

# CONTRIBUIÇÕES AVULSAS

## SOBRE A HISTÓRIA NATURAL DO BRASIL

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### NOTES ON CAMPOSCOLA MELLO-LEITÃO WITH REDESCRIPTION OF THE TYPE SPECIES (OPILIONES, GONYOLEPTIDAE, PACHYLINAE)

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**Abstract:** The hitherto monotypic genus *Camposicola* is studied. The female holotype of *Camposicola altifrons* from Brazil is redescribed and illustrated. The male is discovered and described from new material. An emended diagnosis is given for the genus and their relationships within Pachylinae are discussed. *Camposicoloides sanctateresae* Soares & Soares, 1946 is removed to *Camposicola* giving the genus a second species. A key is given to separate the two species of *Camposicola*.

**key words:** Opiliones, Camposicola, Taxonomy, Neotropica.

Mello-Leitão (1924) described the new genus *Camposicola* based on a single female of the new species *Camposicola altifrons* from northern Rio de Janeiro state, eastern Brazil, providing a poor illustration of the dorsal scute in dorsal view and a lateral view of the eye mound. Two years later Mello-Leitão (1926) described again the same species and genus as new. The type was declared to be in the private collection Mello-Leitão. B. Soares (1945) indicated that the type was in the Museu Nacional, Rio de Janeiro (MNRJ). No author gave any further information about the genus *Camposicola*, nor any additional material of the type species has been reported.

B. Soares (1944) described the new genus *Camposicoloides*, stating it was next to *Camposicola*, and Soares & Soares (1946) described a second species of *Camposicoloides*. Both species of *Camposicoloides* are from the Brazilian State of Espírito Santo.

Now, with the discovery of two males of *Camposicola altifrons*, near the type locality, a redescription of adults of both sexes is due as well as an emended diagnosis of this genus.

#### Systematic results

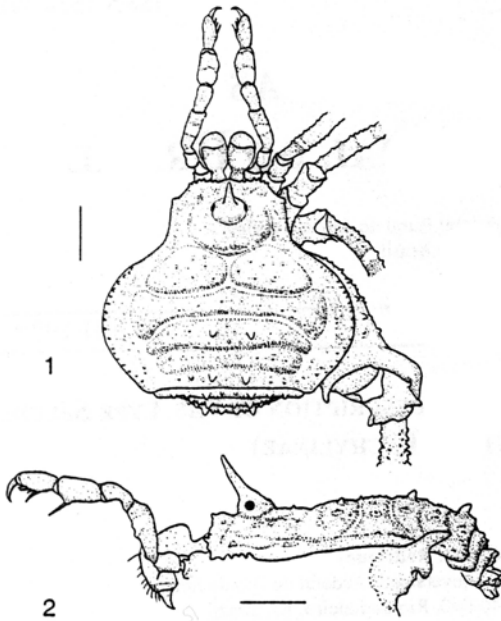
##### *Camposicola* Mello-Leitão, 1924

*Camposicola* Mello-Leitão, 1924: 181; 1926: 373 [mistakenly cited as a new genus]; Roewer, 1929: 239; 1931: 103; Mello-Leitão, 1932: 188; B. Soares, 1944: 150; Soares & Soares, 1954: 240; Muñoz-Cuevas, 1973: 226. (Type species *Camposicola altifrons* Mello-Leitão, 1924, by monotypy).

**Diagnosis.**—Pachylinae with unpaired high spine on eye mound, oblique frontwards, scutal areas and tergites without conspicuous armature, but with a pair of paramedian larger tubercles at each areas III, V of both sexes and free tergites II-III of female. Leg IV of male as long as that of female, but thicker and more heavily armed. Coxa IV of male with dorso-apical apophysis directed obliquely backwards bending in elbow near the apex and ventro apical straight inner apophysis. Femur IV of male densely granulous with two or three larger mesal subdistal to distal spines. Tibia IV of male with basal ventro mesal and ventro ectal row of three to five large spines. Tarsal counts 6/8-9/7/7. Basitarsus I of male not swollen.

**Relationships.**—The unpaired armature of eye mound is shared by many pachylinae not necessarily closely related. The type of sexual dimorphism with leg IV of male not elongate and legs of females unarmed suggests a relationship with *Neopachylus* Roewer, 1913 which is distributed in southern Brazil and *Camposicoloides* B. Soares, 1944 which occurs roughly in the same area as *Camposicola*. *Camposicola* differs from *Neopachylus* by having sharp mesotergal tubercles (elliptical flattened in *Neopachylus*), area IV undivided, trochanter IV of male without heavy armature. It differs from *Camposicoloides* by the armature of femur and tibia IV (reduced to rows of rounded granules in *Camposicoloides*), shape of apophysis of coxa IV of male (transverse and short in *Camposicoloides*).

**Etymology.**—Derived from Campos (a municipality in the State of Rio de Janeiro) + Latin cola (= inhabitant).



Figs 1-2. *Camposicola altifrons*, male MNRJ 5390.  
1. Habitus, dorsal view; 2. Habitus, lateral view.  
Scale bars = 1 mm.

**Key to the two species of *Camposicola***

1. Femur IV of male with two main spines medial and distal widely separated; femora I-IV ringed medially.....  
.....*C. altifrons*  
Femur IV of male with two main spines subdistal close together; femora I-IV not ringed medially.....  
.....*C. sanctateresae*

***Camposicola altifrons* Mello-Leitão, 1924**

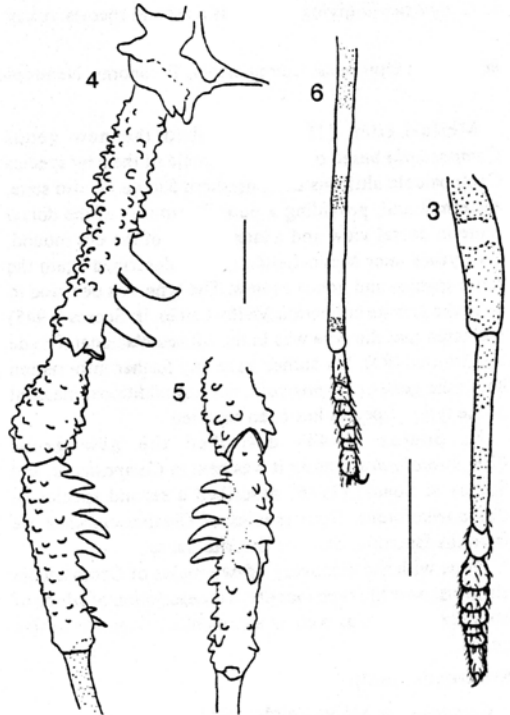
*Camposicola altifrons* Mello-Leitão, 1924: 182, figs 2-3; 1926: 373; Roewer, 1929: 239; 1931: 103; Mello-Leitão, 1932: 188, fig 120; B. Soares, 1945: 370; Soares & Soares, 1954: 240. (Type MNRJ 1485, female holotype, examined).

*Type locality* — BRAZIL. Rio de Janeiro. Campos (21°45'42"S 41°19'30"W).

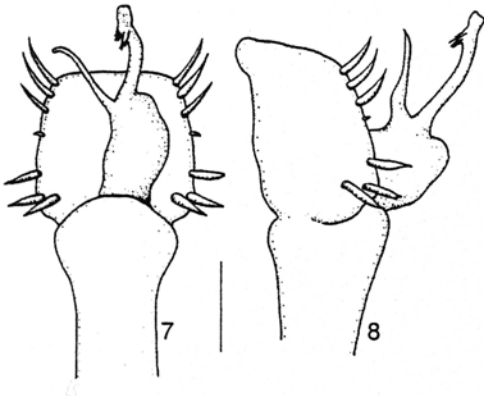
*Other material examined.* BRAZIL. Rio de Janeiro: 1 male (MNRJ 5390) Macaé, Barra do Sana, Poço do Brinco, 6 km from Sana, 16 km of Casimiro de Abreu (22°21'29"S, 42°12'08"W) leg. Alessandro P.L. Giupponi 3-4.vi.1999, on leaf litter; 1 # (MNRJ 5435) Santa Maria Madalena: Parque Estadual do Desengano. (21°57'S, 41°57'W) Renner & Alessandra Baptista 20-22.xii.1991.

**Description of male.** (MNRJ 5390). Measurements (in parentheses male MNRJ 5435): carapace 2.2 (2.0) wide, 1.4 (1.4) long; abdominal scute 4.4 (4.0) wide, 2.4 (2.1) long. Eye mound narrow, with large single spine oblique frontwards (Figs 1-2). Scutal areas densely covered with minute setiferous tubercles. A paramedian pair of larger tubercles on each area III and V. Free tergites covered with rows of sharp granules. Area I longer than the others divided in left and right halves, by medial longitudinal groove. Area II longer at the outer fourth. Areas III and IV short. Lateral areas with two rows of setiferous tubercles. Pedipalps short

and slender, measurements of articles: Tr 0.5, Fe 1.0, Pa 1.0, Ti 0.7, Ta 0.6, claw 0.3. Pedipalpal femur unarmed, pedipalpal tibia armed with one ectal and two mesal spines; pedipalpal tarsus with three mesal and three ectal spines. Tarsal counts 6-6/8-8/7-7/7-7 (Fig 3). Coxa IV densely covered with setiferous tubercles and with stout dorsal apical branched apophysis and small ventral apical inner apophysis (Fig 1). Trochanter IV with bifid median ectal apophysis, dorsal apical straight apophysis and mesal apical straight apophysis (Fig 4). Femora III and IV sigmoid. Femur IV with many well defined rows of setiferous tubercles, and three stout distal apophyses. Patella IV densely granulous (Fig 4). Tibia IV densely covered with granules with ventro ectal and ventro mesal stouter spines (Fig 5). Metatarsus IV smooth (Fig 6). Body background dark brown, with dark yellow spots around each granule of scute and tergites. Femur I-IV each with a median yellow ring. Metatarsi I-II with a median yellow ring, metatarsi III-IV with three very wide yellow rings and tarsi III-IV entirely yellow. Trochanters I-III yellow, pedipalps and chelicerae mottled in yellow. Coxae I-IV, free sternites and stigmatic area dark brown, densely covered with yellow spots around granules. Ventral plate of penis (Figs 7-8) rectangular with rounded corners, distal border entire, two groups of setae, basal with three setae and distal with 1 small + three large setae. Stylus cylindrical with apex truncate possessing many subdistal pointed sclerites, dorsal process absent, ventral process straight, slightly bent at apex, very slender without setae, flaps or ornaments.



Figs 3-6. *Camposicola altifrons*, male MNRJ 5390. 3. left metatarsus and tarsus of leg I; 4. Left trochanter to tibia IV, dorsal view; 5. Tibia IV, ventral view; 6. Left metatarsus to tarsus IV, dorsal view. Scale bars = 1 mm.



Figs 7-8. *Camposicola altifrons*, male MNRJ 5390. 7. Penis, dorsal view; 8. penis, lateral view. Scale bars = 0.1 mm.

Specimen	Fe I	Ti I	Fe II	Ti II	Fe III	Ti III	Fe IV	Ti IV
<i>Macho</i>								
MNRJ 5390	1.5	1.1	2.3	2.2	2.1	1.3	2.6	2.1
<i>Sana</i>								
<i>Macho</i>								
MNRJ 5435	1.3	1.0	2.6	1.9	2.1	1.4	2.4	1.8
<i>Desengano</i>								

Table 1. Femur and tibia measurements of the two studied males of *Camposicola altifrons*.

**Description of female holotype (MNRJ 1485).** Measurements: carapace 2.3 wide, 1.6 long; abdominal scute 4.5 wide, 2.7 long. Leg I Fe 1.2, Ti 1.2; leg III Fe 2.5, Ti 2.0; leg IV Fe 2.6, Ti 2.1. Measurements of pedipalpal articles: Tr 0.5, Fe 1.0, Pa 0.6, Ti 0.6, Ta 0.6, claw 0.5. Lateral areas with row of sharp tubercles, much stouter than in male (Figs 9-10). Armature of coxa IV reduced to a spiniform dorso-apical apophysis, trochanter IV with a small ventro-apical spine (Fig 9). Areas I-V as in male. Armature of free tergites II-III clearly with pair of paramedian spines (Fig 10). The holotype is now heavily discolored by bad preservation in alcohol, but the description of Mello-Leitão perfectly fits well in the color of males MNRJ 5390 and 5435. For the tarsal counts Mello-Leitão gave 6/n/n/n, where "n" means "more than six". Both legs II are lost, tarsal counts of the remaining are 6/7/7/7 (Figs 11-13), which also agrees with the male

*Camposicola sanctateresae* (Soares & Soares, 1946)  
NEW COMB.

*Camposicoloides sanctateresae* Soares & Soares, 1946d: 198, fig 2; 1954b: 241. (Type MZUSP male holotype OS 2975).

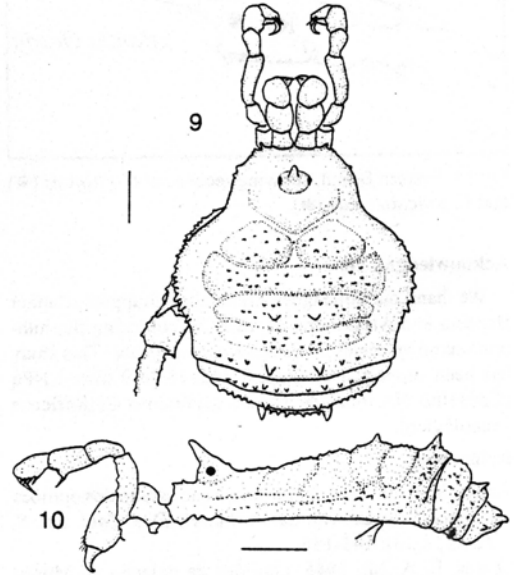
Type locality — BRAZIL. Espírito Santo. Santa Teresa (19°56'08"S 40°36'01"W)

#### Discussion

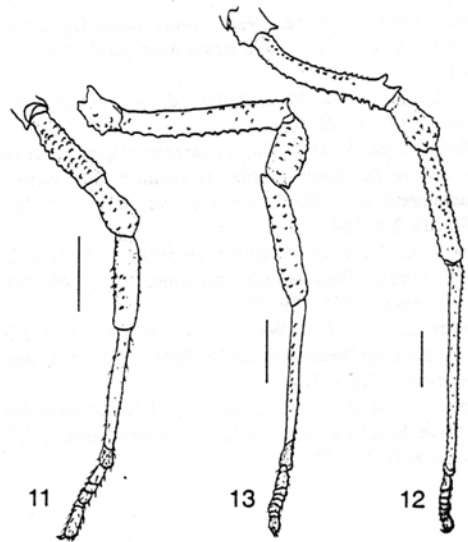
The systematics of the Pachylinae is still in a very unsatisfactory state, where monotypic genera predominate and relationships among genera are unknown. The recognition of the two males of *Camposicola altifrons* as such has been possible mainly because of the very

diagnostic color pattern of legs. Sexual dimorphic characters of male are of immense importance for diagnosis, and the erection of a genus based only on a female is absurd and in some cases makes impossible the establishment of the identity of the species even with the examination of type material.

The relationships of *Camposicoloides mendax*, type species of *Camposicoloides* are uncertain. Judging by the male sexual characters of leg IV, the second species of *Camposicoloides* is without doubt much more closely related of *Camposicola altifrons* than to *C. mendax*.



Figs 9-10. *Camposicola altifrons*, female holotype (MNRJ 1485). 9. Habitus, dorsal view; 10. Habitus, lateral view. Scale bars = 1 mm.



Figs 11-13. *Camposicola altifrons*, female holotype (MNRJ 1485). 11. Leg I; 12. Leg III; 13. Leg IV. Scale bars = 1 mm.

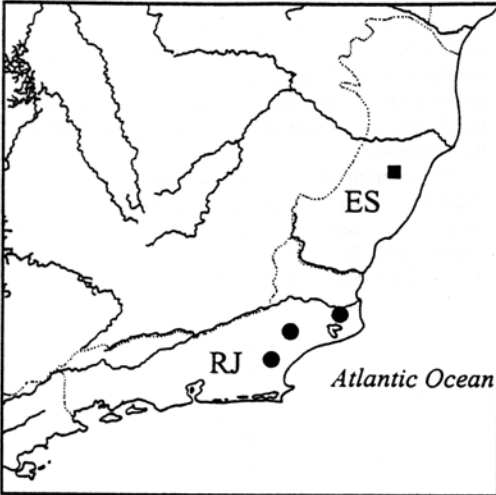


Fig 14. Eastern Brazil, showing records of *C. altifrons* (●) and *C. sanctateresae* (■).

#### Acknowledgments

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