

ARTÍCULO:

The first new species of *Neonella* Gertsch from Brazil (Araneae: Salticidae)

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ARTÍCULO:

THE FIRST NEW SPECIES OF *NEONELLA* GERTSCH FROM BRAZIL (ARANEAE: SALTICIDAE)

Gustavo R. S. Ruiz & Antonio D. Brescovit

Abstract:

Neonella salafraria sp. n. is described from the caatinga of Canindé do São Francisco, State of Sergipe, Brazil, becoming the first species of *Neonella* to be described from this country. This species is similar to *N. camillae* Edwards, from the United States of America, and to *N. mayaguez* Galiano, from Puerto Rico, because of its well-developed embolus, which curls retrolaterally on the distal half of the cymbium, and the elongated spermathecae.

Key words: Araneae, Salticidae, *Neonella*, taxonomy, Brazil.

Taxonomy: *Neonella salafraria* sp. n.

La primera nueva especie de *Neonella* de Brasil (Araneae: Salticidae)

Resumen:

Se describe *Neonella salafraria* sp. n. de la caatinga de Canindé do São Francisco, estado de Sergipe, Brasil, convirtiéndose en la primera especie de *Neonella* que se describe de este país. Esta especie es similar a *N. camillae* Edwards, de Estados Unidos, y a *N. mayaguez* Galiano, de Puerto Rico, por su émbolo bien desarrollado, que se espiraliza retrolateralmente sobre la mitad distal del cimbio, y por las espermatecas alargadas.

Palabras clave: Araneae, Salticidae, *Neonella*, taxonomía, Brasil.

Taxonomía: *Neonella salafraria* sp. n.

Introduction

The genus *Neonella* was described by Gertsch (1936) to include *N. vinnula* Gertsch, 1936, described from the United States of America. The second species of this genus, *N. minuta*, was described by Galiano (1965), from Argentina. Galiano (1988) also described *N. antillana* from Jamaica, *N. montana* from Argentina and *N. lubrica* and *N. nana* from Paraguay, and, a decade later, *N. cabana* and *N. colalao* from Argentina and *N. mayaguez* from Puerto Rico (Galiano, 1998). The last species to be proposed was *N. camillae*, described by Edwards (2002) from the United States of America.

Species of the genus *Neonella* are among the smallest known jumping spiders, with adults reaching generally less than 2 mm in body length (Edwards, 2002). They are diagnosed by two putative synapomorphies, the presence of a basal conical tegular projection on the male palp (see *N. vinnula* Gertsch, 1936, fig. 28) and the peculiar flattened carapace, with a posterior uniform narrowing beginning behind the posterior lateral eyes (see *N. antillana* Galiano, 1988, fig. 1). The male of *Neonella salafraria* sp. n. is similar to that of *N. camillae*. These species have a well developed embolus that curls retrolaterally on the distal half of the cymbium, and two patellar projections, seen also in *N. colalao* and *N. cabana* (a single projection), although these two species show reduced embolus, with a basal branched structure. The female of *Neonella salafraria* sp. n. is similar to both *N. camillae* and *N. mayaguez*, having elongated spermathecae. The male of the latter remains unknown.

The specimens examined were collected with pitfall traps in the Brazilian Caatinga, a phytogeographic region characterized by a very hot and dry climate and sparse vegetation (Ab'Saber, 1977; Joly *et al.*, 1999). This region is now occupied by the Usina Hidrelétrica de Xingó dam, Canindé do São Francisco, Sergipe, Brazil.

Material and Methods

The material examined is deposited in the collection of the Instituto Butantan (IBSP, A. D. Brescovit) and in the Museu de Zoologia da Universidade de São Paulo (MZSP, R. Pinto da Rocha). All measurements are given in millimeters.

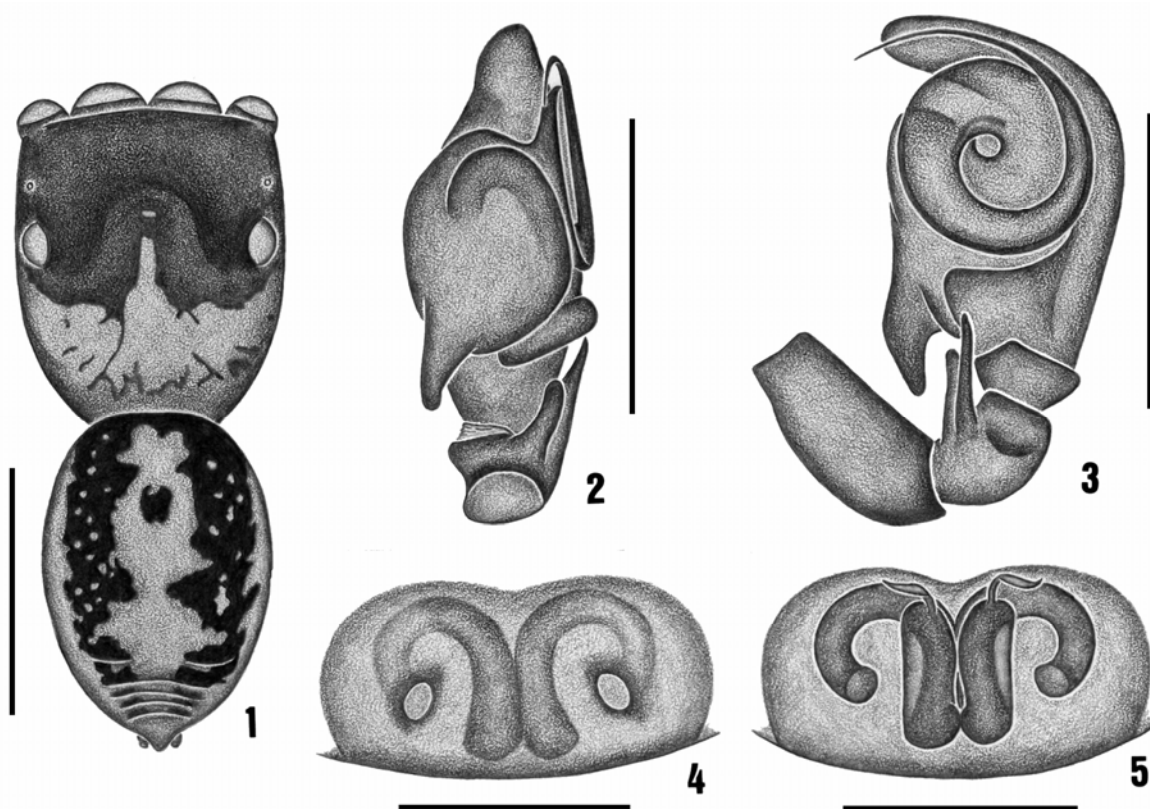


Fig. 1-5. *Neonella salafraria* sp. n. 1. Male, dorsal view; 2. Left palp, ventral view; 3. Retrolateral view; 4. Female, epigynum, ventral view; 5. Dorsal view. Scale lines: 1. 0.5 mm; 2-3. 0.25 mm; 4-5. 0.125 mm.

Neonella salafraria new species

Fig. 1-5

TYPES. Holotype male from Usina Hidroelétrica de Xingó, Canindé do São Francisco, Sergipe, Brazil, 31/X/2000, L. Ianuzzi coll. (IBSP 45094). Allotype (IBSP 45095) and 2 male paratypes with the same data of the holotype (IBSP 45096, MZSP 23697).

ETYMOLOGY. The specific name is a Portuguese adjective that means "scoundrel".

DIAGNOSIS. *Neonella salafraria* sp. n. resembles *N. camillae* Edwards and *N. mayaguez* Galiano, but is distinguished by the larger curling embolus and longer projections on the patellae of the male palp (Fig. 2-3); the epigynum has longer spermathecae and copulation ducts, that loop anteriorly and connect posteriorly to the spermathecae (Fig. 4-5).

DESCRIPTION

MALE. (Fig. 1) Total length: 1.37. Carapace yellow, 0.76 long, 0.57 wide, 0.37 high, with black margins. Cephalic region dark brown, covered by sparse white hairs. Ocular quadrangle 0.39 long. Anterior eye row 0.56 wide, posterior 0.55 wide. Thoracic region variegated with light brown. Chelicerae yellow, brown proximally, teeth inconspicuous. Palps (Fig. 2, 3) dark brown, cymbium yellow. Legs pale yellow, with dark

spots on the prolateral faces of the femora and on the ventral distal ends of the femora. Dark rings around the distal ends of the patellae. Length of the patella + tibia: I 0.37, II 0.35, III 0.45, IV 0.47. Sternum and labium yellow. Abdomen pale yellow, with a pair of longitudinal brown stripes, variegated, forming an irregular median dorsal light stripe between them. Spinnerets pale yellow.

FEMALE. Total length: 2.05. Carapace yellow, 0.82 long, 0.60 wide, 0.39 high. Cephalic region dark brown, with a pair of wide longitudinal light brown stripes from between the posterior lateral eyes extending to the posterior edge of the carapace, forming a dorsal narrow yellow stripe between them. Black margins. Ocular quadrangle 0.42 long. Anterior eye row 0.60 wide, posterior 0.60 wide. Chelicerae yellow, variegated prolaterally with brown, teeth inconspicuous. Palps light brown. Legs pale yellow, with longitudinal brown stripes on the prolateral face of the femora I, II and III and on the prolateral, ventral and retrolateral distal ends of the femora and the tibiae. A median ventral spot on the femora III and IV. Length of the patella + tibia: I 0.44, II 0.37, III 0.47, IV 0.52. Sternum and labium yellow. Abdomen pale yellow, with a pair of longitudinal light brown stripes. Spinnerets yellow.

VARIATION. Three males: total length: 1.26-1.37; carapace length: 0.70-0.76.

OTHER MATERIAL EXAMINED. Brazil. **Sergipe:** Canindé do São Francisco, Usina Hidrelétrica de Xingó, 1 male, 31/X/2000, L. Ianuzzi coll. (IBSP 45098).

DISTRIBUTION. Known only from Canindé do São Francisco, Sergipe, Brazil.

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