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NOTES ON SOME BRAZILIAN HARVESTMEN (OPILIONES, GONYLEPTIDAE AND PHALANGODIDAE)

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ABSTRACT

A small collection of harvestmen assembled by Mr. J. Becker included the hitherto undescribed males of Maromba d'andrettai Soares & Soares, 1954 and Meteusarcoides marombaensis Soares & Soares, 1954, as well as the following new taxa: Currala bahiensis, sp. n., Therezopachylus fuscus, gen. n., sp. n., and Corcovadesia armatipes, sp. n.

Through the courtesy of Mr. Johann Becker, Museu Nacional, Rio de Janeiro, I have had the opportunity to study a small collection of Brazilian harvestmen belonging to that Institution, where all the specimens, including types, are deposited; some duplicates are kept in the "H. Soares Collection", Faculdade de Ciências Médicas e Biológicas de Botucatu, State of São Paulo, Brazil. Thanks are due to Mr. Max de Menezes of the Department of Zoology of the last mentioned institution, who made the drawings of the male genitalia.

Gonyleptidae, Mitobatinae

Ancistrotellus nigromaculatus (Mello-Leitão)

Neoancistrotus nigromaculatus Mello-Leitão, 1931: 143, fig. 19. Ancistrotellus nigromaculatus; Soares & Soares, 1949: 228.

Material examined. Brazil, *Guanabara*: Rio de Janeiro, Paineiras, 28.IX.1954 (J. Becker, 43, 19); Rio de Janeiro, Taquara, 20.IX. 1963 (J. Becker, among stones by brooklet, 23).

Asarcus ingenuus (Mello-Leitão)

Bogdana ingenua Mello-Leitão, 1940: 27, fig. 29. Asarcus ingenuus; Soares & Soares, 1949: 230.

Material examined. Brazil, *Rio de Janeiro*: Teresópolis, Parque Nacional da Serra dos Orgãos, 30.VIII.1957 (J. Becker, 1&). *São Paulo*: Campos do Jordão, 7.IX.1954 (J. Becker, 1\sqrt{2}).

Faculdade de Ciências Médicas e Biológicas, 18.600 Botucatu, SP. Presented to the Fifth International Congress of Arachnology at Brno, Czechoslovakia (30.VIII-4.IX.1971).

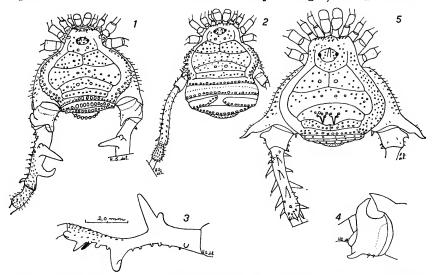
Gonyleptidae, Pachylinae

Currala bahiensis, sp. n.

(Figs. 1-4, 14-15)

Male. Length, 9.5 mm; tarsal segments, 6-9/10-7-8. Female. Length, 10.5 mm; tarsal segments, 6-9-7-7.

Male. Anterior margin of cephalothorax with a median elevation with two small tubercles and a row of pointed granulations. Cephalothorax with small granulations and two larger granules behind eye tubercle. Eye tubercle with a pair of small tubercles and a few rare granulations. First area with median line. First and third areas both with a pair of roundish tubercles, those of the latter larger, with a transverse row of granulations and other smaller ones irregularly scattered. Fourth area without a median line. Fifth area and free tergites unarmed, with a transverse row of granulations, the median granules of the fifth area and tergites larger and elongated. Lateral areas with three rows of large granules (those of the marginal row larger). Anal operculum unarmed, irregularly granulate. Free sternites with a row of minute hair-tipped granulations. Stigmatic area and II-IV coxae smooth, with minute obsolete granulations, seen only when the surface is slightly wetted with alcohol, first coxa with large granulations. Palpi: trochanters with two parallel, sub-apical tubercles; femora with a longitudinal, ventral row of hair-tipped granulations and without apical inner spine; tibiae with 2-3 and tarsi with 3-4 ventral spines. First and second femora nearly straight, third femora



Currala bahiensis, sp. n.: 1, holotype; 2, Q paratype; 3, lateral inner view of left IV femur of holotype; 4, lateral inner view of left IV coxal outer apical apophysis and trochanter of holotype. 5, male of Maromba d'andrettai.

slightly curved, with longitudinal rows of minute hair-tipped granules, those of ventral row larger. Fourth legs: coxae with 1ew and minute hair-tipped granulations, with a snort, large, pointed, very oblique, apical apophysis, and without apical inner spine; trochanters longer than wide, with obsolete granulations, with a strong median lateral apophysis curved upwards, with a strong apical inner spine, and with one or two lateral inner granules; femora short, S-curved, thicker from basis to median portion, with a double ventral, longitudinal row of hair-tipped granulations of increasing size towards the apex, with dorsal, longitudinal row of obsolete granules, with small granules, more numerous on the third apical portion, with two strong ventral, apical spines, with a robust bifid dorsal apophysis almost in the middle of femur (its outer branch obsolete, the inner one very long), with a strong inner lateral apophysis curved upwards, with dorsal, apical tubercle; patellae with pointed granules and a small ventral, apical spine; tibiae with longitudinal rows of pointed granulations and a pair of ventral, apical spines.

Structure of penis. Length, 3.41 mm. Aedeagus rather swollen and complex, its dorsal basal portion dilated, soft and rugose, giving origin to a more chitinized, bifid structure, whose dorsal branch is tubular and curved upwards, and which constitutes the terminal portion of the ejaculatory duct; the ventral branch is a little more robust, curved downwards, fan-like at the apex; its margins smooth and provided with short hairs. Ventral plate consisting of two curved plates, apically directed downwards and fused at their common bases; each plate with a basal and an apical group of three strong, curved setae (some setae short and straight). Chelicerae, palpi and I-III legs dull yellow with dark retivalents.

Chelicerae, palpi and I-III legs dull yellow with dark reticulation; trochanters and femora of the same colour, but brighter. Dorsal scute light brown, cephalothorax, lateral and free tergites blackish. First to fourth areas with black, small, irregular lines. Fourth legs: coxal apices and coxal outer apical apophysis dark brown; trochanters, femora, patellae and tibiae dark reddish brown.

Female. Similar to male. Granulations of the fifth area and of the free tergites smaller and not elongated. Fourth legs: coxae with rare hair-tipped granules, with small wide oblique outer apical spine; trochanters longer than wide, with small granulations; femora curved with longitudinal rows of granules, with small inner apical dorsal spines, and with double ventral row of granules (the outer granules of the row pointed) and two ventral apical spines; patellae and tibiae with granulations, tibiae with granulations, ventrally similar to femora. Colour similar to male. Dorsal scute more reddish, I-IV areas instead of black lines, with a black reticulation. Fourth femora reddish brown. Cephalothorax darker than in male.

Male holotype and female paratype, in the Museu Nacional, Rio de Janeiro, Brazil.

Type-locality: Brazil, Bahia: Maracás, 20.I.1963 (J. Becker).

This is the second known species of *Currala* Roewer, 1927, and differs from the type-species as follows: a, different fourth coxae, trochanters and femora; b, in *C. spinifrons* Roewer the anterior margin of the cephalothorax has two lateral spines near

the angle (outer one two times larger than inner); c, Roewer's species has a smooth cephalothorax, only with two granules behind the eye tubercle; d, *C. spinifrons* with first to fourth areas smooth. *C. spinifrons* occurs in the State of Minas Gerais.

Discocyrtus crenulatus Roewer

Discocyrtus crenulatus Roewer, 1913: 100, 111, fig. 51; Soares & Soares, 1954a: 248.

Material examined. Brazil, *Rio de Janeiro*: Teresópolis, Parque Nacional da Serra dos Orgãos (Abrigo 2), 5.XII.1963 (J. Becker, 13,59).

Eusarcus nigrimaculatus Mello-Leitão

Eusarcus nigrimaculatus Mello-Leitão, 1924: 181; Soares & Soares, 1954a: 261.

Material examined. Brazil, *Guanabara*: Rio de Janeiro, Pedra da Gávea, 25.IX.1955 (J. Becker, 23).

Maromba d'andrettai Soares & Soares (Figs. 5, 16, 17)

Maromba d'andrettai Soares & Soares, 1954b: 498, fig. 8.

Male. Length, 6.0 mm. Tarsal segments: 6-9-7-7.

Anterior margin of cephalothorax with a row of granules and with a median, granulate elevation. Cephalothorax with scattered granules. Eye tubercle with a small, upwards directed spine. First and fourth areas with a median line. First area irregularly granulate, with a pair of small, rounded tubercles. Second, fourth and fifth areas unarmed, with two rows of granules, those of the fourth and fifth areas larger, a group of granules at angles of the second area. Third area irregularly granulate, with a pair of high, basally enlarged, ampouliform spines and with large granulations. Lateral areas granulate. Free tergites and anal operculum unarmed, tergites with a row of granules, the dorsal anal operculum granulate, ventral one with a row of granules. Palpi: femora unarmed; tibiae with 3-4 and tarsi with 4-5 ventral spines. First legs granulate: femora sub-straight; the three first tarsal segments of same diameter, much thicker than the three distal segments. Second and third legs granulate. II femora straight, III slightly curved, both with a strong outer apical spine. First to third coxae and stigmatic area granulate. Free sternites with a row of granules. Fourth legs: coxae irregularly granulate, with a strong outer apical apophysis, oblique, pointed and recurved to the apex, and with a small, apical inner tubercle; trochanters a little wider than long, granulate, with wide outer lateral, median apophysis and with two small inner tubercles; femora slightly curved, armed with strong spines; patellae and tibiae granulate, with double longitudinal row of strong spines, those of tibiae stronger. General colour dull yellow with black mottlings. Grooves limiting areas black.

Eye tubercle spine light yellow, third area and fourth femoral

spines reddish brown.

Structure of penis. Length, 2.14 mm. Aedeagus rather swollen, dorsal portion with rugose membrane at base and continued by distal portion of ejaculatory duct, which is apically cleft and ventrally, near the apex, provided with a narrow, rather short, downwards directed expansion. Ventral plate rectangular, its dorsal face concave, with two groups of three long, curved setae (all setae equally long), one basal and one apical.

Material examined. Brazil, São Paulo: São José dos Barreiros, Serra da Bocaina (Núcleo Colonial Senador Vergueiro), 30.X.1967 (O. A. Roppa, 13).

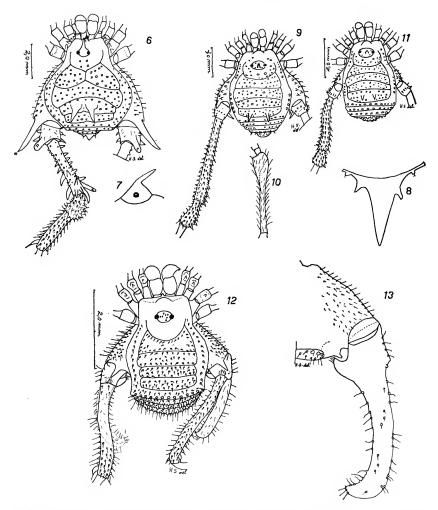
Meteusarcoides marombaensis Soares & Soares (Figs. 6-8, 18, 19)

Meteusarcoides marombaensis Soares & Soares, 1954b: 499, fig. 9.

Male. Length, 6.0 mm. (from the anterior margin of cephalothorax to the apex of the third free tergite spine). Tarsal segments: 5-8-6-6.

Anterior margin of cephalothorax smooth with a low median elevation provided with two minute hair-tipped granules. Cephalothorax smooth, but for four obsolete granules behind the eye tubercle. Eye tubercle high, smooth, with a high, thin spine slightly curved forwards. First area divided, fourth entire. First, second, fourth and fifth areas and first and second free tergites unarmed; first, second and fourth areas with the hair-tipped granulations irregularly scattered. Third area with a pair of high spines slightly divergent and slightly directed backwards, their bases ampouliform, granulate. Fifth area and first and second free tergites with a row of hair-tipped granules; third free tergite with a wide, short, thorn-like spine and with a row of hair-tipped granules. Anal operculum with minute, hair-tipped, granules. Free sternites with a row of minute hair-tipped granules. Stigmatic area and coxae densely granulate. Palpi: trochanters with ventral, sub-basal tubercle; femora smooth, with an apical inner spine; tibiae and tarsi with 3-4 ventral spines. First legs: coxae dorsally with thick tubercles; trochanters with thick, ventral granulations; femora substraight, with obsolete hair-tipped granulations, and with ventral, longitudinal row of hair-tipped tubercles: patellae, tibiae and metatarsi with obsolete hair-tipped granulations; tarsi with the first and second segments very broad, both of the same diameter. Second legs: coxae with thick tuberculated elevations: trochanters ventrally granulate: femora straight, with double, ventral row of hair-tipped tubercles, with outer apical spine, and minute, obsolete hair-tipped granulations. Third legs: trochanters ventrally granulate; femora slightly curved, with a ventral row of hair-tipped tubercles and a strong outer apical spine: patellae with hair-tipped tubercles and spines; tibiae with obsolete hair-tipped granules and double ventral row of strong hair-tipped tubercles. Fourth legs: coxae with minute hair-tipped granulations. with a very long and very thin, oblique, pointed, slightly apically recurved, outer apophysis, with a minute inner apical spine at the

base of trochanter; trochanters a little longer than wide, with two outer lateral apophyses, the apical more robust, with two inner tubercles, with a long thin dorsal apical apophysis directed backwards, and ventrally with pointed granulations; femora straight, with double ventral row of strong spines, those of the apex curved, with two rows (an outer and an inner one) of tuber-



Meteusarcoides marombaensis: 6, male; 7, lateral view of eye tubercle of male; 8, median conic apophysis of III free tergite of female. Therezopachylus fuscus, sp. n.: 9, male holotype; 10, first metatarsus of holotype; 11, female paratype. Corcovadesia armatipes, sp. n.: 12, male holotype; 13, ventral view of right IV coxa and trochanter of holotype.

cles, with two strong dorsal spines in apical third, and with three apical dorsal spines; patellae with strong, irregularly placed tubercles; tibiae with several rows of tubercles, the ventral ones larger,

the apical ones more robust.

Structure of penis. Length, 1.33 mm. Aedeagus rather compact and complex; basally the dorsal surface is soft and rugose, its distal part rather chitinized, with two branches, one (the extremety of the ejaculatory duct) narrowing progressively to the truncate apex, the other branch more robust, cylindrical, directed forwards and obliquely truncate at apex. Ventral plate resembling homonymous plate of *Maromba d'andrettai* Soares & Soares, 1954, rectangular, the dorsal surface concave and laterally armed with two groups of setae, basal group with three long, curved setae, apical one with four setae (three long and curved, one very low and straight).

Chelicerae, palpi and first to third legs yellow-greenish with darker brown mottlings. Body reddish dull yellow, granules of the abdominal scute on small rounded, black spots. Fourth legs: coxae, trochanters and femora reddish dull yellow; patellae and metatarsi blackish olivaceous.

Material examined. Brazil, *Rio de Janeiro*: Teresópolis, Parque Nacional da Serra dos Orgãos, 30.VIII.1957 (J. Becker, 8¢, 15°, of which 2¢ and 1°, n.° 383, in the "H. Soares Collection").

The female of n.º 383 has a very robust, conic, median apophysis on the third free tergite (fig. 8), and the following tarsal formula: 5-7/8-6-6. Body blackish olivaceous.

Therezopachylus, gen. n.

Eye tubercle with a median spine. First area without a median line. First, second, third and fifth areas, free tergites, palpal femora and anal operculum unarmed. Fourth area with a pair of spines. Tarsal segments: 5-6/7-5-5. First metatarsi with apical portion enlarged in the male, normal in the female.

Type-species: Therezopachylus fuscus, sp. n..

This new genus is close to *Gerdesius* Roewer, 1952, with its single species, *Gerdesius peruvianus* Roewer, 1952, from Peru. Roewer's genus differs from *Therezopachylus* by the tarsal formula (6-+6-6-6) and by the first metatarsi, normal in the male.

Therezopachylus fuscus, sp. n.

(Figs. 9-11, 20-21)

Male. Length, 4.75 mm. Tarsal segments: 5-7-5-5. Female. Length, 4.0 mm. Tarsal segments: 5-6-5-5.

Male. Anterior margin of cephalothorax smooth, with small, median elevation. Cephalothorax somewhat granulate. Eye tubercle with small, straight spine and four granules. First area without a median line. First, second, third and fifth areas unarmed; first, second, third granulate, fifth with a row of granules. Fourth area with a pair of high spines, slightly divergent and granulate.

Lateral areas and free tergites with a row of granules. Anal operculum granulate. Body with hair-tipped granulations. Free sternites with a row of granules. Stigmatic area scarcely granulate. Coxae granulate. Palpi: trochanter with a median ventral tubercle; femur without apical inner spine, with a small ventral granule; tibia with 2-3 and tarsus with 3-3 ventral spines. First and third femore archeterial transfer and the spines. and third femora substraight, second straight, granulate; patella, tibia and metatarsus covered throughout with long and thin hairs. First metatarsus enlarged at apical third. Fourth legs: coxae with hair-tipped granulations, with outer apical, oblique spine, and with inner apical spine of same length, joined to the first free sternite; trochanters little longer than wide, more granulate ventrally, and with a median, slightly curved inner spine; femora very long, thin, with longitudinal rows of pointed granules, and an inner row of small tubercles; sculpture of patellae, tibiae and metatarsi resembling that of femora.

Structure of penis. Length, 2.05 mm. Aedeagus swollen, dorsal surface membranous and rugose at base, wherefrom the robust, rather chitinized end portion of the ejaculatory duct arises. Ventral plate concave, the lateral margins parallel to apex, but converging at basal third; distal portion curved downwards, armature of each side with ten diversely sized setae, the majority

straight (three subapical, two submedian, five basal).

Dorsal scute dull yellow, with dark mottlings. All areas, eye tubercle spine, median spine of fourth area, free tergites, sternites and anal operculum, black. Legs, except trochanters, with dark and densely distributed markings; chelicerae and palpi dull yellow.

Female. Similar to male. Spines of the tubercle and of fourth area a little smaller than in male. First metatarsus normal. Fourth legs: coxae with hair-tipped granules, with a small, outer, oblique, apical spine, without median inner spine; femora slightly curved, shorter than those of male. Coloured as male.

Male holotype, 39 and 13 paratypes, in the Museu Nacional, Rio de Janeiro; 13 and 19 paratypes, n.º 397, in the "H. Soares Collection".

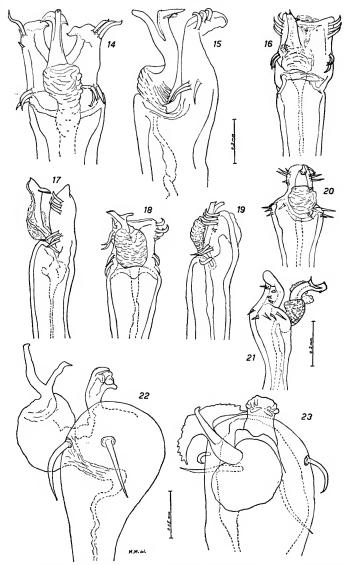
Material examined. Brazil. Rio de Janeiro: Teresópolis. Parque Nacional da Serra dos Orgãos, 28/30.VIII.1957 (J. Becker).

An accurate examination of the pseudonychium, a structure of difficult observation, leaves no doubt about the placement of this species in Gonyleptidae.

Phalangodidae, Tricommatinae

Corcovadesia armatipes, sp. n. (Figs. 12, 13, 22, 23)

Male. Length, 3.0 mm. Tarsal segments: 4-5-5-6. Anterior margin of cephalothorax unarmed, smooth, with median elevation. Cephalothorax smooth. Eve tubercle dorsal, unarmed, with some median granules. First area without median line. All areas, free tergites and anal operculum unarmed. First, second and fifth areas with two rows of granules and some median granules larger than those of the first area; third and fourth areas



Dorsal and lateral view of penis. Currala bahiensis, sp. n.: 14, dorsal; 15, lateral; Maromba d'andrettai: 16, dorsal; 17, lateral; Meteusarcoides marombaensis: 18, dorsal; 19, lateral; Therezopachylus fuscus: 20, dorsal; 21, lateral; Corcovadesia armatipes: 22, lateral; 23, dorsal.

densely granulate. Dorsal scute with hair-tipped granulations. Lateral areas with a row of small granules. Free tergites with two rows of granules, each granule of the posterior row bearing a long seta. Anal operculum granulate. Free sternites with a row of granules, the median ones small and non-setiferous, but those of the angles larger and setiferous. Lateral margin of first sternite enlarged, with groups of setiferous granules joined to the apical inner spine of the fourth coxa. Stigmatic area with minute setiferous granulations; spiracle well visible. First coxa with three rows of pointed setiferous granules; second and third irregularly granulate; fourth ventrally densely granulate. I-III with smaller, pilliferous granules. Palpi: trochanters with a median dorsal elevation and two ventral tubercles; femora unarmed, with two ventral granules; tibiae with 4-4 and tarsi with 3-3 ventral spines. First, second and third femora granulate, first and second substraight, third slightly curved. Fourth legs: coxae densely granulate, with setiferous granules, with short, conic, apical outer apophysis oblique, with small, wide apical inner spine directed outwards, joined to the first free sternite; trochanters longer than wide, with setiferous granules, with a small, dorsal, basal, lateral apophysis which is very wide basally, and with apex curved upwards, apical dorsal protuberance with small and large spine, ventrally with a very long, curved, setiferous apophysis (length 1.5 mm), and with a large sub-basal apophysis whose apex is directed upwards; femora long, slender, substraight, with longitudinal rows of setiferous granules, with an inner lateral row of large, pointed granules, outer row with small spines in apical third, with two large apical ventral spines slightly curved and backwards; patellae elongate, with setiferous granulations and two or three basal tubercles (outer and inner in longitudinal rows); tibiae long, granulate, with double longitudinal ventral rows of small setiferous tubercles; metatarsi with setiferous granules, the ventral with long hairs.

Structure of penis. Length, 1.10 mm. Aedeagus swollen, rounded; dorsal surface complex, bulbous, sphaerical, membranous, wherefrom originates the end portion of the ejaculatory duct (tubular, slightly curved ventrally, apex directed downwards), a fan-like structure resembling that of *Currala bahiensis*, glabrous with serrate margins; between them a cylindrical structure a little longer than wide, directed forwards (rounded and complex). Ventral plate dorsally concave, its margin rounded, with four long, curved setae.

General colour light brown. Ventrally first to third legs, palpi and coxae, and stigmatic area, dull yellow with darker brown mottlings. Dorsal scute blackish, free sternites light brown.

Male holotype in the Museu Nacional, Rio de Janeiro.

Type-locality: Brazil, *Minas Gerais*: Poços de Caldas, Cascata das Antas, 11.IX.1966 (J. Becker).

This species, the second of *Corcovadesia* Soares & Soares, 1954, differs from the type-species, *C. inermis* Soares & Soares, 1954, by the number of segments of the second tarsus (5 in *armatipes*, 6 in *inermis*) and by the distribution of granules on dorsal scute (*inermis* is almost smooth).

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