

ARTÍCULO:

**On *Loxosceles anomala* (Mello-Leitão)
(Araneae: Sicariidae)**

Éder S. S. Álvares¹

Taissa Rodrigues²

& Mário De Maria²

¹ Graduation, Departamento de Zoologia, Instituto de Biociências, Universidade de São Paulo. Correspondence to: Laboratório de Artrópodes, Instituto Butantan, Av. Vital Brasil, 1500, CEP 05503-900, São Paulo, SP, Brazil.

essalvares@yahoo.com.br.

² Laboratório de Aracnologia, Departamento de Zoologia, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais. Av. Antonio Carlos, 6627, Pampulha, CEP 31270-901, Caixa Postal 486, Belo Horizonte, MG, Brazil.

aracnologia_ufmg@yahoo.com.br.

Revista Ibérica de Aracnología

ISSN: 1576 - 9518.

Dep. Legal: Z-2656-2000.

Vol. **10**, 31-XII-2004

Sección: Artículos y Notas.

Pp: 293-295.

Edita:

Grupo Ibérico de Aracnología (GIA)

Grupo de trabajo en Aracnología de la Sociedad Entomológica Aragonesa (SEA)

Avda. Radio Juventud, 37
50012 Zaragoza (ESPAÑA)

Tef. 976 324415

Fax. 976 535697

C-elect.: amelic@telefonica.net

Director: A. Melic

Indice, resúmenes, abstracts vols. publicados:

<http://entomologia.rediris.es/sea/publicaciones/ria/index.htm>

Página web GIA:

<http://entomologia.rediris.es/gia>

Página web SEA:

<http://entomologia.rediris.es/sea>

ARTÍCULO:

ON *LOXOSCELES ANOMALA* (MELLO-LEITÃO) (ARANEAE: SICARIIDAE)

Éder S. S. Álvares, Taissa Rodrigues
& Mário De Maria

Abstract:

Loxosceles anomala (Mello-Leitão), from Minas Gerais, Brazil, is redescribed. This species is the fourth representative of the *spadicea* group. Drawings are presented of the female spermathecae and male palp.

Key words: Araneae, Sicariidae, *Loxosceles anomala*, Brazil, Minas Gerais.

Sobre *Loxosceles anomala* (Mello-Leitão) (Araneae: Sicariidae)

Resumen:

Se redescribe *Loxosceles anomala* (Mello-Leitão), de Minas Gerais, Brasil. Se presentan dibujos de las espermatecas de la hembra y del palpo del macho.

Palabras clave: Araneae, Sicariidae, *Loxosceles anomala*, Brasil, Minas Gerais.

Introduction

The genus *Loxosceles* Heineken & Lowe, 1832 comprises 100 species (Platnick, 2004) which are commonly known as brown spiders (“aranha-marrom” in Brazil), recluse spiders or violin spiders.

Gertsch (1967) reviewed the South American species of *Loxosceles*, dividing them in four nominal groups based on morphological characters of the genitalia: *gaucho* group, *laeta* group, *amazonica* group and *spadicea* group. Mello-Leitão (1917) described the genus *Calheirosia* in the family Leptonetidae including two species from Brazil, the type-species *C. anomala*, collected in Belo Horizonte, Minas Gerais, and *C. immodesta*, from São Paulo, São Paulo. Brignoli (1978) transferred this genus to Sicariidae and synonymized it with *Loxosceles*. As Gertsch (1967) reviewed the genus *Loxosceles* before Brignoli studied *Calheirosia*, both species were not included in Gertsch’s work.

The type specimens of *L. anomala* were not located in any brazilian collection, and are presumably lost. Examining spiders of the genus *Loxosceles* collected in Belo Horizonte and Santana do Riacho, Minas Gerais, we discovered some specimens that can be identified as *L. anomala* basing on the original description of Mello-Leitão (1917). In this paper we redescribe this species basing on this specimens.

Material & Methods

The specimens examined are deposited in LAMG, Laboratório de Aracnologia, Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brazil (M. De Maria) and in IBSP, Instituto Butantan, São Paulo, SP, Brazil (A.D. Brescovit).

The terminology follows Gertsch (1967). All the measurements were taken in millimeters.

Abbreviations: PME, posterior median eyes; ALE, anterior lateral eyes and PLE, posterior lateral eyes.

Results-Systematics

Loxosceles anomala (Mello-Leitão, 1917) Figs. 1-4

Calheirosia anomala Mello-Leitão, 1917: 80, f. 4-6 (Two females and one male syntypes from Belo Horizonte, Minas Gerais, Brazil, in Mello-Leitão’s Private Collection, should be in the Museu Nacional do Rio de Janeiro, Rio de Janeiro, not found, probably lost); Petrunkevitch, 1928: 108; Roewer, 1942: 311; Bonnet, 1956: 927;

Loxosceles anomala: Brignoli, 1978: 18; – Platnick, 2004.

DIAGNOSIS. The males can be easily distinguished by the bulb with a median constriction, giving it an eight-like shape in retrolateral view, and by the presence of a well-developed tegular projection parallel to the base of embolus (Figs. 1, 2). The females are distinguished by the large oval spermathecae placed apart two to three times their diameter to each other (Fig. 4).

DESCRIPTION:

MALE. Carapace yellowish; cephalic region orange; black region around the eyes. Sternum and coxae yellowish. Labium and endites orange. Chelicerae brown. Legs: femur, patella and tibia yellowish; metatarsus and tarsus orange. Palpus: femur yellowish; patella and tarsus orange; tibia with basal area orange and distal area yellowish. Abdomen: dorsum and lateral dark gray; ventrally light gray. Spinnerets yellowish. Total length: 4.41. Carapace: length 1.99; width 1.76. Eye diameter: PME 0.13; ALE 0.13, PLE 0.11. Interdistances: PME-PME 0.03; ALE-PLE 0.04; PME-ALE 0.10; ALE-ALE 0.46; PLE-PLE 0.62. Clypeus height: 0.27. Leg I: femur 3.19 / patella 0.67 / tibia 3.36 / metatarsus 3.32 / tarsus 1.09 / total 11.63. Leg II: 4.16 / 0.71 / 4.70 / 4.96 / 1.51 / 16.04. Leg III: 3.15 / 0.67 / 2.86 / 3.27 / 0.78 / 10.73. Leg IV: 3.61 / 0.67 / 3.44 / 4.03 / 0.88 / 12.64. Leg formula: 2413. Palp: embolus thin, shorter than diameter of bulb and with a carina that encircles apex of bulb; tibia more than two times longer than width.

FEMALE. Coloration as in male, except palpus with patella yellowish and tibia orange. Total length: 5.54. Carapace: length 2.31; width 1.93. Eye diameter: PME 0.16; ALE 0.15, PLE 0.14. Interdistances: PME-PME 0.04; ALE-PLE 0.04; PME-ALE 0.16; ALE-ALE 0.59; PLE-PLE 0.81. Clypeus height: 0.33. Leg I: femur 2.39 / patella 0.67 / tibia 2.35 / metatarsus 2.27 / tarsus 1.18 / total 8.86. Leg II: 2.60 / 0.71 / 2.60 / 2.56 / 0.97 / 9.45. Leg III: 2.35 / 0.63 / 1.97 / 2.18 / 0.73 / 7.87. Leg IV: 2.73 / 0.67 / 2.65 / 2.90 / 0.80 / 9.74. Leg formula: 4213. Spermathecae: oval shape, with long and sinuous tubular ducts that open in a blind sac.

VARIATION: Measurements: Seven females. Total length: 4.28 – 6.76. Carapace length: 2.11 – 2.57, width: 1.64 – 2.34.

OTHER MATERIAL EXAMINED. BRAZIL. Minas Gerais: Santana do Riacho, Parque Nacional da Serra do Cipó, 19° 21' S, 43° 34' W, VII.2003, E.S.S. Álvares col., 1 ♂ (IBSP 45201), 1 ♀ (IBSP 45202) and 3 juv (LAMG 1330). Belo Horizonte, Estação Ecológica da UFMG, 19° 52' S 43° 58'W, V.1999, E.S.S. Álvares col., 1 ♀ (LAMG 895); Cidade Jardim, 25.III.2003, E.O. Machado et al. col. 7 ♀♀ and 9 juv (LAMG 1331; LAMG 1332).

Discussion

The identification of this species were made by comparisons with drawings and original description of Mello-Leitão (1917), specially with the color pattern and the length of the specimens. Besides, female specimens were found in Belo Horizonte, the type locality of *L. anomala*. This species can be placed in the *spadicea* group, based on the presence of a carina at base of embolus and by spermathecae placed more than two times their diameter apart, with long tubular ducts.

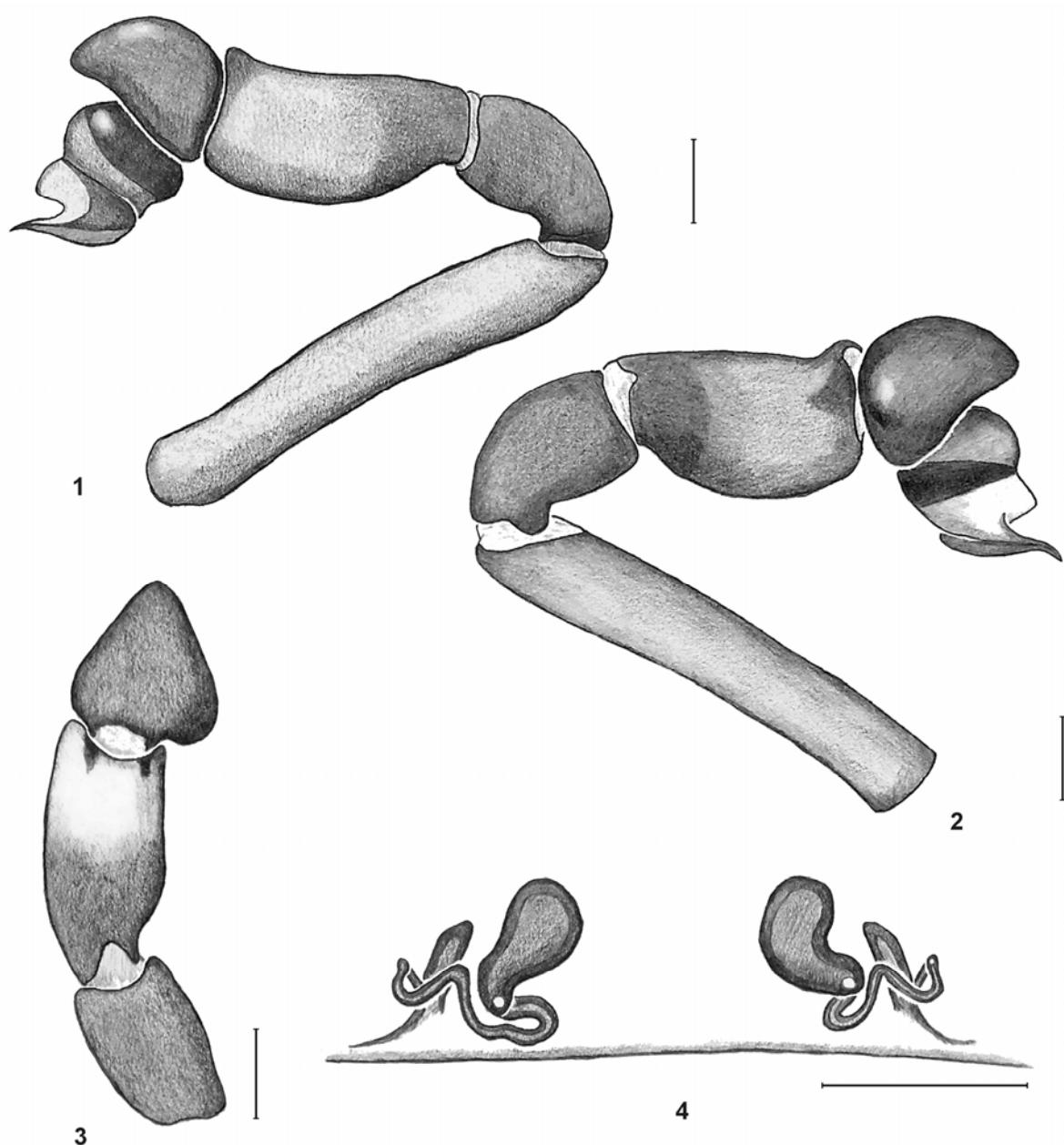
The specimens from Parque Nacional da Serra do Cipó were found underneath some tiles from the remains of an old house. The spiders from Belo Horizonte were collected inside houses and in an urban reserve (Estação Ecológica da Universidade Federal de Minas Gerais). In this city, this species is sympatric with *L. laeta* Nicolet and *L. similis* Moenkhaus. The fact that some specimens were collected in the wild may indicate that *L. anomala* concerns a native species in the state of Minas Gerais.

Acknowledgments

We thank E.O. Machado and A.D. Brescovit for reviewing the manuscript. ESSA also would like to thank FAPESP for the financial support (grant number 02/11275-6).

References

- BONNET, P. 1956. *Bibliographia araneorum*. Toulouse, 2(2): 919-1926.
- BRIGNOLI, P. M. 1978. Spinnen aus Brasilien, II. Vier neue Ochyroceratidae aus Amazonas nebst Bemerkungen über andere Amerikanische Arten (Arachnida: Araneae). *Studies on Neotropical Fauna & Environment*, 13: 11-21.
- GERTSCH, W. J. 1967. The spider genus *Loxosceles* in South America (Araneae, Scytodidae). *Bulletin of the American Museum of Natural History*, 136(3): 117-174.
- MELLO-LEITÃO, C. F. DE 1917. Notas arachnologicas. 5, Espécies novas ou pouco conhecidas do Brasil. *Brotéria*, 15: 74-102.
- PETRUNKEVITCH, A. 1928. Systema Aranearium. *Transactions of Connecticut Academy of Arts and Science*, 29: 1-270.
- PLATNICK, N. I. 2004. *The World Spider Catalog*, Version 5.0. American Museum of Natural History, online at <http://research.amnh.org/entomology/spiders/catalog/INTRO1.html>.
- ROEWER, C. F. 1942. *Katalog der Araneae von 1758 bis 1940*. Bremen, 1: 1-1040.



Figs 1-4. *Loxosceles anomala* (Mello-Leitão). **1.** male, left palpus, retrolateral view. **2.** male, left palpus, prolateral view. **3.** male, left palpus, dorsal view. **4.** female, spermathecae, dorsal view. Scale lines = 0,1 mm.