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# Description of a New Species of *Paradamoetas* (Araneae: Salticidae), with a Revised Key to the Genus

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# DESCRIPTION OF A NEW SPECIES OF *PARADAMOETAS* (ARANEAE: SALTICIDAE), WITH A REVISED KEY TO THE GENUS

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ABSTRACT

*Paradamoetas changuinola* new species, is described. The range of this antlike genus of jumping spiders is extended south to Panama. A revised key to the four species currently recognized is presented.

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The antlike jumping spiders of the genus *Paradamoetas* have been revised recently (Cutler 1981). This paper describes a new species from Panama, collected at about the time that the generic revision was published. I wish to thank Dr. G. B. Edwards of the Florida State Collection of Arthropods, for collecting and making these specimens available for study. All specimens are deposited in that collection.

The occurrence of the genus *Paradamoetas* in Panama has been problematical. F. O. Pickard-Cambridge (1901) recorded a female of *P. formicina* Peckham and Peckham from Bugaba. I have not seen this specimen. Banks (1929) recorded the species from Panama. I have examined Banks' specimen and it does not belong to the genus *Paradamoentas*. Chickering (1946) did not have the genus in his extensive collections from Panama. In my revision (Cutler 1981), I noted that northern Nicaragua was the southern limit of the genus. This new species extends the confirmed southern range of *Paradamoetas* to northwestern Panama.

### *Paradamoetas changuinola* new species

**Diagnosis:** This species closely resembles *P. cara* in the male, and *P. formicina* in the female. The position of the promarginal cheliceral tooth readily distinguishes the male from the other species in the genus. The palpal structures are very similar to those of *P. cara*, but the embolus curves more strongly in *P. changuinola* (Fig. 4a). Details of the spermathecae separate the female of *P. changuinola* from the female of *P. formicina* (Figs. 4b&c), but these details may be difficult to see.

The white scales at the sides of the prosoma in *P. changuinola* are slightly toothed as in *P. fontana* (Levi), and have one to two pair of lateral keels in addition to the median keel (Fig. 1a). the iridescent scales of the opisthosoma (Fig. 1b) are smooth, as is typical of most iridescent scales in salticids (Hill 1979).

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

All measurements are in millimeters.

**Male Holotype:** Total length 3.5, carapace 1.65 long, 1.20 wide. Eyerow I width 1.05, eyerow III width 1.12, eyefield length 0.94. Eye diameters: AME 0.27, ALE 0.17, PME 0.03, PLE 0.13. Distance ALE-PME 0.23, PLE-PME 0.33. Femora length: I 0.97, II 0.73, III 0.78, IV 1.09. Leg formula 4123. Spines leg I: dorsal femoral 4, tibial 3-3, metatarsal 2-2. Carapace dark brown-black, with thin band of white scales at lateral borders. Chelicerae and palpi dark brown. Legs brown to dark yellow with brown pro- and retrolateral stripes and infuscation on patellae and tibia. Opisthosoma black and highly iridescent. Carapace length of male paratype 1.18.

**Female Allotype:** Total length 4.1, carapace 1.55 long, 1.09 wide. Eyerow I width 0.90, eyerow III width 1.09, eyefield length 0.75. Eye diameters: AME 0.27, ALE 0.15, PME 0.03,

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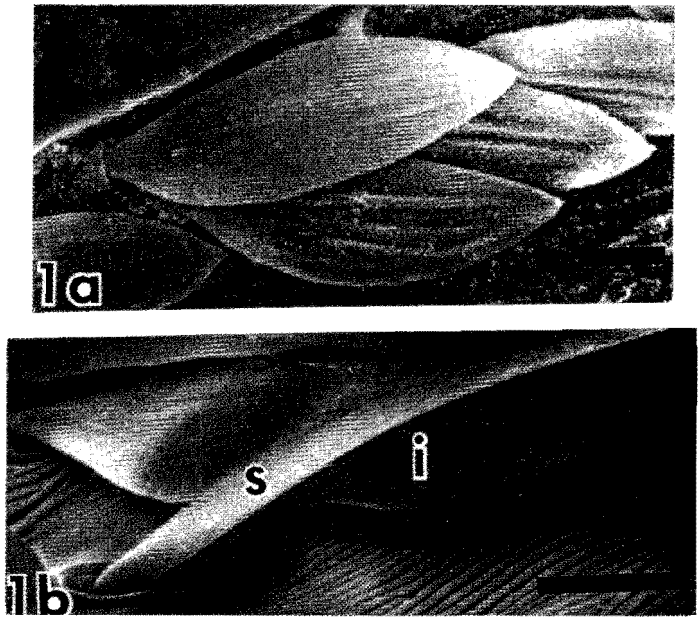



Fig. 1. *Paradamoetas changuinola* immature, scanning electron micrographs, markers are 10 μm; (A) White scales at lateral border of carapace; (B) Smooth iridescent scale from opisthosoma (I) with sensory seta (S).

PLE 0.17. Distance ALE-PME 0.17, PLE-PME 0.20. Femora lengths I 0.80, II 0.65, III 0.70, IV 1.14. Leg formula 4132. Spination and coloration as in male. Carapace length of female paratype 1.50.

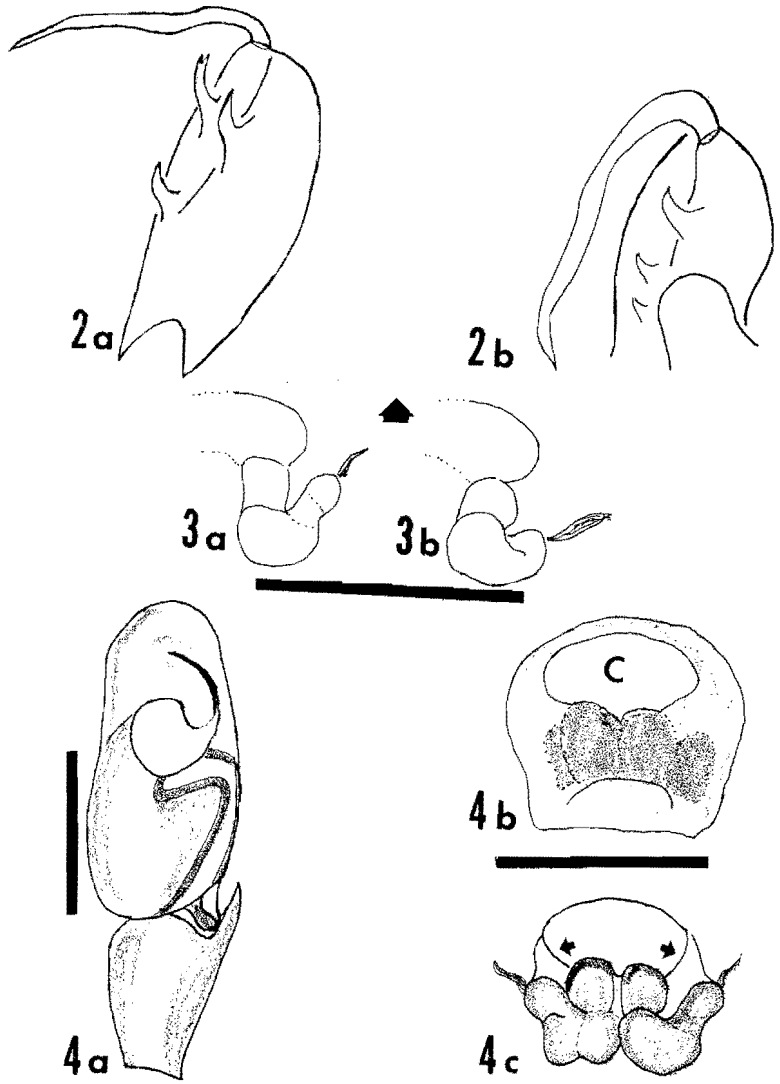
**Material Examined:** Male holotype: PANAMA: Bocas del Toro, Changuinola, 2 August 1981. Female allotype: Same locality, 29 July 1981. Male and female paratypes, and two immatures: Same locality, 29 July 1981. All specimens collected by beating branches of dead trees lying across a jeep trail in forest.

## SYNOPSIS AND DISTRIBUTION OF *PARADAMOETAS*

*P. cara* (Peckham and Peckham). El Salvador, Guatemala, Honduras, eastern Mexico.
*P. changuinola* n. sp. Panama.
*P. fontana* (Levi). Canada, Ontario; United States, Minnesota,, Wisconsin.
*P. formicina* Peckham and Peckham. Guatemala; Mexico, Chiapas; Nicaragua; United States, Texas?. Type species of genus.

## KEY TO THE SPECIES OF *PARADAMOETAS*

1. Males ..... 2
Females (best differentiated by details of the internal tubes of the epigynum) .... 5
2(1). Cheliceral fang groove deeply excavated, retromarginal cheliceral tooth basal ..... *fontana*
Cheliceral fang groove not deeply excavated, retromarginal cheliceral tooth distal . ..... 3




Figs. 2–4. (2) *Paradamoetas* male chelicerae; (A) *P. changuinola*; (B) *P. cara*. (3) *Paradamoetas* females, internal view of left spermathecae. Markers are 0.17 mm. Arrow indicates anterior; (A) *P. changuinola*; (B) *P. formicina*. (4) *Paradamoetas changuinola* genitalia. Markers are 0.17 mm; (A) Ventral view of left male palpus; (B) External view of epigynum, C = clear area; (C) Internal view of epigynum, arrows indicate openings for embolic insertion.

3(2). Promarginal cheliceral tooth opposite retromarginal tooth (Fig. 2a) ... *changuinola*
Promarginal cheliceral tooth proximal relative to retromarginal tooth (Fig. 2b) ... 4
4(3). Embolus a simple curve with one bend ..... *cara*
Embolus sinuous, with two bends ..... *formicina*
5(1). Epigynum elongated parallel to longitudinal axis of opisthosoma ..... *cara*
Epigyum elongated parallel to transverse axis of opisthosoma ..... 6
6(5). Epigynum with clear area (openings of copulatory tubes at the sides of this area) separated from spermathecae ..... *fontana*
Epigynum with spermathecae intruding into this clear area ..... 7
7(6). Spermathecae as in Fig. 3a, note greater anteriad extension of laterad portion of spermathacea compared to Fig. 3b ..... *changuinola*
Spermathecae as in Fig. 3b ..... *formicina*

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