

BOLETIM DO MUSEU NACIONAL

NOVA SÉRIE
RIO DE JANEIRO - BRASIL

ISSN 0080-312X

ZOOLOGIA

Nº 420

21 DE JUNHO DE 2000

A REVIEW OF *CNEMOLEPTES* MELLO-LEITÃO (ARACHNIDA, OPILIONES, GONYLEPTIDAE) ⁽¹⁾

(With 6 figures)

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The genus *Cnemoleptes* has been described (MELLO-LEITÃO, 1941) as a member of the Mitobatinae under the assumption that all Gonyleptidae with sexual dimorphism in length of male femur IV could be either Mitobatinae (genera with only three mesotergal areas) or Bourguiyinae (genera with four mesotergal areas). In the second part of the monograph of the Gonyleptidae by SOARES & SOARES (1949), this genus has been acritically listed under the Mitobatinae and given a standard diagnosis comparing it to other genera. With the complete disintegration of the Bourguiyinae as conceived by MELLO-LEITÃO (1949) and SOARES & SOARES (1949) and a new extension proposed for this subfamily (KURY, 1994b), several genera have been then included in the Bourguiyinae, among which *Cnemoleptes*. The validity of *Cnemoleptes* and its relationships with other Bourguiyinae have never been assessed.

The genus *Cnemoleptes* has always been a monotypic taxon, and its type species has never been adequately described. Below a redescription of *Cnemoleptes passarellii* Mello-Leitão, 1941 is given, emphasizing diagnostic features among Bourguiyinae and not Mitobatinae.

Cnemoleptes Mello-Leitão, 1941

Cnemoleptes Mello-Leitão, 1941:440; SOARES & SOARES, 1949:231; KURY, 1994b:351. (Type species *Cnemoleptes passarellii* Mello-Leitão, 1941).

Diagnosis – Most closely related to *Stylopisthos* Roewer, 1930, by 1- eye mound unarmed (Figs.1-2); 2- free tergites and sternites black in female, contrasting with color of scute; 3- ratio calcaneus/astragalus of metatarsus III of male 0.3 or more and 4- legs of male much darker than body. Distinguished by 1- the lack of the distal inner hook on trochanter IV of male and 2- presence of thumb-like dorsal process on glans (Figs.4-6).

¹ Received on September 1, 1999. Accepted on February 29, 2000.

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Cnemoleptes passarellii Mello-Leitão, 1941

(Figs. 1-6)

Cnemoleptes passarellii Mello-Leitão, 1941:440; SOARES, 1945:367; SOARES & SOARES, 1949:232. (Types MNRJ 196 ♂ lectotype, 8♂ 19♀ paralectotypes, MNRJ 5998, 1♂ paralectotype, herewith designated, from Serra do Barro Branco, Caxias, RJ, Brazil, A.Passarelli col.).

Etymology – The name has been given after the collector, A. Passarelli, who provided material for the Museu Nacional in the early 1940's.

Type-locality – BRAZIL, RIO DE JANEIRO, Barro Branco.

Distribution – Known only from the type-locality. The information given by Mello-Leitão is incomplete. The correct name of the type locality is Serra do Barro Branco, Municipality of Duque de Caxias, Rio de Janeiro, Brazil (22°47'S 43°18'W), which A. Passarelli visited many times at the end of the 1930's.

Material examined – Only the type series.

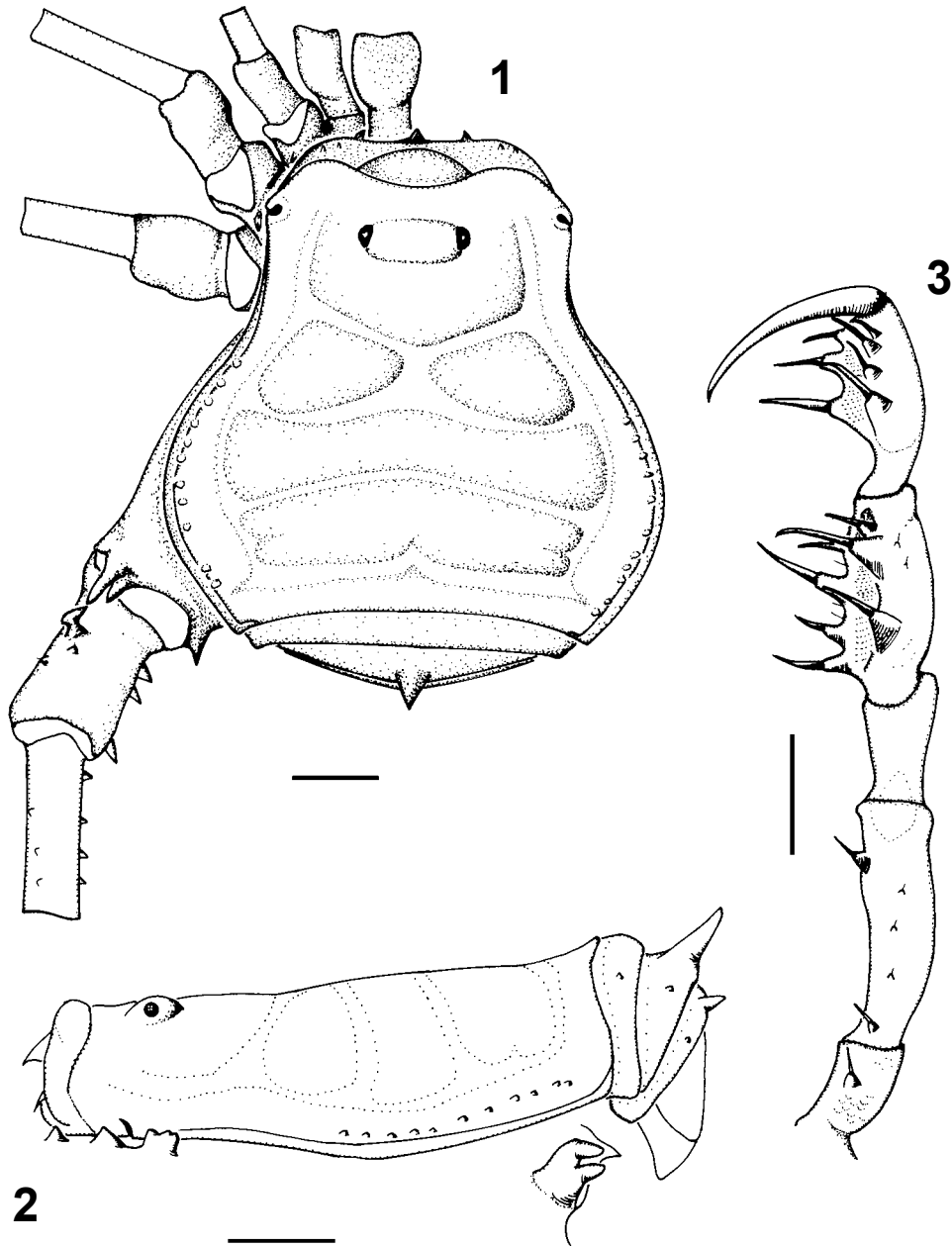
Description – Male lectotype. Dorsum (Figs.1-2). Dorsal scute 5.77 long. Carapace 2.59 long, 3.65 wide. Abdominal scute 3.18 long, 6.05 wide. Eye mound wide low, smooth and unarmed. Abdominal scute divided in four areas by three transversal grooves. Free tergite I and anal opercle unarmed; free tergites II and III armed with a median spine, much smaller at tergite III. Lateral margin with a crest bearing a row of large rounded granules. Anal operculum unarmed. Pedipalpal trochanter (Fig.3) armed ventrally with robust setiferous tubercle; femur with a ventro-basal tubercle, a ventral row of three setose granules and a strong mesal distal spine; patella unarmed, slightly widened distally, tibia armed with 4 mesal (Ili) and 3 ectal (I-Ii) spines; tarsus armed with 3 mesal (Iii) and 4 ectal spines (Iiii). Trochanter IV armed with a dorso-basal apophysis curved to the inside, and a row of three mesal conic apophyses; without internal hook. Femurs I to IV straight. Coxa IV following outline of scutum, steadily but slightly surpassing it in dorsal view, armed with dorso-apical apophysis with two short branches, dorsal one curved and slightly longer; also a ventro-apical short and straight apophysis. Femur IV slightly thickened in basal third and covered with longitudinal rows of setiferous tubercles; femora III-IV slightly clavate and bent at joint with patella. Tibia IV also this way at joint with metatarsus.

Ratio calcaneus/astragalus of metatarsi I to IV:0.38-0.06-0.30-0.03; tarsal formula:7:14/15:10:11; variation in male paralectotypes:7/8:13/16:10/12:11/13; distitarsi I and II three-segmented.

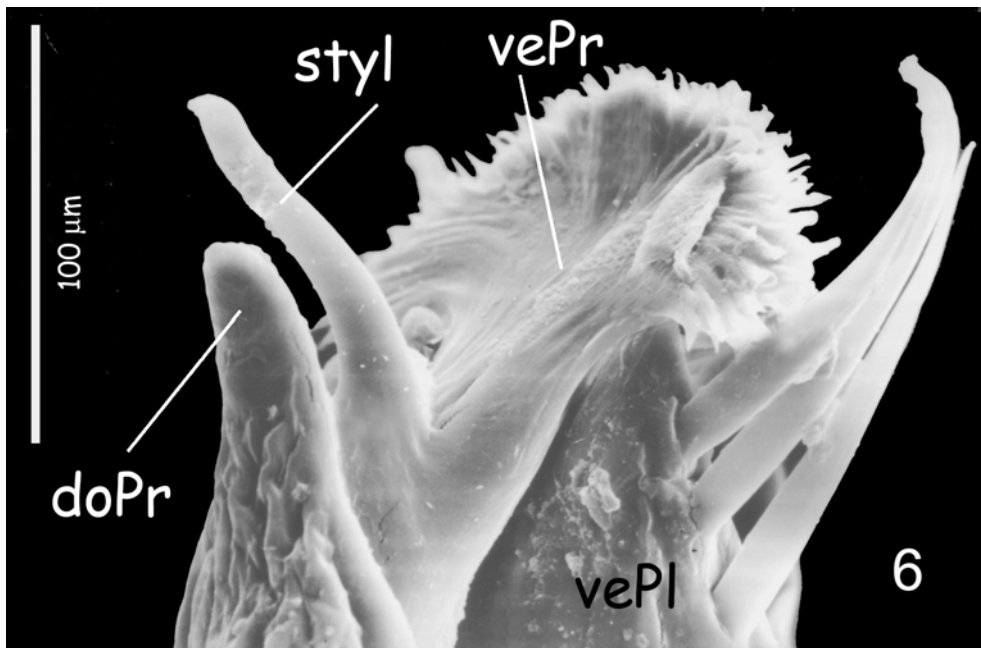
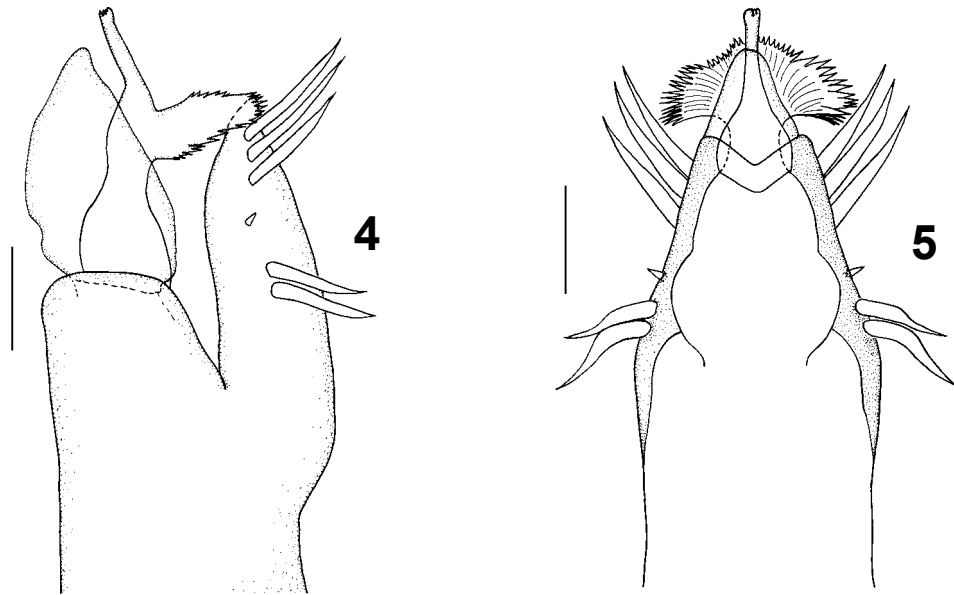
Genitalia (Figs.4-6) – Penis 3.50 long. Ventral plate subrectangular. Distal border concave. Lateral setae with two basal and three long curved distal setae. Glans with thumb-like dorsal process. Stylus unarmed, slender, sinuous. Ventral process flabelliform, with rectangular shaft giving rise to a crown of lamellae.

Coloration – Body dark-yellow; black pigmentation aggregated in very little spots in mesotergum. Pedipalps, free tergites and venter uniform mahogany brown; free sternites dark brown. Femur IV distally, patella, tibia and metatarsus IV dark brown. Femur IV with black loose reticle in basal half.

Female – Free tergites, posterior margin of scute and anal opercles are black, while in male are dark-yellow, concolorous with the rest of the body. Femora I-II are straight and III-IV sigmoid. Variation of tarsal segmentation in female paralectotypes: 7:13/14:10/11:11/13.



Cnemoleptes passarellii male lectotype: fig.1- habitus, dorsal view; fig.2- habitus, lateral view; fig.3- left pedipalpus, ventral view. Scale bars are 1.0mm.



Cnemoleptes passarellii male paralectotype: fig.4- Distal part of penis, ventral view; fig.5- same, lateral view; fig 6- Glans penis, oblique view, (doPr) dorsal process, (styl) stylus, (vePl) ventral plate, (vePr) ventral process. Scale bars are 0.1mm.

TABLE 1
 MALE LECTOTYPE APPENDAGE MEASUREMENTS OF
CNEMOLEPTES PASSARELLII

Appendage	Tr	Fe	Pa	Ti	Mt	Ta
Pedipalpus	1.06(0.67)	2.07(1.90)	1.15(1.18)	1.32(1.54)	-	2.27(2.60)
Leg I	0.84(0.72)	4.34(3.42)	1.30(1.18)	3.19(2.62)	4.69(3.61)	2.28(2.06)
Leg II	1.18(0.86)	13.71(8.05)	1.87(1.34)	9.24(5.31)	12.47(6.66)	7.08(5.13)
Leg III	1.01(0.91)	9.47(7.77)	1.75(1.56)	5.13(3.84)	7.18(5.13)	3.48(3.12)
Leg IV	1.87(1.25)	18.63(9.32)	2.23(2.06)	13.24(6.09)	18.33(7.92)	4.07(3.60)

(measurements in parentheses are of one female paralectotyp)

DISCUSSION

MELLO-LEITÃO, by occasion of the description of *C. passarellii* (1941:440), considered the monotypic "mitobatinae" genus *Cnemoleptes* as closest to *Asarcus* Koch, 1839, and surely also to *Leptocnema* Koch, 1839, as *Cnemoleptes* is an anagram of this pre-existing name (from Greek *leptós* = slender and *cneme* = tibia). At that time these were the only pretense Mitobatinae with all areas of dorsal scute unarmed. *Asarcus* has been removed to the Bourguiyinae (KURY, 1994b). A study of *Leptocnema* showed it is nor a mitobatine either, being related to the Progonyleptoidellinae instead (KURY, 1994a). There is no evidence to support the monophyly of *Cnemoleptes* + *Asarcus* as shown above, since the loss of the armature is symplesiomorphic at this universality level.

Preliminary work on the internal relationships of the Bourguiyinae (KURY, unpub. data) suggests that *Cnemoleptes* is most closely related to *Stylopisthos* because of the characters cited in the diagnosis, and that these two genera would form a clade with *Styloleptes* Piza, 1938 because of ratio of stigmatic area length/stigmatic distance more than 1.3 and femur IV with many minute black dots.

ACKNOWLEDGMENTS

I am indebted to Dr Marcia Attias (Instituto de Biofísica Carlos Chagas Filho, Universidade Federal do Rio de Janeiro) for the SEM shot. This study has been supported by grant #300175/94-9 from Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq).

RESUMO

Com base no estudo da série-tipo de *Cnemoleptes passarellii* Mello-Leitão, 1941, a descrição original é complementada, a espécie é ilustrada pela primeira vez e a série lectotípica é designada. A localidade tipo é positivamente identificada como Serra do Barro Branco, Município de Duque de Caxias, Rio de Janeiro, Brasil (22°47'S 43°18'W).

Palavras-chave: Bourguyiinae; Mitobatinae; opiliões; Sudeste do Brasil; Mata Atlântica.

ABSTRACT

From the examination of the type series of *Cnemoleptes passarellii* Mello-Leitão, 1941, the original description is supplemented, the species is figured for the first time and the lectotypic series is designated. The type locality is positively identified as Serra do Barro Branco, Municipality of Duque de Caxias, Rio de Janeiro, Brazil (22°47'S 43°18'W).

Key words: Bourguyiinae; Mitobatinae; harvestmen; Southeastern Brazil; Atlantic Forest.

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