not emergent from circular bases.

- Leg formulae starts with the longest leg to the shortest in order of decreasing size, e.g. 4,1,2,3.

- All measurements are in mm.

- In accordance with Article 8 of the International Code of Zoological Nomenclature (ICZN, 1999), this work was registered in ZooBank prior to publication.

**Taxonomic treatment***Paratropis tortue* sp. nov.

(Fig. 1-8)

ZooBank: <http://zoobank.org/B1C3271E-3CA7-41EB-8DD2-80BB32C536D1>

**Holotype**, ♂ (IBSP 276617), Montagnes Tortue Biological Reserve (04°19'14.1"N 52°14'27.5"W), 6 km from Régina, French Guiana, XI/2010, coll. G. Lmarre.

**Paratype**, ♂ (IBSP 290140), [same data].

**Diagnosis.** – The male of *Paratropis tortue* sp. nov. resembles that of *P. papilligera* F. O. Pickard-Cambridge, 1896 (type material examined by DS in 2018) by the palpal bulb with a very thin and elongate embolus (see Perafán *et al.*, 2019: Fig. 4F, G), but differs by the more elongated and sinuous embolus tip (Fig. 7-8) and the absence of a baso-retrolateral conical process on tibia I (present in *P. papilligera*).

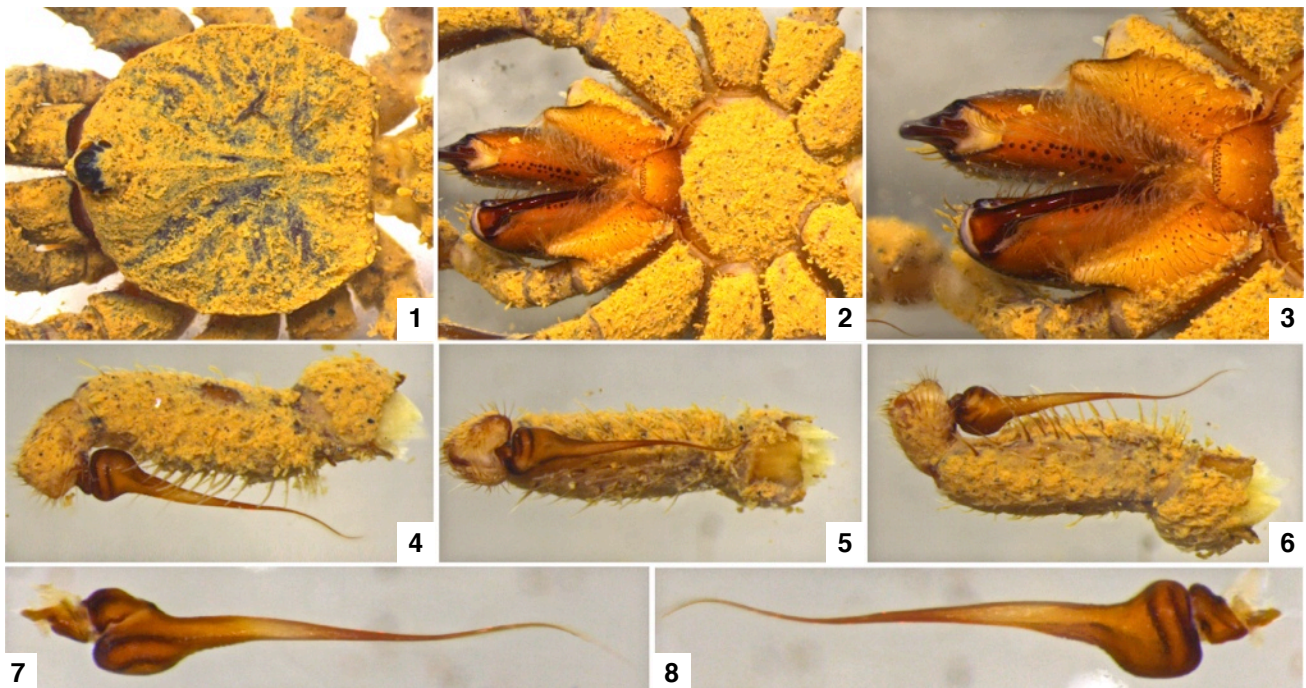
**Etymology.** – The specific epithet “tortue” is a noun in apposition from the French word for turtle, as this is the name given to the small mountainous reliefs of the biological reserve where the types were found.

**Description of holotype** (IBSP 276617)

– **Total length** including chelicerae: 11.2. – **Carapace**: length 4.8, width 4.5. – **Caput**: raised. – **Eye tubercle**: raised, length 0.7, width 0.8, AME<ALE, ALE>PLE, PLE<PME (Fig. 1). – **Fovea**: shallow, almost straight. – **Opisthosoma**: length 4.5, width 3.3. – **Chelicerae**: length 1.5, width 0.9. Cheliceral furrow with eight prolateral and twelve retrolateral teeth, arranged in two parallel diagonal rows (Fig. 2-3). – **Maxilla**: with 25–27 cuspules, distributed in the median area (Fig. 3). – **Labium**: length 0.6, width 1.1, with 20–24 cuspules, grouped in the distal area (Fig. 3). – **Labio-sternal mounds**: joined to sternum. – **Sternum**: length 2.1, width 2.5, with two pairs of circular sigilla (Fig. 2). – **Tarsi and metatarsi** I–IV ascopulate. Tarsus II not club-shaped. Lengths of legs and palpal segments see table 1, leg formula 1423. Thorn-like setae and clubbed setae covering dorsal and lateral surfaces of palpal femora, femora, tibiae, and metatarsi I–IV. A single pair of tarsal claws present on tarsi I–IV and the palpal tarsus, each claw with a pointed tooth near its base, ITC present on tarsi I–II. Leg I stouter than all other legs, femur, patella, and tibia noticeably incrassate. – **Trichobothria**: [clavate] tibia I d3, II d3, III d6, IV d4, palp d4, metatarsus I d3, II d5, III d5, IV d6. – **Spination**: tibia III v5, IV v3, metatarsus I v30, II v40, III v38, IV v33, tarsus I d12, II d6, III d14, IV d10, palp d8. PLS with 3 segments, basal 0.6, median 0.4, digitiform apical 0.8, basal and median segments incrassate, apical segment cylindrical, PMS present, 0.4. – **Palp**: cymbium with two unequal lobes separated by a sclerotized groove; tibia with shallow distoventral groove (Fig. 4-5). Palpal bulb as long as tibia, embolus very thin and elongate, embolus tip sinuous (Fig. 4-8).

**Affinities.** – Mud encrusted (Fig. 1-2) on carapace, opisthosoma, dorsum of chelicerae, dorsal surface of legs, palp, and spinnerets. Ventral surface of legs and labium devoid of mud. Sternum covered with a thick layer of encrusted mud, making it difficult to see the sigilla. Opisthosoma with two horizontal rows of tubercles on the dorsal surface and three additional rows of tubercles, irregular in size, arranged in rows on the dorso-retrolateral and dorso-prolateral surfaces.

**Distribution.** – Known only from the type locality, Montagnes Tortue Biological Reserve, French Guiana.



**Fig. 1-8.** *Paratropis tortue* sp. nov. holotype ♂ (IBSP 276617).

1. Carapace, dorsal view. 2. Cephalothorax, ventral view. 3. Chelicerae and labium, ventral view. 4. Palp, retrolateral view. 5. Palp, ventral view. 6. Palp, prolateral view. 7. Palpal bulb, prolateral view. 8. Palpal bulb, retrolateral view.

	I	II	III	IV	Palp
Femur	4.0	3.1	2.8	7.2	2.1
Patella	2.1	1.7	1.4	1.6	1.2
Tibia	3.3	2.2	2.0	2.1	1.8
Metatarsus	3.0	2.5	2.3	3.3	–
Tarsus	2.6	1.7	1.4	1.8	1.0
Total	15.0	11.2	9.9	13.6	6.1

**Table 1.** *Paratropis tortue* sp. nov. holotype ♂ (IBSP 276617) podomere lengths.

## Discussion

The family Paratropididae remains one of the most enigmatic spider families and much more research is needed to understand the taxonomy of the group, including the description of the unknown sexes of more than half of its currently valid species. Fortunately, the geographical separation of these species means the current existence of synonyms is likely low, given the reduced ranges and microhabitat niches exhibited by most paratropidids (Dupérré & Tapia 2020). During the completion of this work, we were made aware of a paratropidid record from French Guiana in the grey literature, identified as “*Paratropis papilligera*” and accompanied by a photograph of the specimen in life (see Lalagüe, 2021). It cannot be determined from the habitus photograph alone whether the specimen in the report corresponds to the new species described herein, *P. papilligera sensu stricto*, or another taxon.

## Acknowledgements

We would like to thank the reviewers, Nadine Dupérré (Zoologisches Museum Hamburg), Bastian Drolshagen (Karlsruhe, Germany), Shuqiang Li (Chinese Academy of Sciences) and Michaël Dierkens (Lyon, France) whose comments helped to improve the manuscript. ADB was supported by the grant CNPq (PQ 303903/2019-8).

## Résumé

Sherwood D., Lucas S.M. & Brescovit A. D., 2023. – *Paratropis tortue* n. sp., une nouvelle espèce de Guyane (Araneae: Paratropididae). *Faunitaxys*, 11(10): 1–3.

Une nouvelle espèce du genre *Paratropis* Simon, 1889, *P. tortue* n. sp., est décrite de la Réserve biologique des Petites Montagnes Tortue en Guyane, basée sur un holotype mâle.

Mots-clés. – Araneae, Paratropididae, *Paratropis*, taxonomie, morphologie, biogéographie, nouvelle espèce, description, Guyane.

## References

- Almeida M. Q. & Morais J. W. de, 2022. – A new species of *Paratropis* Simon, 1889 (Araneae: Paratropididae) from Guyana. *EntomoBrasilis*, 15(e1004): 1-5.
- Caporiacco L. di, 1955. – Estudios sobre los arácnidos de Venezuela. 2a parte: Araneae. *Acta Biologica Venezuelica*, 1: 265-448.
- Dupérré N. & Tapia E., 2020. – On the putatively incorrect identification and "redescription" of *Paratropis elicioi* Dupérré 2015 (Paratropididae, Araneae) with the description of two new sympatric species from Ecuador. *Zootaxa*, 4869(3): 326-346.
- Lalagüe H., 2021. – *Inventaire des mygales (Mygalomorphae) de la Réserve Naturelle Régionale Trésor*. Technical report, available online at: <https://www.reserve-tresor.fr>
- Mello-Leitão C. F. de, 1923. – Theraphosidae do Brasil. *Revista do Museu Paulista*, 13: 1-438.
- Perafán C., Galvis W. & Pérez-Miles F., 2019. – The first Paratropididae (Araneae, Mygalomorphae) from Colombia: new genus, species and records. *ZooKeys*, 830: 1-31.
- Pickard-Cambridge F. O., 1896. – On the Theraphosidae of the lower Amazons: being an account of the new genera and species of this group of spiders discovered during the expedition of the steamship "Faraday" up the river Amazons. *Proceedings of the Zoological Society of London*, 64(3): 716-766, pl. 33-35.
- Sherwood D., Lucas S. M. & Brescovit A. D., 2022. – Redescription of the holotype female of *Anisaspidoides gigantea* F. O. Pickard-Cambridge, 1896 with discussion and typification of *Anisaspidoides tuberculata* Simon, 1892 (Araneae: Paratropididae). *Revista Ibérica de Aracnología* 41: 91-95.
- Simon E., 1889. – Voyage de M. E. Simon au Venezuela (Décembre 1887–Avril 1888). 4e Mémoire. Arachnides. *Annales de la Société Entomologique de France*, (6) 9: 169-220, pl. 12-13.
- World Spider Catalog, 2023. – *World Spider Catalog, version 23.5*. Natural History Museum Bern, online at: <http://wsc.nmbe.ch>

## Derniers articles publiés

Trócoli S., 2023. – Una nueva especie del género *Vesperella* Dayrem (Coleoptera, Cerambycidae) de Marruecos. *Faunitaxys*, 11(5): 1–5. [https://doi.org/10.57800/faunitaxys-11\(5\)](https://doi.org/10.57800/faunitaxys-11(5))

Trócoli S., 2023. – Dos nuevas especies del género *Hestimoides* Breuning (Coleoptera, Cerambycidae) de Islas Salomón. *Faunitaxys*, 11(6): 1–4. [https://doi.org/10.57800/faunitaxys-11\(6\)](https://doi.org/10.57800/faunitaxys-11(6))

Delahaye N., Coache A., Le Gall P. & Filippi G., 2023. – Catalogue illustré des Cerambycidae de São Tomé & Príncipe (Coleoptera). *Faunitaxys*, 11(7): 1–54. [https://doi.org/10.57800/faunitaxys-11\(7\)](https://doi.org/10.57800/faunitaxys-11(7))

Ythier E. & Lourenço W. R., 2023. – Two new scorpion species from Central Saudi Arabia (Scorpiones: Buthidae). *Faunitaxys*, 11(8): 1–8. [https://doi.org/10.57800/faunitaxys-11\(8\)](https://doi.org/10.57800/faunitaxys-11(8))

Keith D., 2023. – Description d'espèces nouvelles du genre *Miridiba* Reitter, 1902 du Laos (Coleoptera: Scarabaeidae, Melolonthinae, Rhizotrogini). *Faunitaxys*, 11(9): 1–9. [https://doi.org/10.57800/faunitaxys-11\(9\)](https://doi.org/10.57800/faunitaxys-11(9))

# Faunitaxys

Volume 11, Numéro 10, Janvier 2023

## SOMMAIRE

*Paratropis tortue* n. sp., une nouvelle espèce de Guyane (Araneae: Paratropididae).

*Danniella Sherwood, Sylvia M. Lucas & Antonio D. Brescovit* ..... 1 – 3

## CONTENTS

*Paratropis tortue* sp. nov., a new species of mud spider from French Guiana (Araneae: Paratropididae).

*Danniella Sherwood, Sylvia M. Lucas & Antonio D. Brescovit* ..... 1 – 3



### *Illustration de la couverture :*

La **Tortue luth** (*Dermochelys coriacea*), unique représentant du genre *Dermochelys*, est la plus grande espèce répertoriée. On la trouve en haute mer dans les différents océans du globe. Son déclin en Guyane est observé depuis maintenant plus de 10 ans. On compte seulement cinq sites de ponte majeurs répartis sur 1 145 km de côtes du Guyana à la Guyane.

Crédits:

**Danniella Sherwood:** 1-8.