Six new species of *Scytodes* Latreille, 1804 (Araneae, Scytodidae) from Brazil

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**ABSTRACT**

Six new species of *Scytodes* from the Amazon region in northern Brazil are described: *S. piroca* n. sp., distinguished by a needle-like embolus covered by a wide concave distal projection; *S. vieirae* n. sp., distinguished by a bifid distal area of the bulb; *S. auricula* n. sp., distinguished by a sickle-like embolus, distal projection with truncated tip and very small apophysis, all from Parque Nacional da Serra do Divisor, in the state of Acre; *S. balbina* n. sp., from Balbina, distinguished by the male palpal bulb with a very long and distally curved embolus and a flattened distal hyaline projection and the female’s large and laterally expanded seminal receptacles with a sclerotized area adjacent to their bases; *S. mapia* n. sp., from Rio Mapiá, Borba, distinguished by a triangular fovea that does not project anteriorly and by the semicircular shape of the larger pair of seminal receptacles, both from state of Amazonas and *S. altamira* n. sp., from Cachoeira, Altamira, in the state of Pará, distinguished by the bulb’s leaf-like embolus and the distal area, with several projections.

**KEY WORDS**  
Araneae,  
Brazil,  
*Scytodes*,  
Scytodidae,  
negative species.
INTRODUCTION

Between 1891 and 1948 a total of 10 species of spiders of the genus *Scytodes* Latreille, 1804 were described for Brazil (Keyserling 1891; Mello-Leitão 1915, 1918, 1929, 1947; Piza 1944; Soares & Camargo 1948). Two of these were synonymized by Mello-Leitão (1941). In a preliminary study of the Brazilian species, emphasizing synanthropic species, seven of the remaining eight species described for Brazil, were synonymized (Brescovit & Rheims 2000). As such, only *Scytodes insperata* described by Soares & Camargo (1948), remains valid.

In this second paper on Brazilian *Scytodes*, six new species are described based on the study of material from the Amazon region. Most of this material was collected within the frames of the management plan in the Parque Nacional da Serra do Divisor in the state of Acre (S.O.S. Amazônia-TNT-IBAMA 1999).

ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ame</td>
<td>anterior median eyes;</td>
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<td>ale</td>
<td>anterior lateral eyes;</td>
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<td>metatarsus;</td>
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<td>ple</td>
<td>posterior lateral eyes;</td>
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<td>pls</td>
<td>posterior lateral spinnerets;</td>
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<td>pme</td>
<td>posterior median eyes;</td>
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<td>pms</td>
<td>posterior median spinnerets;</td>
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<td>ta</td>
<td>tarsus.</td>
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MATERIAL AND METHODS

The material examined belongs to the following collections: CPDC, Centro de Pesquisas do Cacau - CEPLAC, Itabuna (P. S. Terra); IBSP, Instituto Butantan, São Paulo (A. D. Brescovit); INPA, Instituto Nacional de Pesquisas da Amazônia, Manaus (C. Magalhães); MCN, Museu de Ciências Naturais, Fundação Zoobotânica do Rio Grande do Sul, Porto Alegre (E. H. Buckup); MNHN, Muséum national d’Histoire naturelle, Paris (C. Rollard); MNRJ, Museu Nacional do Rio de Janeiro, Rio de Janeiro (A. B. Kury); SMNK, Staatliches Museum für Naturkunde, Karlsruhe (H. Höfer).

Descriptions and terminology follow Brescovit & Rheims (2000). All measurements are in millimeters. The epigynes were submerged in lactic acid to study internal structures.
SYSTEMATICS

*Scytodes piroca* n. sp.
(Fig. 1)

**Type Material.** — *Piroca*. Parque Nacional da Serra do Divisor, Acre, 9.XI.1996, R. S. Vieira, 1 ♂ holotype (IBSP 8943) and 1 ♀ allotype (IBSP 8943).

**Morro Queimado.** Parque Nacional da Serra do Divisor, Acre, 8.XI.1996, R. S. Vieira, 1 ♂ and 2 ♀ ♀ paratypes (IBSP 12083).


**ETYMOLOGY.** — The specific name is a noun in apposition taken from the type locality.


**Camp.** 15.XI.1996, R. S. Vieira, 1 ♀ (IBSP 9390).


**DISTRIBUTION.** — Acre and Amazonas, Brazil.

**DIAGNOSIS.** — *Scytodes piroca* n. sp. is distinguished from the other species, described in this paper, by the male palp with a slender needle-like embolus covered by a wide concave distal projection (Fig. 1B, C). The female external genitalia is similar to those of *S. gertschi* Valerio, 1981 and *S. diminuta* Valerio, 1981 (Valerio 1981: figs 14-15) but differ in the presence of two pairs of seminal receptacles (Fig. 1E).

**DESCRIPTION**

**Male (IBSP 9083)**

Carapace yellow with black U-shaped pattern. Pedipalps yellow with black stains, except on tarsus. Labium and endites yellow with brownish base. Sternum yellow with brown margins on base of legs and along slight grooves extending toward centre. Legs yellow with two ventral black longitudinal stripes on femur and single black longitudinal dorsal stripe on tibia and metatarsus, except on leg I. Irregular black stains on the prolateral face of femur. Abdomen cream coloured with three or four black transversal markings in median region.

Total length 2.75. Carapace, 1.62 long, 1.37 wide. Eye diameters: pme 0.14, ale 0.14, ple 0.14. Lateral eyes on tubercle. Chelicerae with subapical hyaline keel and inconspicuous stridulatory ridges. Labium 0.28 long, 0.26 wide. Sternum 0.86 long, 0.80 wide.

Bulb 0.30 long, distally narrowed (Fig. 1B, C). Abdomen 1.12 long, 1.00 wide, rounded, covered with large feathery hairs. Cymbium with long, slender distal spine.

Legs. I, femur 3.87; patella 0.50; tibia 3.75; metatarsus 5.62; tarsus 0.62; total 14.36. II, 2.50; 0.50; 2.62; 3.25; 0.62; 9.49. III, 1.75; 0.37; 1.50; 1.75; 0.50; 5.87. IV, 2.87; 0.37; 2.25; 0.62; 9.11. Palpal femur with short and narrow stridulatory pick with round, projected socket.

**Female (IBSP 12221)**

Coloration pattern (Fig. 1A) as in male.

Total length 5.00. Carapace slightly arched, 2.25 long, 1.75 wide. Eye diameters: pme 0.10, ale 0.14, ple 0.16. Lateral eyes on tubercle. Chelicerae as in male. Labium 0.20 long, 0.28 wide. Sternum 1.20 long, 0.90 wide. Abdomen 2.75 long, 2.50 wide. Fovea inconspicuous, widely separated. Positioning ridges semicircular (Fig. 1D). Internal genitalia with two pairs of seminal receptacles, one with short, slender stalk and adjacent globous one with inconspicuous stalk (Fig. 1E).

Legs. I, femur 2.50; patella 0.50; tibia 3.00; metatarsus 3.38; tarsus 0.62; total 10.00. II, 1.88; 0.50; 2.00; 2.25; 0.50; 7.13. III, 1.50; 0.38; 1.13; 1.25; 0.38; 4.64. IV, 2.00; 0.50; 2.25; 2.00; 0.63; 7.38. Palpal femur with stridulatory pick as in male.

**Variation**

**Two males.** Total length 2.75-2.77; carapace 1.62-1.75; femur I 3.87-4.12; bulb 0.30-0.38.
Fig. 1. — Scytodes piroca n. sp.; 

**A**, female body, dorsal view; 

**B**, male left palpus, retrolateral view; 

**C**, male left palpus, prolateral view; 

**D**, female epigyne, ventral view; 

**E**, female epigyne, dorsal view; 

**F**, female carapace, dorsal view, variation. Scale bars: 0.25 mm.
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Fig. 2. — *Scytodes balbina* n. sp.; **A**, male body, dorsal view; **B**, male left palpus, retrolateral view; **C**, male left palpus, prolateral view; **D**, female epygine, ventral view; **E**, female epygine, dorsal view. Scale bars: 0.25 mm.
Ten females. Total length 4.25-5.25; carapace 1.88-2.50; femur I 2.25-3.00. A single female presented a coloration pattern as shown in Figure 1F.

*Scytodes balbina* n. sp.  
(Fig. 2)

**Type material.** — *Usina Hidrelétrica de Balbina.* Balbina, Amazonas, 29.XI.1987, Eq. IBSP, 1 ♂ holotype (IBSP 23044).  

**Etymology.** — The specific name is a noun in apposition taken from the type locality.


**Distribution.** — Northern Brazil (Amazonas).

**Diagnosis.** — *Scytodes balbina* n. sp. differs from the other species, here described, by the male palpal bulb presenting a very long and distally curved embolus and a flattened distal hyaline projection (Fig. 2B, C). The female has large and laterally expanded seminal receptacles with a sclerotized area adjacent to their bases (Fig. 2E).

**Description**  
**Male (IBSP 23044)**

Carapace yellow with brown pattern of short stains. Pedipalps yellowish with transversal brown bands. Labium and endites cream coloured with brownish bases. Sternum cream coloured with brownish margin. Legs yellow with interrupted brown transversal bands, except on tarsi. Abdomen cream coloured with dorsolateral pattern consisting of three posterior transversal groups of markings and anterior scattered irregular stains (Fig. 2A).

Total length 3.13. Carapace, 1.50 long, 1.25 wide. Eye diameters: pme 0.12, ale 0.14, ple 0.14. Lateral eyes on tubercle. Chelicerae with subapical hyaline keel and lateral surface with three or four widely separated stridulatory ridges. Labium 0.14 long, 0.18 wide. Sternum 0.94 long, 0.88 wide. Cymbium presenting long, slender distal spine. Bulb 0.50 long and medially constricted (Fig. 2B, C). Abdomen 1.50 long, 0.88 wide, rounded, covered with large feathery hairs.

**Legs.** I, femur 7.00; patella 0.50; tibia 7.00; metatarsus 8.38; tarsus 0.50; total 23.38. II, 5.75; 0.50; 4.38; 5.25; 0.75; 16.63. III, 4.05; 0.40; 2.13; 2.63; 0.50; 9.71. IV, 3.63; 0.38; 3.88; 4.63; 0.75; 13.27. Palpal femur presenting very short, thick stridulatory pick with round, projected socket.

**Female (MCN)**

Coloration pattern as in male. Total length 4.25. Carapace 2.12 long, 1.75 wide. Eye diameters: pme 0.12, ale 0.14, ple 0.12. Lateral eyes on tubercle. Chelicerae as in male but with stridulatory ridges more conspicuous. Labium 0.24 long, 0.22 wide. Sternum 1.10 long, 0.86 wide. Abdomen 2.12 long, 1.75 wide. Positioning ridge L-shaped. Fovea separated from each other by four times their width (Fig. 2D).

**Variation**

**Four males.** Total length 3.50-3.62; carapace 1.62-1.75; femur I 7.25-7.50; bulb 0.42-0.60.

**Four females.** Total length 3.87-5.12; carapace 1.62-2.25; femur I 4.37-5.50.

*Scytodes auricula* n. sp.  
(Fig. 3)

**Type material.** — *Morro Queimado.* Parque Nacional da Serra do Divisor, Acre, 8.XI.1996, R. S. Vieira, 1 ♂ holotype (IBSP 9092) and 1 ♀ allotype (IBSP 9092), 1 ♀ paratype with same data of holotype (IBSP 23707).

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FIG. 3. — Scytodes auricula n. sp.; A, female body, dorsal view; B, male left palpus, retrolateral view; C, male left palpus, prolateral view; D, female epygine, ventral view; E, female epygine, dorsal view. Scale bars: 0.25 mm.

ETYMOLOGY. — The specific name is a Latin word that denotes the ear shaped fovea.


DISTRIBUTION. — Northern, central western and southeastern Brazil.
**DIAGNOSIS.** — The male of *Scytodes auricula* n. sp. is similar to *S. altamira* n. sp. but differs in having a bulb with sickle-like embolus, distal projection with truncated tip and very small apophysis (Fig. 3B, C). The female is similar to *S. mapia* n. sp. but differs in the presence of a larger fovea with positioning ridge anteriorly extended (Fig. 3D) and in the presence of a glous pair of seminal receptacles with inconspicuous stalk and pair of diamond shaped seminal receptacles with sinuous stalk (Fig. 3E).

**DESCRIPTION**

*Male (IBSP 9092)*

Carapace yellow with delicate black pattern. Pedipalps yellow with few dorsal scattered brown stains. Labium and endites yellowish with brown margins. Sternum cream coloured with brownish margins at base of each leg and along slight depressions toward centre. Legs yellow with two longitudinal black interrupted stripes along ventral side of femur and few longitudinal stains scattered along rest of leg, except on tarsi. Abdomen cream coloured with dorsal black pattern consisting of four pairs of transversal markings and some irregular stains scattered laterally and anteriorly.

Total length 5.25. Carapace slightly arched, 2.63 long, 2.00 wide. Eye diameters: pme 0.20, ale 0.18, ple 0.18. Lateral eyes on tubercle. Chelicerae with subapical hyaline keel. Lateral surface with nine to eleven stridulatory ridges. Labium 0.28 long, 0.40 wide. Sternum 1.25 long, 1.00 wide.

Cymbium with pair of prominent, curved distal spines (Fig. 3B, C). Bulb 0.64 long, medially constricted. Abdomen 2.75 long, 1.75 wide, rounded, covered with large feathery hairs.

**Legs.** I, femur 8.38; patella 0.75; tibia 8.50; metatarsus 12.13; tarsus 1.00; total 30.76. II, 5.62; 0.75; 5.25; 6.63; 0.75; 19.00. III, 3.25; 0.62; 2.63; 3.75; 0.75; 11.00. IV, 5.25; 0.62; 5.00; 6.13; 0.88; 17.88. Palpal femur presenting very short stridulatory pick with large triangular, projected socket.

*Female (IBSP 8748)*

Coloration pattern as in male (Fig. 3A).

Total length 6.00. Carapace slightly arched, 3.13 long, 2.38 wide. Eye diameters: pme 0.18, ale 0.14, ple 0.16. Chelicerae with subapical hyaline keel, lateral surface with seven to eight stridulatory ridges. Labium 0.22 long, 0.22 wide. Sternum 1.50 long, 1.00 wide.

Abdomen 2.88 long, 2.63 wide. Positioning ridge striated. Fovea separated from each other by one-third of their width (Fig. 3D). Internal genitalia with two pairs of seminal receptacles (Fig. 3E).

**Legs.** I, femur 4.88; patella 0.63; tibia 5.75; metatarsus 7.38; tarsus 0.75; total 19.38. II, 3.76; 0.75; 3.75; 7.38; 0.88; 16.52. III, 2.75; 0.63; 2.38; 2.63; 0.63; 9.02. IV, 3.75; 0.75; 3.63; 4.13; 0.88; 13.14. Palpal femur with stridulatory pick as in male.

**Variation**

Two males. Total length 4.12-5.25; carapace 2.25-2.62; femur I 5.37-8.37; bulb 0.64-0.70.

Four females. Total length 5.75-6.50; carapace 2.63-3.13; femur I 3.13-5.63.

*Scytodes vieirae* n. sp.

(Fig. 4A-C)


**ETYMOLOGY.** — The specific name is a patronym in honour of the collector of most of the types.

**MATERIAL EXAMINED.** — Only the types.

**DISTRIBUTION.** — Northern Brazil (States of Acre and Amazonas).

**DIAGNOSIS.** — The male of *Scytodes vieirae* n. sp. differs from the other species, here described, in the bifid distal area of the bulb (Fig. 4B, C).

**DESCRIPTION**

*Male (IBSP 23043)*

Carapace with U-shaped black pattern. Pedipalps yellow with few irregular brown stains. Labium and endites brownish. Sternum cream coloured with brownish margins at base of each leg, extending along slight grooves toward centre. Legs...
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Fig. 4. — A-C, Scytodes vieirae n. sp.; A, male body, dorsal view; B, male left palpus, retrolateral view; C, male left palpus, prolateral view; D-F, Scytodes mapia n. sp.; D, female carapace, dorsal view; E, female epygine, ventral view; F, female epygine, dorsal view; G, H, Scytodes altamira n. sp.; G, male left palpus, retrolateral view; H, male left palpus, prolateral view. Scale bars: 0.25 mm.
with two longitudinal black stripes along ventral face of femur and single longitudinal stripe along dorsal face of tibia and metatarsus. Irregular stains on prolateral face of femur. Abdomen cream coloured with black dorsal pattern consisting of three posterior groups of transversal markings and irregular anteriorly scattered stains (Fig. 4A).

Total length 3.75. Carapace slightly arched, 1.87 long, 1.62 wide. Eye diameters: pme 0.14, ale 0.12, ple 0.14. Chelicerae with subapical hyaline keel and inconspicuous stridulatory ridges. Sternum 1.04 long, 0.80 wide.

Cymbium with long, slender distal spine. Bulb 0.30 long with a strong median constriction (Fig. 4B, C). Abdomen 1.87 long, 1.25 wide, rounded, covered with large feathery hairs.

Legs. I, femur 4.37; patella 0.50; tibia 4.75; metatarsus 6.12; tarsus 0.75; total 16.49. II, 3.00; 0.50; 2.25; 3.37; 0.50; 9.62. III, 1.87; 0.37; 1.62; 1.87; 0.50; M6.23. IV, 2.87; 0.50; 2.75; 3.12; 0.62; 9.86. Palpal femur presenting very short, thick stridulatory pick with round, projected socket.

Female
Unknown.

Variation
Four males. Total length 2.37-3.75; carapace 1.25-1.85; femur I 3.12-4.37; bulb 0.30-0.38.

Scytodes mapia n. sp.
(Fig. 4D-F)

Type material.— Rio Mapiá. Borba, Amazonas, 22.IV.1996, Eq. IBSP/SMNK, 1 ♀ holotype (IBSP 8835).

Balnéário do Lira. Borba, Amazonas, 22.IV.1996, Eq. IBSP/SMNK, 2 ♀ ♀, 1 juv. paratypes (IBSP 7928; SMNK).

Etymology.— The specific name is a noun in apposition taken from the type locality.


Manicoré. 18.IV.1996, Eq. IBSP/SMNK, 1 ♀ (IBSP 8878).


Distribution.— Northern, northeastern and southeastern Brazil.

Diagnosis.— The female of Scytodes mapia n. sp. is similar to S. auricula n. sp., but differs in the presence of a triangular fovea that does not project anteriorly (Fig. 4E) and in the semicircular shape of the larger pair of seminal receptacles (Fig. 4F).

Description
Male
Unknown.

Female (IBSP 8835)
Carapace cream coloured with brown pattern as in Figure 4D. Pedipalps cream coloured with brown longitudinal stains and transversal bands. Labium and endites cream coloured with brown margins. Sternum cream coloured with brown margins at base of each leg and along slight grooves toward centre. Legs cream coloured with two transversal, very interrupted longitudinal ventral stripes on femur and tibia. Few longitudinal stains along metatarsus. Abdomen cream coloured with same basic pattern as Scytodes auricula n. sp. (Fig. 3A). Total length 5.75. Carapace slightly arched, 2.75 long, 2.25 wide. Eye diameters: pme 0.18, ale 0.16, ple 0.18. Lateral eyes on tubercle. Chelicerae with subapical hyaline keel, lateral surface with eight to ten stridulatory ridges. Abdomen 3.00 long, 2.50 wide. Positioning ridge striated. Fovea separated from each other by half their width (Fig. 4D). Internal genitalia with two pairs of globous seminal receptacles; one semicircular and very large, the other globous and small, both with inconspicuous stalks (Fig. 4E).

Legs. I, femur 5.50; patella 0.63; tibia 6.13; metatarsus 7.00; tarsus 1.00; total 20.26. II, 4.00; 0.50; 3.88; 4.50; 0.63; 13.51. III, 2.75; 0.50; 2.38; 2.63; 0.63; 8.89. IV, 4.50; 0.63; 3.88; 4.38; 0.88; 14.27. Palpal femur presenting

Rheims C. A. & Brescovit A. D.
very short stridulatory pick with round, projected socket.

**Variation**

**Four females.** Total length 4.00-5.75; carapace 2.50-3.38; femur I 3.13-6.25.

**Scytodes altamira** n. sp.

(Fig. 4G-H)

**Type Material.** — **Chácara São Manuel.** Cachoeira, Altamira, Pará, XI.1952, A. R. Hoge & J. Cavalheiro, 1♂ holotype (IBSP 4212).

**Etymology.** — The specific name is a noun in apposition taken from the type locality.

**Material Examined.** — Only the type.

**Distribution.** — Northern Brazil (Pará).

**Diagnosis.** — The male of **Scytodes altamira** n. sp. is similar to **S. auricula** n. sp. but differs by the bulb’s leaf-like embolus and the distal area, with several projections (Fig. 4G, H).

**Description**

**Male (IBSP 4212)**

Specimen very bleached, but presents carapace brown with pair of median longitudinal cream coloured thick stripes. Pedipalps light brown. Labium and endites cream coloured. Sternum cream coloured with brown margins. Legs yellow with very faint transversal light brown bands. Abdomen cream coloured with black transversal markings posteriorly and black spots scattered anteriorly.

Total length 4.37. Carapace 2.37 long, 2.00 wide. Eye diameters: pme 0.18, ale 0.16, ple 0.20. Lateral eyes on a tubercle. Chelicerae with subapical hyaline keel, lateral surface with 10 to 12 stridulatory ridges. Labium 0.20 long, 0.18 wide. Sternum 1.32 long, 1.00 wide. Cymbium with single spine. Bulb 0.70 long medially constricted (Fig. 4G, H). Abdomen 2.00 long, 1.37 wide, rounded, covered with large feathery hairs.

**Legs.** I, femur 5.62; patella 0.62; tibia 5.25; metatarsus 6.25; tarsus 0.75; total 18.49. II, absent. III, 3.50; 0.50; 2.87; 3.37; 0.62; 10.86. IV, 5.37; 0.62; 4.87; 5.75; 0.75; 17.36. Palpal femur presenting short stridulatory pick with triangular, projected socket.

**Female**

Unknown.

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**References**


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