

RESEARCH NOTE

A SECOND SPECIES OF THE GENUS *MEXICHTHONIUS* (PSEUDOSCORPIONIDA, CHTHONIIDAE)

The genus *Mexichthonius* was based on *M. unicus* Muchmore (*J. Arachnol.* 3:1-4, 1975) described from a single female taken at Ich-Ek (near Hopelchen), Campeche, México, in 1973. Despite continued (albeit sporadic) collecting in southeastern México by several people, only one other specimen pertaining to this remarkable genus has been found. That, also a female, proves to represent a second species.

Mexichthonius pacal, new species

Figures 1-3

Material.—Holotype female (WM 3987.02001) collected by Tullgren funnel extraction from rotted wood from forest near Chacomax River, Palenque, Chiapas, México, 24 March 1975 (C.H. Alteri). The type is in the Florida State Collection of Arthropods, Gainesville.

Diagnosis.—Much smaller than *M. unicus*, the only other species known in the genus; with carapace 0.30 mm long and palpal femur 0.26 mm long.

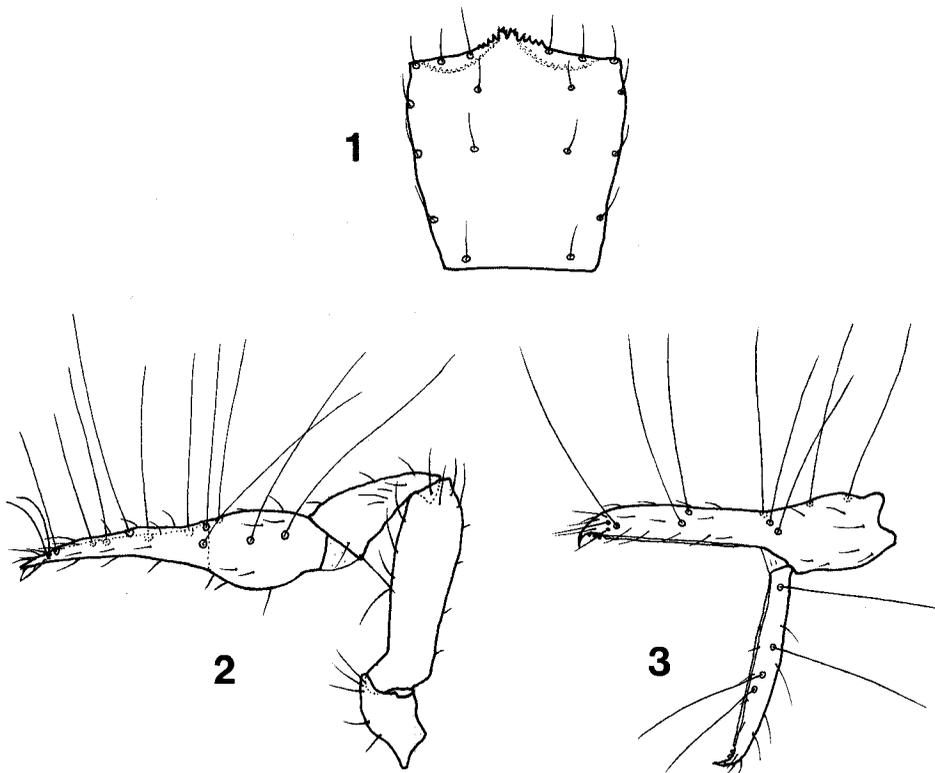
Description.—Female similar to *M. unicus* in general features. All parts nearly colorless. Carapace 1.1 times as long as broad, narrowed posteriorly (Fig. 1); anterior margin with large, serrate epistome and flanking denticles; no eyes; chaetotaxy 6-4-4-2-2=18. Coxal area typical; chaetotaxy 2-2-1:mmm-2-1:2-4-CS:2-5:2-5; lateral seta on apex of palpal coxa short and strongly curved medially; coxal spines consist of one large, complex lateral and five small spines medially; no intercoxal tubercle. Abdomen typical; tergal chaetotaxy 4:4:6:6:6:6:(lost); sternal chaetotaxy 5:(2)6(2):(1)6(2):9:(lost).

Chelicera large, 0.85 as long as carapace; hand with five setae; flagellum of eight pinnate setae; spinneret a distinct knob.

Palp slightly more robust than that of *M. unicus*, but with relatively longer chelal fingers (Figs. 2 and 3); trochanter 1.85, femur 3.25, tibia 2.1 and chela 3.8 times as long as broad; hand 1.4 times as long as deep; movable finger 1.93 times as long as hand. Trichobothria essentially as in *M. unicus*, notably with *isb* and *ib* in tandem on dorsum of hand. Fixed finger with three small denticles just behind terminal tooth, followed by a low, irregular lamella, and with a small, internal accessory denticle distally; movable finger similarly with five distal denticles and a lamella. Movable finger with a small sensillum on external surface near dental margin just proximal to level of trichobothrium *sb*.

Legs typical, stout; leg IV with entire femur 2.0 and tibia 3.7 times as long as deep.

Measurements (mm): Body length about 1.0. Carapace length 0.30. Chelicera 0.25 by 0.14. Palpal trochanter 0.13 by 0.07; femur 0.26 by 0.08; tibia 0.17 by 0.08; chela 0.38 by 0.10; hand 0.14 by 0.10; movable finger 0.27 long. Leg IV: entire femur 0.25 by 0.125; tibia 0.185 by 0.05.



Figs. 1-3.—*Mexichthonius pacal*, new species: 1, carapace; 2, dorsal view of right palp; 3, lateral view of left chela.

Male.—Unknown.

Etymology.—The species is called *pacal* for the Mayan priest-king of that name.

Remarks.—The type locality of *Mexichthonius pacal* at Palenque, Chiapas, is over 200 miles southwest of Ich-Ek, Campeche, type locality of *M. unicus*. It seems likely that the genus is distributed through southern México and Central America, but further information must await extensive collection of the soil microfauna of the area.

Other pseudoscorpions collected along with *M. pacal* include representatives of the genera *Aphrastochthonius*, *Tyrannochthonius*, *Pseudochthonius*, and *Albiorix*.

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