

On the genus *Psalistopoides* Mello-Leitão (Araneae, Mygalomorphae, Nemesiidae)

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ABSTRACT. The genus *Psalistopoides* Mello-Leitão, 1934, previously a junior synonym of *Pselligmus* Simon, 1892, is revalidated. *Psalistopoides fulvimanus* Mello-Leitão, 1934 is redescribed and new distribution records are presented. In addition, *P. emanueli* **sp. nov.** is described from the State of Paraná, Brazil.

KEY WORDS. Atlantic Forest; *Psalistopoides emanueli* **sp. nov.**; *Psalistopoides fulvimanus*; Pycnothelinae.

RESUMO. Sobre o gênero *Psalistopoides* Mello-Leitão (Araneae, Mygalomorphae, Nemesiidae). O gênero *Psalistopoides* Mello-Leitão, 1934, considerado anteriormente sinônimo junior de *Pselligmus* Simon, 1892, é revalidado. *Psalistopoides fulvimanus* Mello-Leitão, 1934 é redescrita e novos registros de sua distribuição são apresentados. *Psalistopoides emanueli* **sp. nov.** é descrita para o Estado do Paraná, Brasil.

PALAVRAS-CHAVE. Mata Atlântica; *Psalistopoides emanueli* **sp. nov.**; *Psalistopoides fulvimanus*; Pycnothelinae.

The genus *Psalistopoides* was proposed by MELLO LEITÃO (1934) to include *P. fulvimanus* Mello-Leitão, 1934, described from Alto da Serra de Paranapiacaba, Santo André, São Paulo, Brazil, based on a single male specimen. The species was synonymized with *Neostothis gigas* Vellard, 1924 by BÜCHERL *et al.* (1971), and thus *Psalistopoides* was placed as a junior synonym of *Neostothis* Vellard, 1924. Two years later, after studying the type material deposited in the Collection of the Instituto Butantan, São Paulo. LUCAS & BÜCHERL (1973) confirmed the validity of *P. fulvimanus* and, based on the absence of claw tufts and labiosternal suture, and the presence of four spinnerets and scopulae on all tarsi, transferred the revalidated *Psalistopoides* from Barychelidae to Pycnothelidae.

RAVEN (1985) synonymized *Psalistopoides* with *Pselligmus* Simon, 1892 based on the absence of a third claw on tarsi I-III and the weak scopulae on the legs. However, GOLOBOFF (1995) suggested that *Pselligmus* is represented solely by *P. infaustus* Simon, 1892 and that *Psalistopoides* could either be a valid genus or a junior synonym of *Stenoterommata* Holmberg, 1888. Goloboff's suggested that *Psalistopoides* "lacks tibial scopulae and has a longer apical article of the posterior lateral spinnerets".

After studying the type specimen of *Psalistopoides fulvimanus* and specimens deposited in the collections of the Instituto Butantan, São Paulo, and Secretaria de Saúde do Estado do Paraná, Curitiba, we consider that *Psalistopoides* is a valid genus and thus present additional information on its description and enhance the geographical distribution. In addition, we describe a new species from Ribeirão do Pinhal, Paraná, Brazil, increasing to two the number of species of the genus.

MATERIAL AND METHODS

The material examined is deposited in the following institutions (abbreviation and curator in parenthesis): Instituto Butantan, São Paulo (IBSP, A.D. Brescovit) and Centro de Produção e Pesquisa de Imunobiológicos, Secretaria de Estado da Saúde do Paraná, Curitiba (CPPI, E. Marques da Silva). Spine notation follows INDICATTI & LUCAS (2005). All measurements are in millimeters. Abbreviations: (AME) anterior median eyes, (ALE) anterior lateral eyes, (PLE) posterior lateral eyes, and (PME) posterior median eyes.

Psalistopoides Mello-Leitão, 1934

Figs 1-3

Psalistopoides Mello-Leitão, 1934: 403, figs 3-4, type-species by original designation and monotypy, *Psalistopoides fulvimanus* Mello-Leitão, 1934; Petrunkevitch, 1939: 300; Roewer, 1942: 222; Bonnet, 1958: 3797; Bücherl *et al.*, 1971: 127 (synonymized with *Neostothis* Vellard, 1924); Lucas & Bücherl, 1973: 240, fig. 2 (revalid).

Pselligmus Simon, 1892: 273; Raven, 1985: 107, figs 148-156 (syn.); Goloboff, 1995: 30; Platnick, 2006.

Diagnosis. Species of the genus *Psalistopoides* differ from those of the other genera of Pycnothelinae by the following characteristics: from *Neostothis* and *Prorachias* Mello Leitão, 1924 by the presence of keels close to the embolus; from *Pselligmus* by the presence of tarsal scopulae on legs III and IV; from *Stenoterommata* Holmberg, 1888 by the absence of a megaspine on tibia I and the aspect of the palpal bulb; from *Rachias* Simon, 1892, by the absence of spines on all tarsi on posterior legs and

from *Pycnothele* Chamberlin, 1917 by the longer embolus.

Psalistopoides fulvimanus Mello-Leitão, 1934

Figs 1-3

Psalistopoides fulvimanus Mello-Leitão, 1934: 404, figs 3-4, (male holotype from Alto da Serra de Paranapiacaba, Santo André, São Paulo, Brasil, deposited in IBSP 3428, examined (previously number 18); Petrunkevitch, 1939: 300; Roewer, 1942: 222; Bonnet, 1958: 3797; Bücherl *et al.*, 1971: 127 (synonymized with *Neostothis gigas* Vellard, 1924); Lucas & Bücherl, 1973: 240, fig 2 (revalid).

Pselligmus fulvimanus, Raven 1985: 107, figs 148-156 (new combination); Goloboff 1995: 30; Platnick 2006.

Diagnosis. The males of *Psalistopoides fulvimanus* differ from those of *P. emanueli* sp. nov. by the apical area of the embolus, wider and more curved (Figs 1 and 2).

Description. Male (holotype). Coloration pattern: carapace and legs brown. Abdomen brown. Total length, excluding chelicerae, 21.00. Carapace 11.00 long, 10.00 wide, with fovea short and procurved. Clypeus present, narrow, 3.75. Overall shape of eye group trapezoidal, wider than long in ratio. Anterior eye row procurved, posterior slightly recurved. AME as large as ALE, ALE larger than PLE and PME smaller than PLE. Basal segment of chelicerae with nine teeth in a row and rastellum with very strong setae. Intercheliceral tumescence large and pale, covered by few hairs. Labium 1.10 long, 2.00 wide, with two cuspules. Each endite with 45 cuspules. Sternum 5.30 long, 4.70 wide. Posterior sternal sigilla median and submarginal. Palp, measurements: femur 5.36/ patella 2.80/ tibia 4.00/ cymbium 2.05/ total 14.21; spination: femur d0-0-2, patella p1, tibia d0-0-2, v0-0-1, p0-2-3, cymbium 0. Legs: measurements: I: femur 10.48/ patella 4.96/ tibia 7.36/ metatarsus 9.36/ tarsus 5.76/ total 37.92; II: 9.68/5.08/ 7.28/9.28/5.76/37.08; III: 8.80/4.56/6.32/10.32/5.76/35.76; IV: 9.68/5.12/8.96/12.24/6.56/42.56; spination: I: femur d1-3-5, patella r1, tibia v2-4-0 (3ap), r0-1-1, megaspine absent, metatarsus r0-1-0, v2-2-1 (3ap), p0-1-0; II: femur d2-3-4, patella p2, tibia v2-3-0 (3ap), p0-1-0, metatarsus d0-1-0, r0-1-0, v2-2-1 (3ap); III: femur d0-5-2, patella d1, p2, tibia d3-3-3, v2-3-0 (3ap), r0-1-0, p1-0-1, metatarsus d3-2-2, v2-1-2 (3ap), p0-1-1; IV: femur d1-2-5, patella r1, tibia d1-0-1, r0-1-1, v2-3-1 (3ap), p0-1-0, metatarsus d2-6-3, v1-2-4 (3ap), p0-1-0, r0-1-1. Scopulae of tarsi II, III, IV divided by a row of thin setae. Third claw present on tarsus IV. Superior tarsal claws large with a double row of six to eight teeth each. Four spinnerets. Apical segment of the posterior lateral spinnerets short, triangular. Palp with elongate tibia. Embolus distally twisted at 180° with conspicuous opening at tip (Fig. 2).

Female. Unknown.

Variation. Coloration pattern of the abdomen can be dark brown with no stains or dark brown with randomly distributed stains. Total length 21.00-22.80. Labium with 2-5 cuspules and endites with 45-50.

Distribution. South and Southeastern Brazil, states of São Paulo and Paraná.

Other material examined. BRAZIL, São Paulo: Santo André (Alto da Serra de Paranapiacaba), 1 male, 1933 (IBSP 12352), 4 males, (IBSP 3716), Primavera (Usina Hidrelétrica Engenheiro Sérgio Motta), 1 male, XII.1998, I. Knysak & R. Martins *leg.* (IBSP 10510). Paraná: Jacarézinho, 1 male, 24.X.1997 (CPPI 1031); 1 male, 03.XI.1997 (IBSP 10953); 1 male, XII.1997, M.E. Souza *leg.* (CPPI 1041), Curiúva (Fazenda Figueira), 1 male, V.1973 (IBSP 2168B).

Psalistopoides emanueli sp. nov.

Figs 4-6

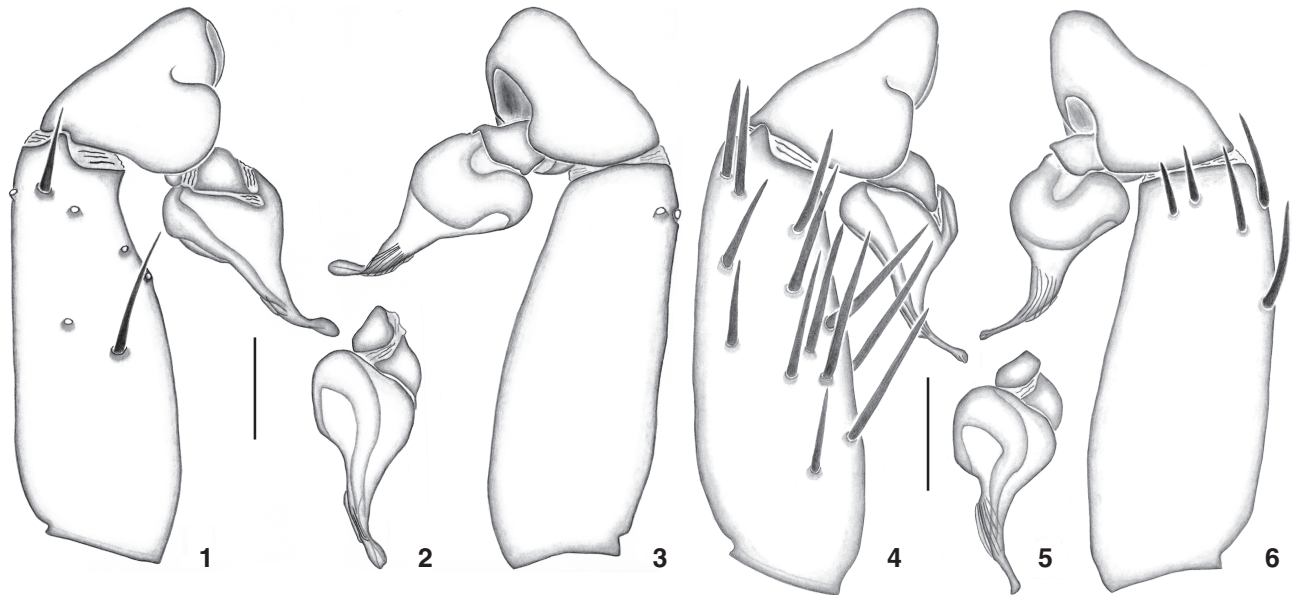
Types. Male holotype from BRAZIL, Paraná: Ribeirão do Pinhal, 19.X.2004, J. Baherra *leg.*, deposited in IBSP 10994. Male paratype with the same data as holotype (CPPI 1501).

Etymology. The specific name patronym in honour of Emanuel Marques da Silva, curator of the collection of the Centro de Produção e Pesquisa de Imunobiológicos, Secretaria de Estado da Saúde do Paraná, Coleção Aracnológica Vera Regina von Eickstedt, Curitiba.

Diagnosis. The males of *Psalistopoides emanueli* sp. nov. differ from those of *P. fulvimanus* by the apical area of the embolus, thinner and less dilatated at tip (Figs 4-6).

Description. Male (holotype). Coloration pattern: carapace and legs dark brown. Abdomen brown with randomly distributed stains. Total length, excluding chelicerae, 18.30. Carapace 9.60 long, 7.90 wide, with fovea short and procurved. Clypeus present, narrow, 2.50. Overall shape of eye group trapezoidal, wider than long in ratio. Anterior eye row procurved, posterior slightly recurved. AME smaller than ALE, ALE larger than PLE and PME larger than PLE. Basal segment of chelicerae with eight teeth in a row and rastellum with very strong setae. Intercheliceral tumescence large, pale covered by few hairs. Labium 0.90 long, 1.70 wide, with three cuspules. Each endite with 63 cuspules. Sternum 4.40 long, 3.60 wide. Posterior sternal sigilla median and submarginal. Palp, measurements: femur 4.56/ patella 1.60/ tibia 2.32/ cymbium 2.00/ total 10.48; spination: femur d0-0-5, patella 0, tibia d0-1-2, r0-0-2, v1-3-1, p3-4-1, cymbium 0. Legs, measurements: I: femur 8.40/ patella 4.49/ tibia 7.20/ metatarsus 7.78/ tarsus 5.12/ total 32.99; II: 8.56/4.32/6.40/7.77/5.12/32.17; III: 7.36/3.76/5.08/8.24/4.04/29.48; IV: 9.65/4.64/7.88/10.45/5.76/38.38; spination: I: femur d1-2-5, patella d2, tibia r1-1-0, v4-4-0 (3ap), p1-1-1, megaspine absent, metatarsus d1-2-0, r0-1-0, v2-1-0 (2ap); II: femur d3-4-3, patella d2, tibia d1-1-1, v2-3-0 (3ap), p0-1-0, metatarsus d1-2-1, r0-1-0, v2-2-0 (3ap); III: femur d4-3-3, patella d3, tibia d3-0-3, v2-2-0 (3ap), metatarsus d4-4-4, v2-2-0 (4ap); IV: femur d1-5-3, patella 0, tibia d3-3-2, v2-2-0 (3ap), metatarsus d4-5-4, v3-1-3 (3ap), p0-1-1. Scopulae of tarsi II, III, IV divided by a row of thin setae. Third claw present on tarsus IV. Superior tarsal claws large with a double row of six to eight teeth each. Four spinnerets. Apical segment of the posterior lateral spinnerets short, triangular. Palp with elongate tibia. Embolus distally twisted at a 30° angle and with an inconspicuous opening (Figs 4-6).

Female. Unknown.



Figures 1-6. (1-3) *Psalistopoides fulvimanus*, male palpal bulb: (1) prolateral view; (2) dorsal view; (3) retrolateral view. (4-6) *Psalistopoides emanueli* sp. nov., male palpal bulb: (4) prolateral view; (5) dorsal view; (6) retrolateral view. Scale bars = 1 mm.

Variation. Total length 18.30-23.65. Labium with 3-5 cuspules.

Distribution. Only known from the type-locality.

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