

ARTÍCULO:

**On the neotropical genus
Fuentes Peckham & Peckham, 1894
(Araneae, Salticidae)**

Gustavo R. S. Ruiz

1. Laboratório de Artrópodes,
Instituto Butantan,
Av. Vital Brazil, 1500,
05503-900, São Paulo, SP, *Brasil*.

2. Departamento de Zoologia,
Instituto de Biociências,
Universidade de São Paulo,
São Paulo, SP, *Brasil*.
gustavoruiz86@hotmail.com

Antonio D. Brescovit

Laboratório de Artrópodes,
Instituto Butantan,
Av. Vital Brazil, 1500,
05503-900, São Paulo, SP, *Brasil*.
adbresc@terra.com.br

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Aragonesa (SEA)

Avda. Radio Juventud, 37
50012 Zaragoza (ESPAÑA)
Tef. 976 324415
Fax. 976 535697

C-elect.: amelic@telefonica.net

Director: Carles Ribera

C-elect.: cribera@ub.edu

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Abstract:

The type specimens of *Fuentes pertinax* Peckham & Peckham, 1894 from Belize were examined. The species is redescribed and newly recorded from Costa Rica and Panama. A new species, *Fuentes yucatan* n. sp., is described from Mexico and Honduras.

Key words: Belize, Honduras, Mexico, systematics, taxonomy.

Taxonomy: *Fuentes yucatan* n. sp.

**Sobre el género neotropical *Fuentes* Peckham & Peckham, 1894
(Araneae, Salticidae)**

Resumen:

Los especímenes tipo de *Fuentes pertinax* Peckham & Peckham, 1894 de Belize fueron examinados. La especie es redescrita y nuevos registros son presentados de Costa Rica y Panamá. Una especie nueva, *Fuentes yucatan* n. sp., es descrita de México y Honduras.

Palabras clave: Belize, Honduras, México, sistemática, taxonomía

Taxonomía: *Fuentes yucatan* n. sp.

Introduction

The genus *Fuentes* was proposed by Peckham & Peckham (1894: 113) to include *F. pertinax* Peckham & Peckham, 1894, described from Belize. The type series of this species was composed of one male and two females (Peckham & Peckham 1894: 114). F.O.P.-Cambridge (1901), while compiling the *Biologia Centrali Americana*, presented a brief characterization of this species and reproduced the original illustrations of the genitalia, apparently without examining the type specimens. To date, despite some transfers of species to this genus, and subsequently from it to the genera *Dendryphantus* C.L. Koch, 1837, *Marpissa* C.L. Koch, 1846 and *Metacyrba* F.O.P.-Cambridge, 1901 (for details of nomenclatural changes, see Platnick 2006), no other study has been carried out on this type species or genus.

Fuentes seems to be closely related to *Metacyrba* (see Barnes 1958, figs. 47-51), with which it shares the elongated abdomen with a pair of longitudinal whitish stripes on which short white scales are inserted (Fig. 1), the very stout leg I, with femur only twice longer than high, the anal tubercle with a transversal row of modified white hairs, the bifid RTA in the male palp, with an acute long dorsal branch and a short, rather truncated ventral branch (Figs. 4, 8), and the inverted drop-shaped atrium in the female epigynum (Figs. 5, 9). Conversely, it presents a wider epigynal atria (Figs. 5, 9) and a long curling embolus in the male palp (Figs. 3, 7), absent in species of *Metacyrba*. Some of the similarities between *Fuentes* and *Metacyrba* appear to be apomorphic within the marpissines and support their sister-group relationship. However, there is no indication that each genus is an independent monophyletic unit. The differences between them (wider atrium, long embolus) could be a synapomorphy for one genus, but not for both. It is possible that *Fuentes* arose within *Metacyrba*, which, in turn, became paraphyletic. If that is true, *Metacyrba* could once more be considered a junior synonym of *Fuentes*. Nevertheless, we prefer to wait until a broader phylogenetic analysis confirms such hypothesis.

In this paper the type species *Fuentes pertinax* is redescribed and new records for this species are given. Also, a new species from Mexico and Honduras is described.

Material and methods

The material examined is deposited in the Museum of Comparative Zoology, Cambridge (MCZ, L. Leibensperger), in the Florida State Collection of Arthropods, Gainesville (FSCA, G.B. Edwards) and in the Instituto Butantan, São Paulo (IBSP, A.D. Brescovit). All measurements are in millimeters.

Abbreviations used throughout the text are: **RTA**, retrolateral tibial apophysis; **PLE**, posterior lateral eyes; **d**, dorsal; **p**, prolateral; **r**, retrolateral; **v**, ventral; **di**, distal.

Fuentes pertinax Peckham & Peckham, 1894

Figs 1-6

Fuentes pertinax PECKHAM & PECKHAM 1894: 113, pl. 11, fig. 4 (male and two female syntypes from Belize, Peckham & Peckham *leg.*; male lectotype and one female paralectotype, here designated, examined, deposited in MCZ 22631; the second female is apparently lost); F.O.P.-Cambridge 1901: 297, pl. 28, figs.16-17; Platnick 2006.

DIAGNOSIS: *Fuentes pertinax* differs from *F. yucatan* n. sp. by the 1.5 turn long curling embolus around the tegulum of the male palp (Fig. 3), by having an extra loop in the epigynal copulation ducts and a posterior atrium that is open on the posterior edge in the female epigynum (Figs. 5-6).

DESCRIPTION.

Male lectotype. Total length: 5.00. Carapace dark brown, 2.20 long, 1.55 wide, 0.80 high, with white scales on lateral borders and behind the PLE (Fig. 1). Ocular quadrangle 1.05 long. Anterior eye row 1.30 wide, posterior 1.35 wide. Chelicera dark brown, with two teeth on promargin, one on retromargin. Palp brown, with long white hairs dorsally on distal half of femur, on anterior face of patella and in a compact tuft on the ventroprolateral tibia; embolus very long, coiled; RTA bifid, with an acute dorsal branch and a short truncated ventral branch (Fig. 4), ignored by Peckham & Peckham (1894) and by F.O.P.-Cambridge (1901). Leg I dark brown, others yellow. Length of femur: I 1.27; II 0.95; III 0.95; IV 1.27; patella + tibia: I 3.25; II 1.15; III 1.02; IV 1.52; metatarsus + tarsus: I 0.97; II 0.87; III 1.00; IV 1.17. Spination: femur I d1-1-0, p1-2; II d1-1-1, p2di; III d1-1-1, p1-1, r1; IV d1-1-1, p1di, r1di; patella I, II, III, IV 0; tibia I v2-1p; II 0; III v1pdi; IV v1pdi; metatarsus I v2-2; II v1r; III v1di, p1di, r1di; IV v1p-1p, p1di. Sternum yellow. Abdomen cream colored, with a pair of narrow longitudinal whitish stripes dorsally, on which white scales are inserted (Fig. 1); laterally brown. Spinnerets yellow.

Female paralectotype. Total length: 7.20. Carapace dark brown, 2.64 long, 1.70 wide, 0.85 high, with white scales only on lateral borders. Ocular quadrangle 1.28 long. Anterior eye row 1.47 wide, posterior 1.52 wide. Chelicera dark brown, as in male. Palp yellow. Leg I dark brown, others yellow. Length of femur: I 1.32; II 0.97; III 0.97; IV 1.40; patella + tibia: I 1.65; II 1.25; III 1.07; IV 1.77; metatarsus + tarsus: I 1.05; II 0.92; III 1.07; IV 1.32. Spination: femur I d1-1-1; II, III d1-1-1, p1di; IV d1-1-1; patella I, II, III, IV 0; tibia I v2-1p; II, III, IV 0; metatarsus I v2-2; II v1pdi; III p1di; IV v1p-1p, p1di. Sternum yellow. Abdomen cream colored, faded, with sparse dark spots, pointed with white, and with a pair of light longitudinal stripes dorsally, with chevrons on the posterior fourth. Epigynum with a semicircular atrium; ducts very coiled inside and rounded spermathecae (Figs. 5-6). Spinnerets yellow.

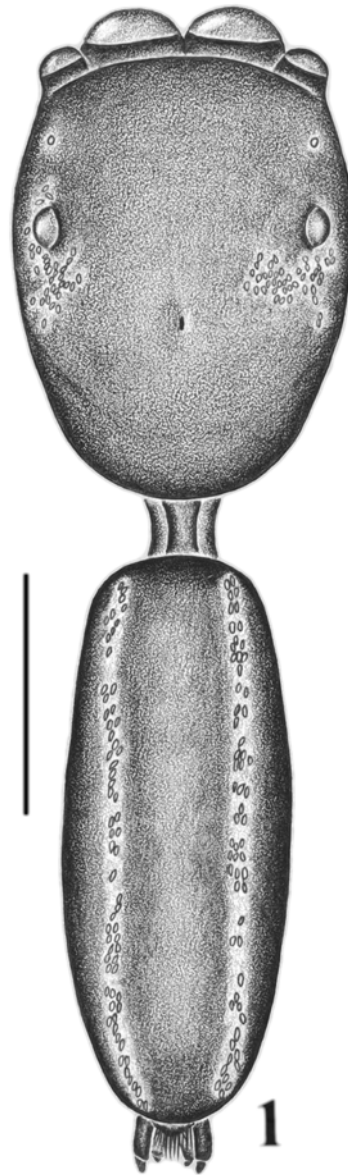
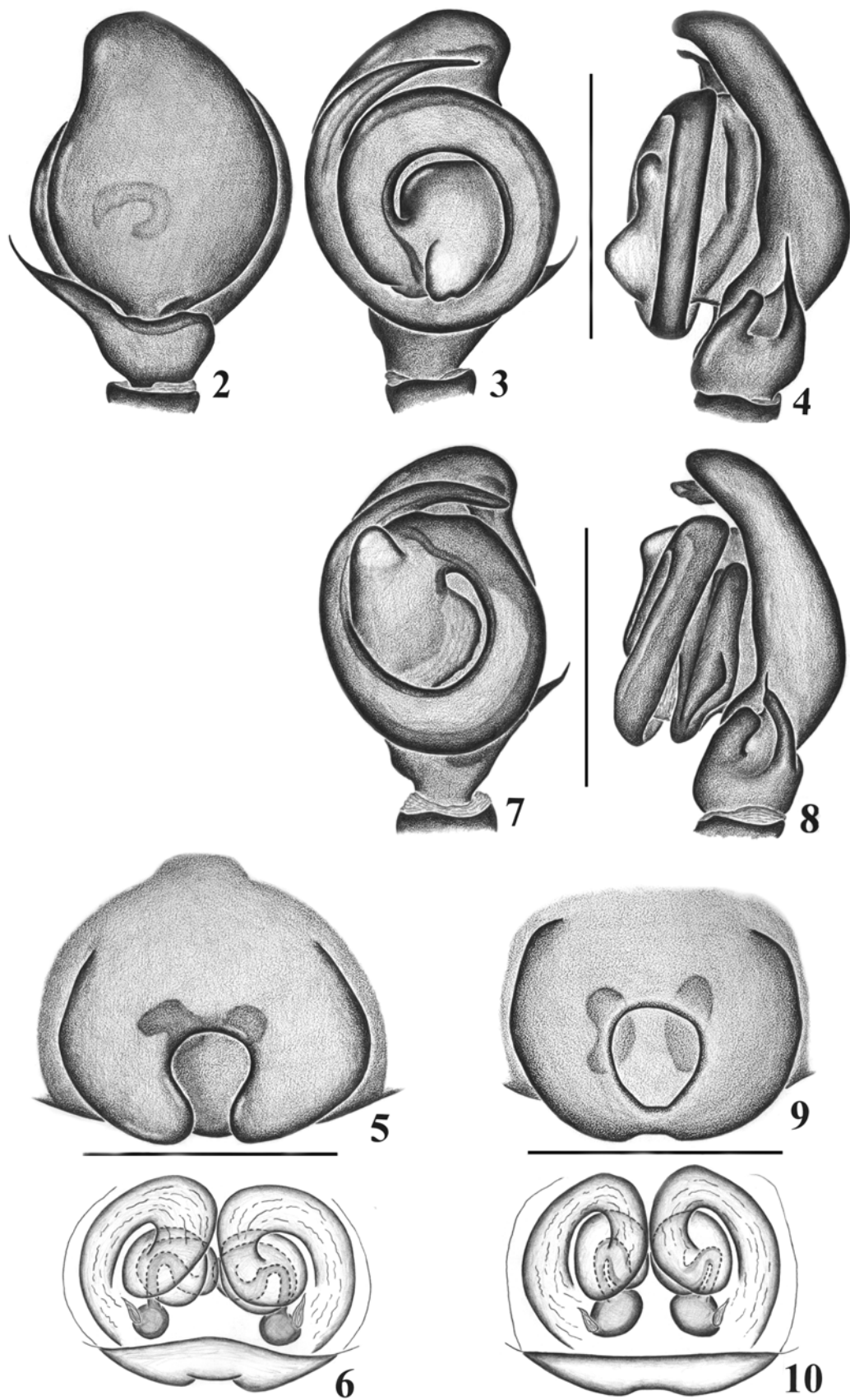


Figure 1. *Fuentes pertinax* Peckham & Peckham; Male, dorsal view. Scale line: 1mm



Figures [2-6]. *Fuentes pertinax* Peckham & Peckham: (2). Left palp, dorsal view; (3). Ventral view; (4). Retrolateral view; (5). Epigynum, ventral view; (6). Dorsal view; Scale lines: 0.5mm.

Figures [7-10]. *Fuentes yucatan* n. sp.: (7) Left palp, ventral view; (8). Retrolateral view; (9). Epigynum, ventral view; (10). Dorsal view. Scale lines:0.5mm.

OTHER MATERIAL EXAMINED: **Costa Rica:** Limon, Sixaola, 1 male, 3.VII.1981, G.B. Edwards *leg.* (FSCA); **Panama:** Bocas del Toro, Changuinola, 2 males, 1 female, 29-30.VII.1981, G.B. Edwards *leg.* (FSCA, IBSP 59774).

DISTRIBUTION. Known from Belize, Costa Rica and Panama.

Fuentes yucatan n. sp.

Figs 7-10

TYPE. Male holotype from 31 km NE of Felipe Carrillo Puerto, on Highway 307 toward Tulum (19° 48' N, 87° 52' W), Quintana Roo, Mexico, 17.VII.1983, W. Maddison & R.S. Anderson *leg.*, deposited in MCZ 60370. Female paratype from Cárdenas, Tabasco, Mexico, 13.I.1976, M. Páez, A. Maruri & G. Zarete *leg.*, deposited in FSCA.

NOTE. Females are tentatively assigned to this species due to proportional correlation of the length of male embolus and the length of female copulation ducts.

DIAGNOSIS. *Fuentes yucatan n. sp.* differs from *F. pertinax* by the shorter curling embolus, which describes only one complete turn around the tegulum of the male palp (Fig. 7) and by having shorter epigynal copulation ducts and a posteriorly closed atrium in the female epigynum (Figs. 9-10).

DESCRIPTION.

Male holotype. Total length: 4.80. Carapace dark brown, totally covered with sparse white scales, 2.15 long, 1.45 wide, 0.75 high, with white scales on lateral borders. Ocular quadrangle 1.05 long. Anterior eye row 1.27 wide, posterior 1.30 wide. Chelicera light brown, with two teeth on promargin, one on retromargin. Palp brown, with long white hairs dorsally on distal half of femur and on anterior face of patella; embolus long, curling around the tegulum (Fig. 7). Leg I light brown, others yellow. Length of femur: I 1.20; II 0.90; III 0.85; IV 1.15; patella + tibia: I 1.55; II 1.10; III 1.00; IV 1.45; metatarsus + tarsus: I 1.00; II 0.85; III 1.00; IV 1.12. Spination: femur I d1-1-1, p1-2; II d1-1-1, p2di; III d1-1-1, p1-2, r1-1; IV d1-1-1, p1di, r1di; patella I, II, III, IV

0; tibia I v1-2-1p (v0-2-1p); II p1; III v1pdi (v0), p1-1 (p1), r1-1; IV v1pdi; metatarsus I v2-2; II v0-1r-1p; III v2di, p1di; IV v1p-2, p1di. Sternum dark yellow. Abdomen cream colored, with a pair of narrow longitudinal whitish stripes dorsally, on which white scales are inserted; light brown posteriorly. Spinnerets yellow.

Female paratype. Total length: 6.70. Carapace dark brown, 2.55 long, 1.67 wide, 0.80 high, with white scales on lateral borders. Ocular quadrangle 1.20 long. Anterior eye row 1.42 wide, posterior 1.45 wide. Chelicera light brown, as in male. Palp yellow. Leg I dark brown, others yellow. Length of femur: I 1.30; II 1.00; III 1.00; IV 1.35; patella + tibia: I 1.60; II 1.25; III 1.05; IV 1.75; metatarsus + tarsus: I 1.05; II 0.95; III 1.05; IV 1.25. Spination: femur I d1-1-1; II d1-1-1, p1di; III d1-1-1, p1di, r1di; IV d1-1-1; patella I, II, III, IV 0; tibia I v0-2-1p; II 0; III r1 (r0); IV 0; metatarsus I v2-2; II v0-1r-1p; III, IV v2di, p1di. Sternum light yellow. Abdomen cream colored, with a pair of narrow longitudinal whitish stripes dorsally, on which white scales are inserted. Epigynum with an oval atrium; ducts very coiled inside and oval spermathecae (Figs. 9-10). Spinnerets light brown.

VARIATION. Three females: total length: 5.50-6.70; carapace length: 2.45-2.55.

OTHER MATERIAL EXAMINED: **Mexico:** Tabasco, Cárdenas, 1 female, 22.I.1976, G. Zarote, A. Moruri & M. Páez *leg.* (IBSP 59775); **Honduras:** Lancetilla, 1 female, VII.1929, A.M. Chickering *leg.* (MCZ 60379).

DISTRIBUTION. Known from Mexico and Honduras.

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