New oribatid species of the genus *Crotonia* from Brazil (Acari: Crotoniidae)

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ABSTRACT. A new oribatid mite, Crotonia marlenae n. sp. is described from Brazil from wet litter of tropical mountain forest.

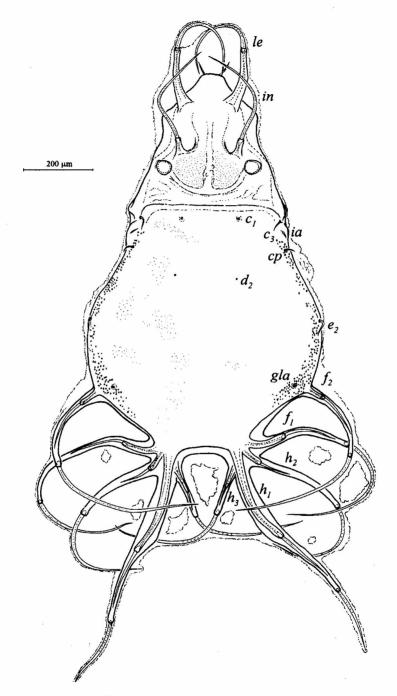
Key words: Acarology, taxonomy, new species, Brazil, Acari, Oribatida, Crotonioidea.

INTRODUCTION

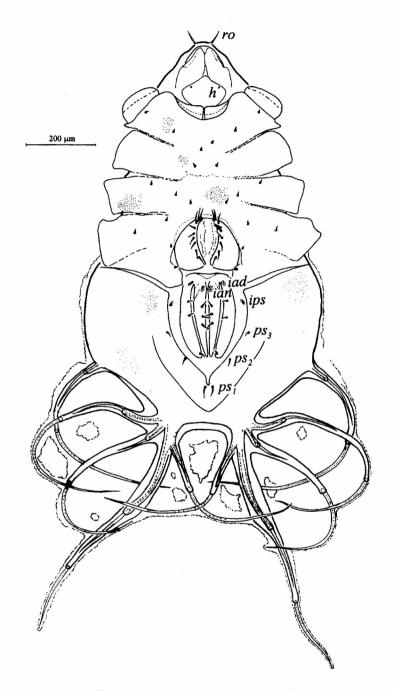
From among over thirty species of the genus *Crotonia* described so far, only three come from Neotropical region: *C. pulchra* (Beck, 1962) from Peru, *C. flagellata* (Balogh et Csiszár, 1963) from Argentina and Chile, and *C. chiloensis* Wallwork, 1978 from Chile. The available data on the distribution of this genus (Norton & Olszanowski 1989) and results of the studies by the author are indicative of the presence of a considerable number of new species belonging to the family *Crotoniidae* in the area of South America. This paper is the first of the series of works on the fauna of crotoniid mites of the Neotropical region.

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1. Crotonia marlenae n. sp., holotype, dorsal view



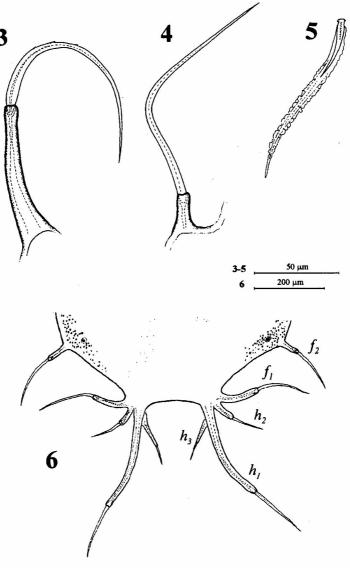
2. Crotonia marlenae n. sp., holotype, ventral view

Crotonia marlenae n. sp.

Body length: 1150 mm; maximum body width: 710 mm.

Colour: light brown to brown.

Body covered with cerotegument with some dirt and debris and, in posterior part, with fragments of tritonymphal exuvium.



3-6. Crotonia marlenae n. sp., holotype: 3 - lamellar seta, 4 - interlamellar seta; 5 - seta I4 (tarsus I); 6 - posterior part of notogaster without tritonymphal exuvium

Prodorsum (Figs. 1, 3, 4)

Rostrum elongated. Two pairs of sclerified ridges present on dorsal part: one pair runs anteromedially from near bothridia and bears setae *in*, the other runs posteromedially from bothridia to be distally joined. Prodorsal surface delicately pointed. Rostral setae (*ro*) direct, smooth, situated on small tubercles. Lamellar setae (*le*) curved, indistinctly serrated, on long, slightly curved medially apophyses (Fig. 3); tips of apophyses distinctly go beyound rostrum. Interlamellar setae (*in*) situated on shorter apophyses, smooth, bent medially (Fig. 4); their tips reach distal parts of lamellar apophyses. Sensillus completely contained within bothridium.

Notogaster (Figs 1, 6)

Notogaster distinctly enlarged posterodorsally; broadest at level between setae e_2 . Dorsal plate flat, demarcated laterally by plicature strip; surface finely porose, lateral parts with small, round cavities. With 12 pairs of smooth notogastral setae (setae c_2 absent, setae d_2 probably represented only by alveoli), setae c_3 removed of specimen. Setae c_3 and cp situated in close vicinity $(c_1 - c_3 > c_3 - cp)$. Both setae c_3 situated far from each other $(c_1 - c_1 > c_1 - c_3)$. Setae of the rows f and h on distinct apophyses; apophyses of the setae h_1 more than twice longer than others. Apophyses of setae f_1 and row h situated very close, form two groups, distinctly separated between pair of apophyses of setae h_1 . Setae of row ps not inserted in small tubercles; ps1 slightly longer than ps_2 and ps_3 . Five pairs of lyrifissures in normal position for genus; opisthosomal gland opening (gla) near the base of setae f_2 .

Ventral region (Fig. 2)

Coxisternal pairs fused medially, surface distinctly porose. Coxisternal setation: 3-1-3-2, setae short, spiniform. Nine pairs of genital setae, all near medial margin of plate. Two pairs of aggenital setae. Anal and adamal plates with 3 pairs of setae.

Legs (Figs. 5, 7-9)

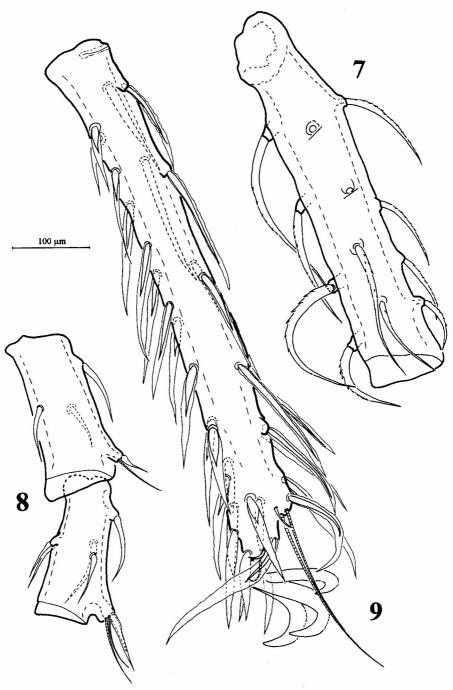
Tarsi homotridactylous, claws with dorsal hyaline teeth. Setae inserted on short apophyses. Setae built of a shorter, thicker core with inner tubule and a longer external part covered with delicate partially corrugated "sheath" (Fig. 5). Setation (including famulus): I: 1-12-4(1)-6(2)-36(2); II: 1-11-5(1)-6(1)-32(2); III: 5-9-5(1)-5(1)-30; IV: 1-8-4(1)-4(1)-30.

MATERIAL EXAMINED

Holotype (adult female) was collected from: Brazil, Serra do Mar, env. of Parati, alt. 1300 m, tropical mountain forest, very wet rich litter. Leg. J. BALOGH [Br.90/B.90]. Specimen is deposited in the Hungarian National Museum, Budapest, Hungary.

ETYMOLOGY

This species is dedicated to an excellent Polish ecologist Dr. Marlena LEMBICZ.



7 - 9. Crotonia marlenae n. sp., holotype, leg I, antiaxial view: 7 - femur, 8 - genu and tibia; 9 - tarsus

REMARKS

This species seems to be a member of "cophinaria" species group (Luxton 1982; modified by Lee 1985). From other species it differs in possessing the following combination of characters: straight rostral setae, absence of setae c_2 , setae c_3 not inserted on apophyses, length of posterior apophyses.

REFERENCES

- LEE, D.C., 1985. Sarcoptiformes (Acari) of South Australian soils. 4. Primitive oribate mites (Cryptostigmata) with an extensive unfissured hysteronotal shield and aptychoid. Records of the South Australian Museum, 19: 39-67.
- Luxton, M. 1982. Mites of the genus Crotonia (Acari: Cryptostigmata) from New Zealand. Zoological Journal of the Linnean Society, 76: 243-271.
- Norton, R.A., Olszanowski Z., 1989. A new *Holonothrus* (*Oribatida: Crotoniidae*) from Zaïre, with notes on the distribution of crotoniid mites. Revue de Zoologie africaine Journal of African Zoology, 103: 405-412.