

ARTÍCULO:

**A new species in the spider genus
Phormictopus (Theraphosidae:
Theraphosinae) from Cuba**

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ARTÍCULO:

**A new species in the spider genus
Phormictopus (Theraphosidae:
Theraphosinae) from Cuba**

David Ortiz & Rogério Bertani

Abstract:

A new species, *Phormictopus auratus*, is described. This species is characterized by presenting the apex of the retrolateral branch of the tibial spurs flattened, on which the metatarsus I makes contact when flexed; also by possessing spermathecae well defined in three parts: the base, neck and fundus, and finally for having the carapace covered by a fine and dense golden pubescence. Natural history data of this species, collected in various regions of central-eastern Cuba, are given. With this, the registered number of Cuban taxa pertaining to the genus *Phormictopus* is increased to four.

Key words: Araneae, Theraphosidae, Theraphosinae, *Phormictopus*, West Indies, Cuba, taxonomy.

Taxonomy: *Phormictopus auratus* sp. n.

Nueva especie de araña del género *Phormictopus* (Theraphosidae: Theraphosinae) de Cuba

Resumen:

Se describe *Phormictopus auratus* sp. n. Esta se caracteriza por presentar un ápice plano la rama retrolateral de las apófisis tibiales, sobre el que hace con tacto el metatarso I al flexionarse; por poseer espermatecas con base, cuello y fundus bien definidos y por estar cubierta la región dorsal del prosoma por una fina y densa pilosidad dorada. Se ofrecen datos de la historia natural de esta especie, que se ha capturado en varias regiones del centro-oriente de Cuba. Con este, se elevan a cuatro los táxones del género *Phormictopus* registrados para el país.

Palabras clave: Araneae, Theraphosidae, Theraphosinae, *Phormictopus*, Antillas, Cuba, taxonomía.

Taxonomía: *Phormictopus auratus* sp. n.

Introduction

The genus *Phormictopus* Pocock, 1901 was first established for the placement of species that were initially described as *Mygale cancerides* Latreille, 1806, from the island of La Hispaniola and *Lasiadora cauta* Ausserer, 1875. Neither the original description nor the labels of the type specimens offers any information about the type locality of the latter species. Since then, a total of 13 species and two subspecies from South America, Central America, Greater Antilles and the Tortuga Island south of North America (Platnick, 2005) have been described or transferred to this genus. Nevertheless, the majority of these descriptions were made before or during the first half of the twentieth century, in a time when the systematic of theraphosid spiders was in its earlier age. Besides, all of the descriptions included one or very few specimens, many times of only one sex or without knowledge of the type locality. This leads to the thought that a complete revision of this genus would result in great changes on the basis of its composition and structure.

There have only been three taxa described with certainty in Cuba: *P. cubensis* Chamberlin, 1917, *P. nesiotus* Chamberlin, 1917 and *P. cancerides centumfocensis* Franganillo, 1926.

The description of a new species is presented here, constituting the first result of a revision of the Cuban fauna of this genus that is presently being carried out.

Materials & Methods

Generic diagnosis was prepared based on Pocock (1901), Schiapelli & Gerschman de Pikelin (1979), Pérez-Miles *et al.* (1996) and Bertani (2001).

A species diagnosis was made from the examination of type specimens and abundant material of both sexes of *Phormictopus nesiotus*, *P. cubensis* and *P. dubius* Chamberlin, 1917 and the single type specimen of *P. melodermus* Chamberlin, 1917. In addition, spermathecae drawings by Schmidt (1991), from the type specimen of *P. atrichomatus* Schmidt, 1991, and the spermathecae and palpal bulbs drawings by Schiapelli & Gerschman de Pikelin (1979), from the type specimens of *P. cancerides* (Latreille, 1806) were examined.

All measurements were taken according to the central axis of the structures and are given in millimeters.

Measurements of the legs and palps' segments were taken dorsally from the left appendages, except in the case when it was absent or deformed, then the right was used instead; those pertaining to the length of the tibial spurs branches were done from the point where they separate.

Measurements corresponding to the total body length (including chelicerae, prosoma and opisthosoma), the length and width of the carapace and sternum, and the segments of the appendages were made using a calliper; those corresponding to the ocular patterns and tibial spurs were made using a stereomicroscope possessing an ocular micrometer of lineal scale; the extension of the metatarsal and femoral scopulae was evaluated at plain view.

The spermathecae were separated from the abdomen of the female specimens with the aid of a scalpel. To clean them, they were placed in a plastic vial containing concentrated lactic acid (90%) that was placed in boiling water for approximately 10 minutes. They were photographed using a digital camera incorporated to an optic microscope connected to a computer possessing the software Motic Images 2000, from Micro-Optic Industrial Group Co, LTD.

The male palpal bulbs and the remaining illustrated structures were photographed with a digital camera connected to a stereomicroscope, after removing existing hair segments in the necessary cases, and later digitally traced using the computer software Corel Draw 10. The terminology for their keels follows Bertani (2000): A, apical keel; SA, subapical keel; PS, prolateral superior keel; PI, prolateral inferior keel.

The spination patterns were observed in the left appendages and described following Petrunkevitch (1925). The terminology for the urticating hairs follows Cooke *et al.* (1972) and that of the tarsal scopulae hairs, according to Pérez-Miles (1994).

The ocular patterns were described using the following abbreviations: AME, anterior median eyes; ALE, anterior lateral eyes; PME, posterior median eyes; PLE, posterior lateral eyes.

The map was obtained from Microsoft Encarta 2005 Encyclopedia.

The type materials examined are deposited at the

Museum of Comparative Zoology, Massachusetts, USA. The new species specimens will be added to the following collections: Instituto de Ecología y Sistemática, La Havana, Cuba (IES); Museo de Historia Natural Carlos de la Torre y Huerta, Holguín, Cuba (MHNCT); Instituto Butantan, São Paulo, Brazil (IBSP); Facultad de Ciencias, Montevideo, Uruguay (FCU); American Museum of Natural History, New York, USA (AMNH) and Senckenberg Museum of Natural History, Frankfurt, Germany (SMF).

Systematics

Family Theraphosidae Thorell, 1870
Subfamily Theraphosinae Thorell, 1870
Genus *Phormictopus* Pocock, 1901
Phormictopus Pocock, 1901: 543, 545.

TYPE SPECIES. *Phormictopus cancerides* (Latreille, 1806)

DIAGNOSIS. Plumose bristles on coxae and trochanters. Retrolateral zone of palpal tibiae of adult males with a nodule shaped tegumentary prominence and ventro-subapical zone of tibiae of legs I with two branched spurs. Retrolateral face of legs IV covered by a scopula of plumose setae.

***Phormictopus auratus* sp. n.**
(Figs. 1-10, Tables I-III)

HOLOTYPE. ♂ (IES-3.3240); CUBA, Camagüey Province, Sierra del Chorrillo, vicinity of Gaspar Najasa cave (21°00'37.9''N - 77°42'29.8''W); October 2004; Elier Fonseca, col.; walking at night.

PARATYPES. CUBA. Camagüey Province. 1 ♂ (IES-3.3241); same data as holotype. 2 ♀♀ (IES-3.3242 & 3.3243); locality, collection date and collector same as holotype; under stones.

Las Tunas Province. 1 ♂ (IES-3.3244); Ciénaga de Birama, Monte Cabaniguán; collected June 25, 2004, killed January 28, 2005; Darío Miguel; under a tank tap. Holguín Province. 3 ♀♀ (SMF, AMNH, IBSP-11099); Holguín City, exit to San Andrés; August 26, 2003; David Ortiz & D. Miguel; under stones. 2 ♀♀ (IES-3.3201 & 3.3206); 3 km south of Holguín City, El Yayal; January 21, 2004; D. Ortiz & Alejandro Fernández; under stones. 1 ♀ (FCU); Holguín City, base of La Cruz Hill; January 20, 2004; D. Ortiz & A. Fernández; under a stone. 1 ♀ (MHNCT-5.333); Holguín City, Matamoros Zone; June 15, 1992; Yuri Peña. 1 ♀ (MHNCT-5.334); Velasco Municipality, Alta Abajo Hill; September 19, 1996; Yaquelín R. 1 ♀ (MHNCT-5.335); 3 km south of Holguín City, El Yayal; February 25, 1998; L. Marro. 1 ♂ (IES-3.3202); same locality as the previous; October 27, 1982; Carlos & Nils. 1 ♂ (MHNCT-5.336); Purnio Settlement; September 5, 1985; Solana & Carlos.

OTHER MATERIAL EXAMINED. CUBA. Holguín Prov-

ince. 1 ♀ (MHNCT-5.337); 769 km from La Havana; September 9, 1988; José A. Calderón. 1 ♂ (MHNCT-5.338); Holguín City, Sagner Zone; August 14, 1984; Fernando Aguilera. 1 ♂ (MHNCT-5.339); without collection information. 1 ♂ juvenile (IES-3.3207); Gibara Municipality, El Jobal; November, 2003; A. Fernández; under a stone.

ETYMOLOGY. Latin adjective that makes reference to the dense golden pubescence displayed on the dorsal side of this species, especially on the carapace.

DIAGNOSIS. Adult males differ from those of *P. nesioetes*, *P. cubensis* and *P. dubius* in that metatarsus I, when flexed, makes contact with the apex of the retrolateral branch of the tibial spur, which is flat. In the aforementioned species, metatarsus I makes contact with the external side of the same branch, which is acute at the apex. Female spermathecae differ from those of *P. cancerides*, *P. atrichomatus* and *P. melodermus*, in that they are well defined in base, neck and fundus, instead of being subtriangular to subrectangular shaped and not well defined in these parts. Males and females also differ from the other congeners by presenting a dense golden pubescence over the carapace and the appendages.

DESCRIPTION

Holotype male: Total length, 57. Carapace length, 25.9; width, 25.2. Sternum length, 11.4; width, 9.2. Left chelicera, nine teeth; right, 10 teeth. Labium longer than wider and is subtrapezoid shaped (Fig. 1). Sternum (Fig. 1) flat, not protruded under the level of the coxae, and sigillae situated at legs III level, near the sternum border. Carapace subrectangular with an invagination in the center of the posterior margin and almost flat for having the cephalic region only slightly elevated. Ocular anterior row slightly procurved and posterior row slightly recurved. Ocular quadrangle length, 2.55; width, 3.57. AME circular, diameter, 0.58. ALE ovoid, greater diameter, 0.61. PME ovoid, greater diameter, 0.58. PLE ovoid, greater diameter, 0.68. AME-ALE, 0.51. AME-PME, 0.17. PME-PLE, contiguous. ALE-PLE, 0.34.

Appendage segment lengths. Palp: femur, 14.7; patella, 8.3; tibia, 12.3; total, 35.3. Leg I: femur, 23.6; patella, 12.4; tibia, 17.4; metatarsus, 20.9; tarsus, 12.8; total, 87.1. Leg II: femur, 22.6; patella, 11.5; tibia, 17.7; metatarsus, 20.2; tarsus, 12.0; total, 84.0. Leg III: femur, 20.8; patella, 10.0; tibia, 15.8; metatarsus, 21.0; tarsus, 10.5; total, 78.1. Leg IV: femur, 23.9; patella, 10.5; tibia, 19.0; metatarsus, 27.2; tarsus, 11.5; total, 92.1. Palpal bulbs (Figs. 2 & 3) pyriforms; in the apical half, the embolus takes a marked curve in the dorsal direction. A, SA and PI keels evident; PS keel absent. A keel narrow and long. SA keel serrated with irregular denticles, four times as long as A keel and extending beyond the apical half of the embolus. PI keel covers, in an apical-basal direction, from half-way of the A keel to a little less than the end of the SA. Retrolateral nodule of palpal tibiae conic, with the apex toward the ventral region, from where it protrudes. Tibia I spurs with two

branches that emerge from a common base (Fig. 4). The prolateral branch is acute at its apex and presents a megaspine on the interior border; the retrolateral branch apex is flat. The prolateral branch is 0.6 times as extensive as the retrolateral in the left leg, baso-apically; 0.5 times in the right. When flexed, metatarsus I makes contact with the apical zone of the retrolateral branch (Fig. 4). Stridulatory apparatus: Retrolateral face of the palpal coxae is covered by abundant medium-sized plumose bristles. Retrolateral face of palpal trochanters with some large plumose bristles amongst abundant medium-sized plumose bristles. Retrolateral face of the palpal femora with some plumose bristles and hairs. Prolateral face legs I coxae covered above the suture by abundant plumose bristles and some spiniform hairs. Prolateral face of legs I trochanters with similar structure as the previous, although the plumose bristles reaches a much larger size. Prolateral face of legs I femora covered in the basal half by a dense scopula of plumose hairs, which are larger in the superior zone. Retrolateral face of legs I coxae with scarce plumose hairs. Prolateral face of legs II coxae with plumose bristles less numerous than on legs I. Prolateral face of legs II trochanters with some plumose bristles. Prolateral face of legs II femora covered in its basal zone by a small tuft of plumose hairs.

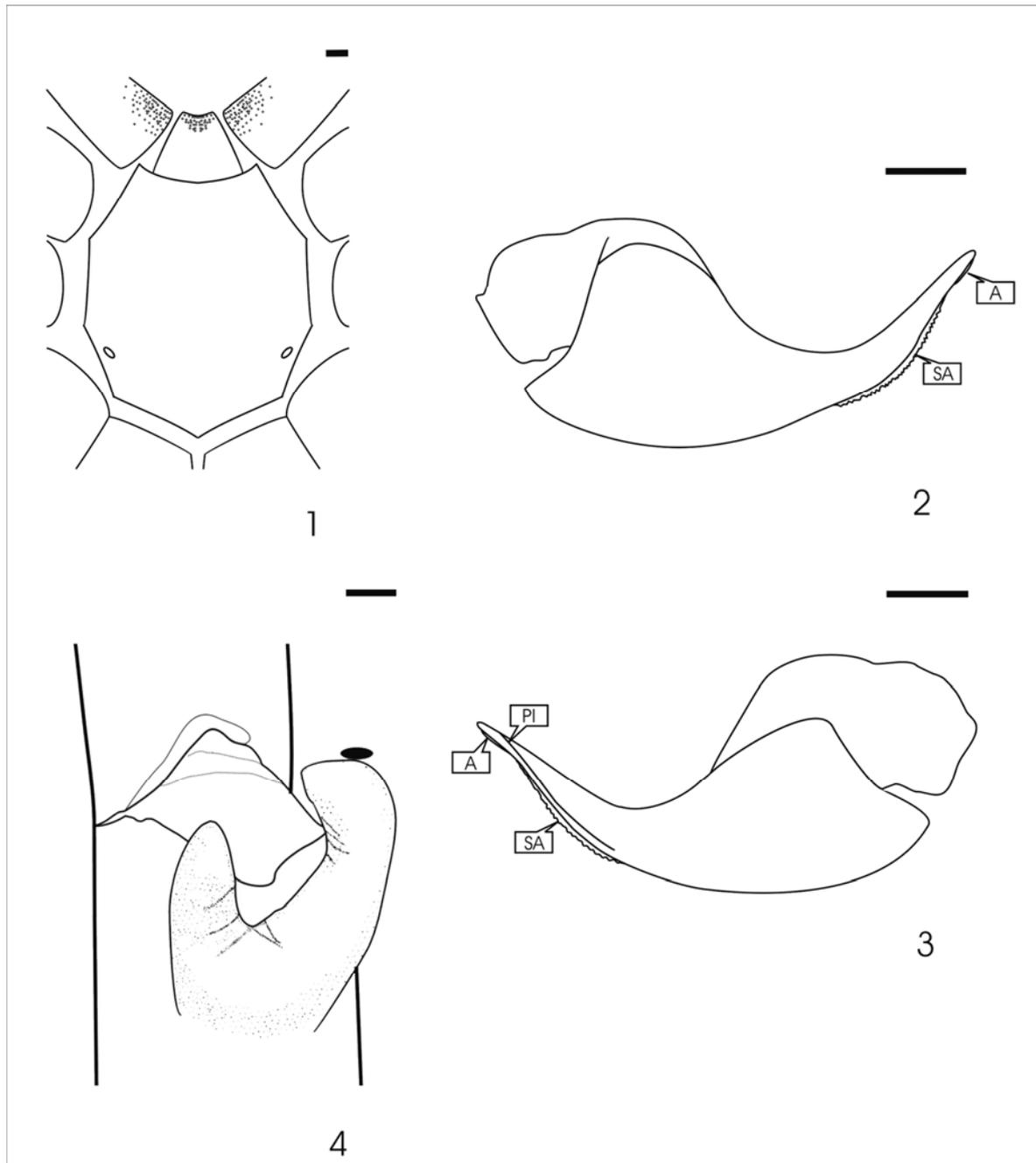
The metatarsal scopulae covers all the segment in legs I and II, the apical half in legs III and only the apical region in legs IV. Retrolateral face of legs IV femora covered by a scopula of plumose setae. Scopulae of tarsus IV not divided by type B hairs.

The abdomen has types I and III urticating hairs. Spination pattern. Palp: femur p0-0-1; tibia v0-1-0 p0-2-0. Leg I: femur p0-0-1; tibia v0-1-1 p0-1-0; metatarsus v0-0-2 p0-0-1. Leg II: femur p0-0-1; tibia v0-1-2 p0-1-0; metatarsus v1-0-3. Leg III: tibia v0-1-2 p1-1-1 r0-1-1; metatarsus v0-2-3 p1-1-1 r0-1-1. Leg IV: tibia v0-3-3 p0-1-0 r0-1-1; metatarsus v15 p0-1-1 r0-1-1.

Coloration and covering hairs: Carapace covered by a dense golden pubescence that partially masks the brown coloration of the tegument. Legs, palps and chelicerae also covered by this pilosity, both dorsally and ventrally.

Even the dorsal part of the abdomen has a brownish-yellow color, intermixed with long light red setae. The sternum and the ventral part of the coxae have a yellowish-brown color. Maxillae and labium are a reddish-brown. The ventral surface of the abdomen is brown, except the area that is at the book lungs level, which is brownish-red.

Paratype female (IES-3.3242): Total length, 73. Carapace length, 25.5; width, 24.5. Sternum length, 10.4; width, 9.9. Left chelicera, eight teeth; right, 11 teeth. The form of labium, sternum, carapace and ocular rows same as holotype. Ocular quadrangle length, 2.41; width, 3.65. AME circular, diameter, 0.62. ALE ovoid, greater diameter, 0.76. PME ovoid, greater diameter, 0.55. PLE ovoid, greater diameter, 0.69. AME-ALE, 0.52. AME-PME, 0.45. PME-PLE, 0.21. ALE-PLE, 0.45.



Figures 1-4. *Phormictopus auratus* sp. n., holotype ♂. **1.** Ventral view of prosoma. **2-3.** Right palpal bulb, retrolateral (2) and prolateral (3) view. **4.** Left tibia I spur. Keels: A=apical, SA=subapical, PI=prolateral inferior. (●): Region of contact between metatarsus I and spur when flexed. Scale lines: 1 mm.

Figuras 1-4. *Phormictopus auratus* sp. n., ♂ holotipo. **1.** Vista ventral del cefalotórax. **2-3.** Bulbo del pedipalpo derecho, vistas retrolateral (2) y prolateral (3). **4.** Apófisis de la tibia I izquierda. Quillas: A=apical, SA=subapical, PI=prolateral inferior. (●): Zona de contacto del metatarso I con las apófisis al flexionarse. Líneas de escala: 1 mm

Appendage segment lengths. Palp: femur, 14.2; patella, 8.7; tibia, 10.8; tarsus, 9.4; total, 43.1. Leg I: femur, 20.4; patella, 11.8; tibia, 15.8; metatarsus, 14.5; tarsus, 8.2; total, 70.7. Leg II: femur, 18.9; patella, 11.0; tibia, 14.1; metatarsus, 14.4; tarsus, 8.6; total, 67.0. Leg III: femur, 17.1; patella, 9.7; tibia, 12.3; metatarsus, 16.0; tarsus, 8.0; total, 63.1. Leg IV: femur, 20.0; patella, 9.8; tibia, 15.2; metatarsus, 20.3; tarsus, 8.8;

total, 74.1.

The spermathecae are represented in Fig. 5.

Stridulatory apparatus is same as found in the male holotype, with the following exceptions: retrolateral face of legs I coxae lacking plumose hairs; prolateral face of legs II trochanters lacking plumose bristles; prolateral face of legs II femora with a scopula of plumose hairs in the superior basal zone that, even though is greater than

those present in the holotype, do not reach the length of those found on legs I.

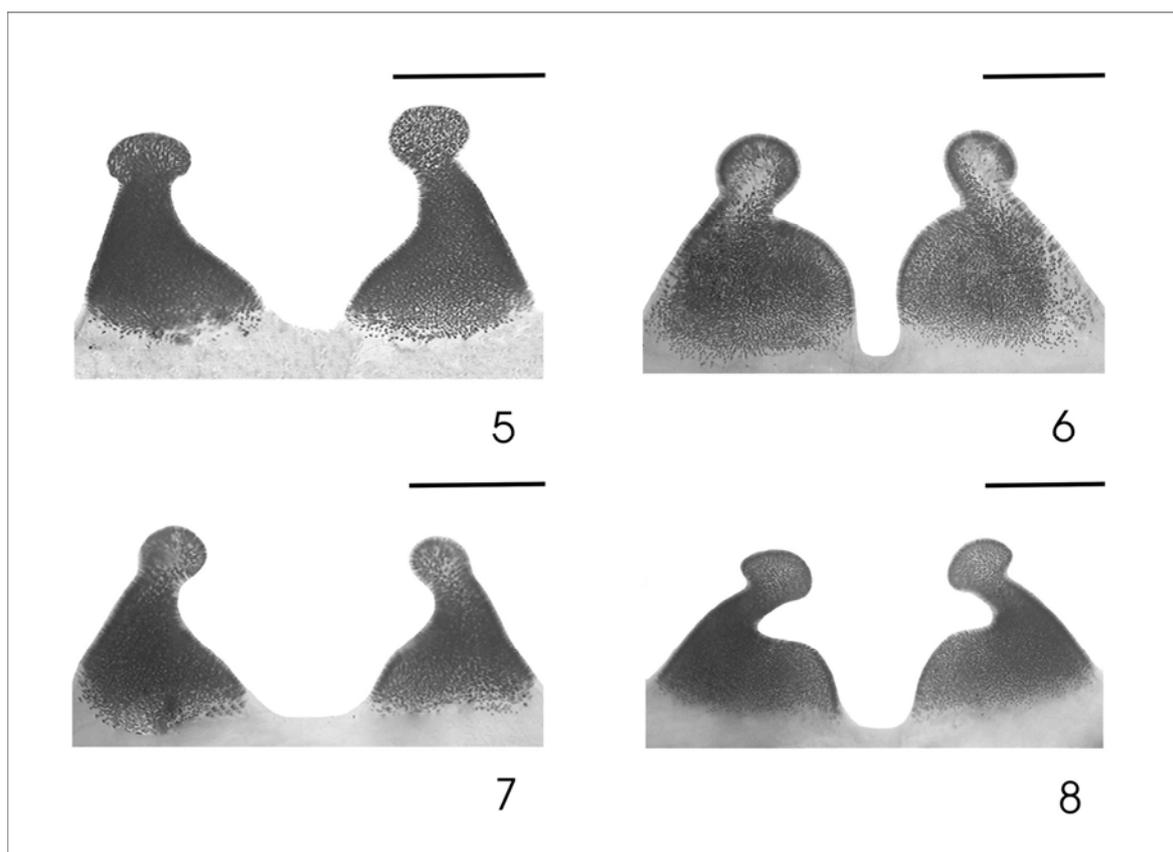
Femoral scopulae of legs IV and metatarsal scopulae same as holotype. Tarsus IV divided only in the basal half by a very fine row of type B hairs (almost each hair situated after the other).

The abdomen with urticating hairs same as holotype.

Spination pattern. Palp: femur p0-0-1; tibia v0-0-3

p0-1-0. Leg I: femur p0-0-1; tibia v0-1-3; metatarsus v0-0-1. Leg II: femur p0-0-1; tibia v0-1-3; metatarsus v0-1-4. Leg III: tibia v0-1-3 p1-1-0 r0-1-1. Leg IV: tibia v0-1-2 r0-1-1; metatarsus v16 p0-1-1 r1-1-1.

Coloration and covering hairs: Very similar to those of the holotype, although the golden pilosity is not as thick on the carapace, giving less of a golden and more of a brownish color.



Figures 5-8. *Phormictopus auratus* sp. n. Spermathecae. 5. IES-3.3242. 6. IBSP-11099. 7. FCU. 8. MHNCT-5.337. Scale lines: 1 mm

Figuras 5-8. *Phormictopus auratus* sp. n. Espermatecas. 5. IES-3.3242. 6. IBSP-11099. 7. FCU. 8. MHNCT-5.337. Líneas de escala: 1 mm.

Variation:

Some characters that show little variation are: labium shape, form and position of the sternum with respect to the coxae, position of the sternal sigillae, shape of the carapace and elevation of the cephalic region, zone where the metatarsus I makes contact with the retrolateral branch of the tibial spurs when flexed, and form of the retrolateral nodule of the palpal tibiae.

The stridulatory apparatus is always well developed on the retrolateral face of the palpal coxae and trochanters, and in the prolateral face of the coxae and trochanters of legs I. The retrolateral face of the palpal femora ranges from being bare to possessing an abundant group of plumose bristles and hairs, only found in the inferior basal region of the segment. The

scopulae of plumose hairs found on legs I femora is always present and can cover up to the basal half of the segment. In some specimens plumose hairs exist on the retrolateral zone of legs I coxae, whilst in others they are absent. On the prolateral face of legs II coxae and trochanters of some specimens exist some plumose bristles although never as many as those of legs I. Prolateral face of legs II femora with a scopula of plumose hairs which can be more or less developed or totally absent, although never as extensive as in legs I femora.

The relative length of the prolateral branch of tibia I spurs with respect to the retrolateral varies between 0.45-0.66 on the seven adult males examined. Similarly, the apex of the retrolateral branch varies from being per-

pendicular to the leg to having a slight downward inclination towards the external region, always possessing a flat surface.

The carapace pilosity is always abundant in both sexes, although, obviously more dense in the males. The coloration is quite homogeneous, ranging from the more common golden yellow to a greenish-yellow.

The quantity of cheliceral teeth varies a lot, including between the two appendages of the same individual. The registered extreme values are seven and 16. Most of the individuals also possess various smaller teeth that were not counted.

The male palpal bulbs vary a little with respect to the general shape, embolus thickness and inclination; however, keels, though always present, were not so stable in form and extension.

The spermathecae vary a lot in form (Figs. 5-8). Nevertheless, a pattern seems to exist which, according to the internal border of their base, tends to go from slightly curved (Figs. 5 & 7) to very curved (Figs. 6 & 8), giving the base a subtrapezoidal aspect.

Some quantitative variables appear in Tables I-III.

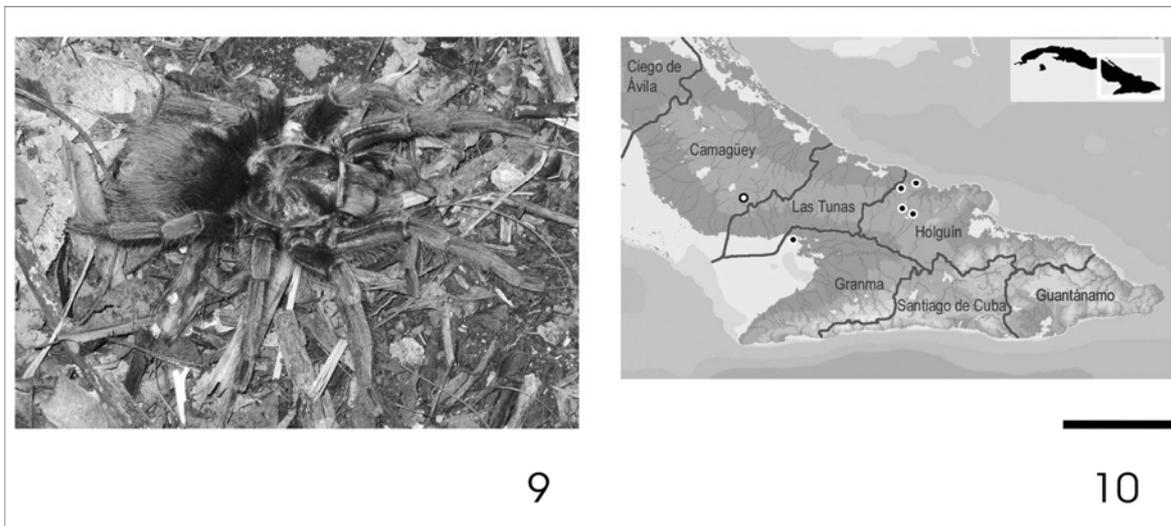
DISTRIBUTION. The known distribution of *P. auratus* sp. n. occupies regions within the limits of Camagüey, Las Tunas and Holguín provinces in central-eastern Cuba (Fig. 10). Nevertheless, the scarcity of visited locations leads to the thought that more thorough sampling could extend the distribution range, leaving it less fragmented.

NATURAL HISTORY. This species primarily lives in semideciduous forests under rocks, in natural crevices of the soil and tree trunks and in caves. They can also be found in very altered areas and a specimen (IES-3.3244) was even collected in a marsh mangrove. It, therefore, seems that this species is ecologically diverse in its habitat requirements. In El Yayal (approximately 3 km south of Holguín City) they can be frequently found under medium-sized rocks (about 80 cm of diameter), where they live in sympatry with *Cyrtopholis ramsi* Rudloff, 1996 (Theraphosidae).

Their reproductive season is during the summer months, when the adult males were captured between the months of June and October, while in search of females.

A female specimen in captivity (IES-3.3201) began to construct a dense web around the walls of the cage on 21/II/2004 through to the morning of the 23, completing a 'cube' of 10 cm in length. By the end of the day, the female had made an egg sac that was beige color and oval shape. On the 29, it was taken from the female, opened, and found to contain 102 yellowish-white eggs, ranging in diameter between 3.2-3.8 mm. Thirteen of them were shrunken and dark green in color possibly due to fungus contamination.

Another female in captivity (IES-3.3206) constructed between days 15-20/II/2004 an egg sac that was later found to contain 272 eggs of similar characteristics to the previous. This female molted on 12/V/2004.



Figures 9-10. *Phormictopus auratus* sp. n. **9.** paratype ♀ (IES-3.3242). **10.** Geographical distribution. (○): Type locality. (●): Other localities. Scale line: 100 km.

Figuras 9-10. *Phormictopus auratus* sp. n. **9.** ♀ paratipo (IES-3.3242). **10.** Distribución geográfica. (○): Localidad tipo. (●): Otras localidades. Línea de escala: 100 km.

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Table I.

Phormictopus auratus sp. n. Variation (mm) of palp and leg segment lengths of seven adult males.

Tabla I.

Phormictopus auratus sp. n. Variación de la longitud (mm) de patas y pedipalpos de siete machos adultos.

SEGMENT	Palp	Leg I	Leg II	Leg III	Leg IV
Femur	12.0–14.7	18.4–23.6	17.2–22.6	16.1–20.8	19.1–23.9
	13.0±1.0	20.2±1.8	19.5±1.8	18.2±1.6	21.4±1.5
Patella	7.0–8.8	10.0–12.4	9.4–11.5	8.5–10.0	8.8–10.5
	7.7±0.7	11.1±0.8	10.3±0.7	9.0±0.5	9.7±0.6
Tibia	10.1–12.3	13.6–17.4	13.7–17.7	12.0–15.8	15.0–19.0
	11.1±0.9	15.1±1.2	15.4±1.3	13.8±1.2	16.6±1.5
Metatarsus	–	16.8–20.9	16.2–20.2	15.5–21.0	20.0–27.2
	–	18.5±1.4	17.6±1.4	18.0±1.8	23.1±2.2
Tarsus	–	9.4–12.8	8.7–12.0	8.0–10.5	7.5–11.5
	–	10.8±1.2	10.1±1.1	9.2±0.8	9.8±1.3

Table II.

Phormictopus auratus sp. n. Variation (mm) of palp and leg segment lengths of 12 adult females.

Tabla II.

Phormictopus auratus sp. n. Variación de la longitud (mm) de patas y pedipalpos de 12 hembras adultas.

SEGMENT	Palp	Leg I	Leg II	Leg III	Leg IV
Femur	12.2–15.5	17.1–21.8	16.2–20.3	15.0–19.1	17.6–21.8
	14.1±1.0	19.9±1.4	18.7±1.3	17.2±1.3	20.1±1.3
Patella	7.6–9.6	10.5–12.6	9.2–12.1	8.4–11.0	9.1–11.8
	8.8±0.6	11.7±0.8	10.9±0.9	9.6±0.8	10.3±0.9
Tibia	9.1–12.0	13.4–16.9	12.3–15.3	10.7–14.0	13.8–17.1
	10.7±0.9	15.4±1.1	13.9±1.0	12.3±1.1	15.5±1.0
Metatarsus	–	13.0–16.8	12.2–16.8	13.5–17.6	18.0–23.2
		15.0±1.3	14.5±1.5	15.6±1.3	20.5±1.6
Tarsus	7.5–10.0	7.0–9.3	6.6–9.0	7.1–9.6	8.0–9.5
	9.2±0.7	8.4±0.7	8.1±0.7	7.8±0.7	8.5±0.5

Table III.

Phormictopus auratus sp. n. Morphometric variation of some characters in seven males and 12 females.

Tabla III.

Phormictopus auratus sp. n. Variación de algunos caracteres morfométricos en siete machos y 12 hembras.

CHARACTER	Males	Females
Carapace Length (mm)	21.6-25.9	23.5-29.5
	23.1±1.5	26.4±2.0
Carapace Width (mm)	20.0-25.2	20.8-26.4
	22.2±1.8	24.4±2.0
Sternum Length (mm)	8.9-11.4	10.2-12.8
	10.0±0.8	11.4±0.8
Sternum Width (mm)	7.9-9.2	9.1-11.1
	8.5±0.5	10.1±0.7
Length/Width Carapace	0.99-1.09	1.04-1.13
	1.04±0.03	1.08±0.03
Length/Width Sternum	1.06-1.27	1.01-1.22
	1.17±0.07	1.13±0.07