A new species of *Paratropis* Simon, 1889 (Araneae: Paratropididae) from Guyana

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**Abstract.** A new species of *Paratropis* is herein described and illustrated, namely: *Paratropis minusculus* n. sp. based on males, females and immatures from Potaro-Siparuni, Guyana. Male and female of *P. minusculus* differ from those of all other species of the genus by having six eyes and by spinneret apical segment domed. In addition, we presented the first record of paratropidid species from Guyana, contribute to the knowledge of local biodiversity.

**Keywords:** Arachnida; biodiversity; Neotropics; taxonomy.

The spiders of the family Paratropididae Simon, 1889 are found in the American continent, however, its distribution is only known in eight countries: Brazil, Colombia, Ecuador, Mexico, Panama, Peru, Saint Vincent and Venezuela and is represented by four genera: *Anisaspis* Simon, 1892; *Anisaspoides* F.O. Pickard-Cambridge, 1896; *Paratropis* Simon, 1889 and *Stormtropis* Perafán, Galvis & Pérez-Miles, 2019 (*World Spider Catalog* 2022).

The genus *Paratropis* is composed of six species and can be diagnosed in the family Paratropididae by soil encrusted on body, eye tubercle highly elevated, legs I of male without tibial spur, claw tufts absent and by having four spinnerets (*Raven* 1985, 1999; *Perafán* et al. 2019; *Duperre & Tapia* 2020).

The paratropidids are small and fossorial spiders of biology and ecology still little known. They can be found in rainforests, cave, near a stream river, and in montane forests, in microhabitat as under fallen logs and under boulders on the ground (*Raven* 1999; *Bertani* 2013; *Valdez-Mondragón* et al. 2014; *Duperre* 2015; *Perafán* et al. 2019; *Duperre & Tapia* 2020).

The present work aims to describe a new species of *Paratropis* named here *Paratropis minusculus* n. sp. based on males, females and immatures from Potaro-Siparuni, Guyana. In addition, we present the first record of a paratropidid species from Guyana, contributing to the knowledge of the country biodiversity.

**MATERIAL AND METHODS**

Specimens were examined in 70% ethanol using a stereomicroscope Leica M80. All photographs and measurements were taken under stereomicroscope Leica M205A and a Leica application suite V4.10. All measurements are in millimeters. The left male palp was featured and illustrated in prolateral, ventral and retrolateral view. After dissection, female spermathecae were cleaned in clove oil (pure) for 30 minutes.

The total length was taken with the spider in the dorsal position. It was measured from the clypeus edge to posterior end of the abdomen. Chelicerae and spinnerets were not included.

The specimens are deposited at the Museum of Comparative Zoology (MCZ) of Harvard University, Cambridge, USA. The description and terminology follow *Raven* (1999) with some modifications proposed by *Bertani* (2013). Abbreviations used in the descriptions and illustrations: (ALE) anterior lateral eyes, (AME) anterior median eyes, (ITC) inferior tarsal claw, (PLE) posterior lateral eyes, (PLS) posterior lateral spinnerets, (PME) posterior median eyes, (PMS) posterior median spinnerets, (MCZ) Museum of Comparative Zoology, Harvard University, Cambridge, USA, (STC) superior tarsal claw.

**RESULTS**

**Family Paratropididae, Simon, 1889**

**Genus Paratropis** Simon, 1889
Type species. *Paratropis scruposa* Simon, 1889.

**Composition.** *Paratropis elici* Dupérré, 2015, *Paratropis florezi* Perafán, Galvis & Pérez-Miles, 2019, *Paratropis otonga*, Dupérré & Tapia, 2020, *Paratropis papilligera* F.O.P. Cambridge, 1896, *Paratropis pristirana* Dupérré & Tapia, 2020, *Paratropis sanguinea* Mello-Leitão, 1923, *Paratropis scruposa* Simon, 1889, *P. seminermis* Caporiacco, 1955, *P. tuxtlensis* Valdez-Mondragón, Mendoza & Francke, 2014.

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**Table 1.** Length of legs and palpal segments of *Paratropis minusculus* n. sp. (♀ MCZ 47063).

|    | Femur | Patella | Tibia | Metatarsus | Tarsus | Total |
|----|-------|---------|-------|------------|--------|-------|
| Palp | 0.48  | 0.24    | 0.27  | -          | 0.16   | 1.15  |
| I   | 0.72  | 0.36    | 0.61  | 0.70       | 0.31   | 2.70  |
| II  | 0.70  | 0.36    | 0.49  | 0.54       | 0.31   | 2.40  |
| III | 0.60  | 0.31    | 0.37  | 0.50       | 0.32   | 2.09  |
| IV  | 0.81  | 0.36    | 0.56  | 0.83       | 0.37   | 2.93  |

**Table 2.** Length of legs and palpal segments of *Paratropis minusculus* n. sp. (♂ MCZ 47061).

|    | Femur | Patella | Tibia | Metatarsus | Tarsus | Total |
|----|-------|---------|-------|------------|--------|-------|
| Palp | 0.47  | 0.33    | 0.26  | -          | 0.39   | 1.45  |
| I   | 0.76  | 0.38    | 0.50  | 0.48       | 0.27   | 2.39  |
| II  | 0.71  | 0.35    | 0.45  | 0.47       | 0.29   | 2.27  |
| III | 0.52  | 0.30    | 0.35  | 0.49       | 0.32   | 1.98  |
| IV  | 0.64  | 0.34    | 0.61  | 0.73       | 0.38   | 2.70  |
Figures 1-7. *Paratropis minusculus* n. sp., male. (1) habitus, dorsal view; (2) sternum, labium and maxillae; 3-4 left palp, (3) prolateral view; (4) retrolateral view. (5-6) Spinnerets; (7) ocular tubercle. Scale bars: 1-2 = 0.3 mm; 3-4 = 0.5 mm; 5-7 = 0.1 mm.
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distal; mid-widths (lateral) 0.17, 0.15, 0.11, respectively, apical segment domed.

Natural history: All specimens were collected in the rainforest soil with the method miniWinkler in a forest at 490-575m of elevation on Potaro-Sinapuni region, Guyana.

Distribution: Known only from the type locality, Potaro-Sinapuni region, Guyana.

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