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Descriptions of three South American genera of Euliini and five their species (Lepidoptera Tortricidae)

Abstract - Two genera (*Crocotania* and *Sinxema*) and four new species (*C. crocota*, *S. xenisma*, *S. chapada*, *Galomecalpa empirica*) are described from Ecuador. *Galomecalpa secunda* is redescribed and the key to the identification of *Galomecalpa* is provided.

Riassunto - Descrizione di tre generi di Euliini dal Sud America e di cinque loro specie (Lepidoptera Tortricidae).

Si descrivono due generi (*Crocotania* e *Sinxema*) e quattro nuove specie (*C. crocota*, *S. xenisma*, *S. chapada*, *Galomecalpa empirica*) di Lepidoptera Tortricidae dall'Ecuador. *Galomecalpa secunda* viene ridecritta, inoltre si fornisce la chiave per l'identificazione delle specie del genere *Galomecalpa*.

Key words: Lepidoptera Tortricidae, Neotropical Euliini, new taxa. *Crocotania*, *Sinxema*.

INTRODUCTION

Three new Neotropical genera of Euliini, Tortricinae and their species are described from Ecuador. The genus *Galomecalpa* is discussed and the key to determination of its species based on male genitalia is added.

The holotypes of the new species described here are deposited in the collection of V. O. Becker, Brasilia. The numbers in brackets are the entry number of the specimens in the register books of V.O. Becker. The numbers given in the descriptions for the labial palpi indicates the proportion of their total length to the diameter of the eye.

Abbreviations used in the text: DF - Distrito Federal, MG - Minas Gerais, MT - Mato Grosso.

SYSTEMATIC DATA

Crocotania gen.n.

Type-species: *Crocotania crocota* sp.n.

ADULTS. Venation: in forewing R5 just to beneath apex, R4-R5 and M2-M3 approaching one another basally, CuA2 opposite mid-distance R1-R2. In hindwing Rs-M1 stalked to middle, M2-M3 distinctly separate; M3-CuA1 connate.

MALE GENITALIA (figs 1-2). Tegumen broad, rather moderately long; uncus short, simple, hairy; socii slender, drooping, hairy; gnathos arms simple, slender; terminal part large; vinculum fully developed, slender; valva large; costa well developed, with some setae; sacculus broad in basal half, provided with terminal rounded process; disc of valva without pulvinus, scarcely hairy in basal half, with bristles along the fold; transtilla slender medially, with weak longitudinal posterior fold; lateral parts of transtilla broad; juxta broad, without processes; aedeagus long, curved; coecum penis rather short; caulis large; cornuti absent (only small thorns and microspines developed).

Crocotania crocota sp.n.

ADULT. Wing span 20 mm. Head dirty creamy, labial palpus ca 2, more brownish; thorax brownish grey, darker proximally, rust distally. Forewing uniformly broad throughout, termen weakly oblique, almost straight to middle. Ground colour orange creamy, white creamy along costa, basal third of costa tinged brownish, strigulae and innumerable minute marks of same colour scattered all over wing. Tornus slightly suffused brown. Cilia brown-grey. Hindwing creamy tinged yellow on periphery; cilia creamy white, paler in anal area.

MALE GENITALIA (figs 1-2) as described with the genus.

Holotype, male: <<Planaltina, DF Brasil, 1000 m, 19.III.1976, 15°35'S, 47°42'W, V.O. Becker col.; [19381]>>; genitalia on slide 22039.

REMARKS. Externally this species is somewhat similar to *Ranapa paranana* Razowski & Becker, 2000 but easily distinguished by the less oblique termen of forewing and the coloration.

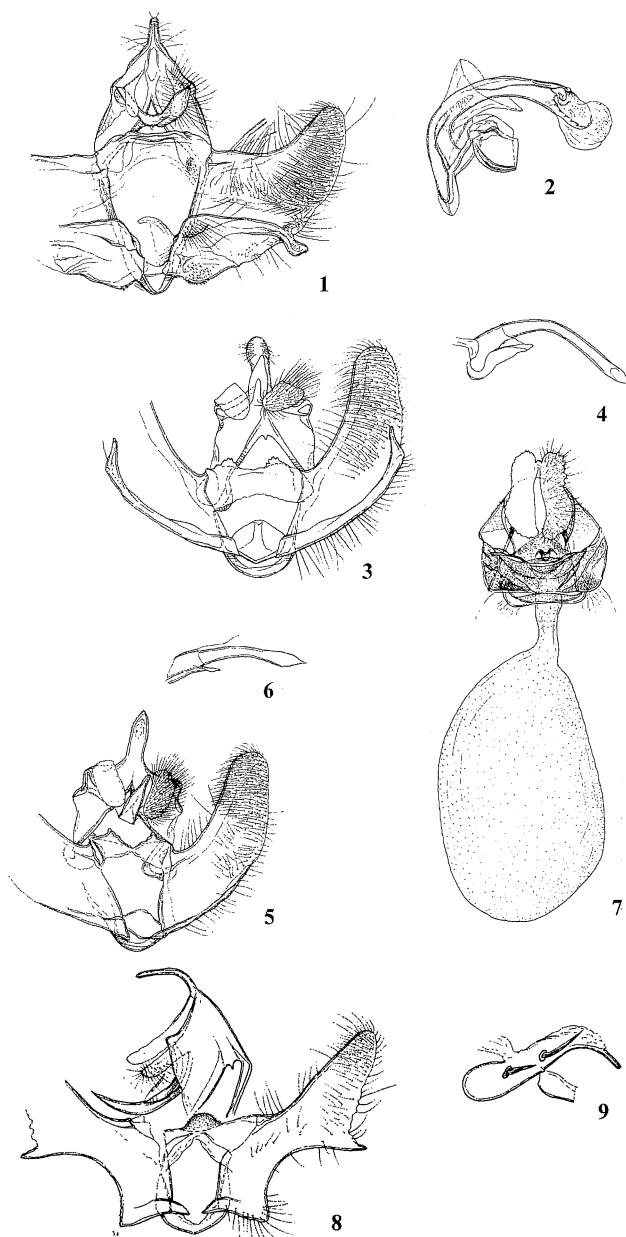
Sinxema gen.n.

Type species: *Sinxema xenisma* sp.n.

ADULTS. Venation: in forewing veins long, R5 just to beneath apex, CuA2 opposite 2/3 distance R1-R2, distance M2-M3 twice shorter than M2-M3. In hindwing Rs-M1 stalked to middle, M3-CuA1 connate.

MALE GENITALIA. Tegumen broad; uncus moderately broad, rather short; socii large, weakly sclerotized, drooping; terminal plate of gnathos large; vinculum fully developed, slender; valva elongate, slightly up-curved; costa and sacculus well sclerotized; disc of valva scarcely hairy; pulvinus absent; transtilla with well developed sublateral lobes concave in middle dorsally and ventrally; juxta small, simple; aedeagus slender, weakly bent; coecum penis very short; caulis large; cornuti absent.

DISTRIBUTION. Brazil.



Figs 1-9 - *Crocotina crocota* sp.n., male genitalia of holotype (1-2); *Sinxema xenisma* sp.n., male genitalia of holotype (3-4); *S. chapada* sp.n., male genitalia of holotype (5-6); *Monimococca parvisignis* (Meyrick), female genitalia, Sao Paulo (7); *Galomecalpa empirica* sp.n., male genitalia of holotype (8-9).

REMARKS. This genus is comparable with *Pinhaisania* Razowski & Becker, 2000 having similar uncus, socii and gnathos. However, it is easily distinguished by the slender aedeagus and the medially constricted transtilla. The name is an anagram of the species name *xenisma*. Two closely related species included.

***Sinxema xenisma* sp.n.**

ADULT. Wing span 11 mm. Head and thorax creamy tinged brownish, the former browner proximally; labial palpus 1.5, concolorous. Forewing weakly expanding posteriorly; costa uniformly convex; termen almost straight, weakly oblique. Ground colour white creamy with indistinct ochreous pinkish hue; delicate, more ochreous suffusion between elements of markings. Markings yellow-brown browner along edges; dorso-basal blotch elongate triangular accompanied by costal suffusion; median fascia slender, extending from mid-costa, curved outwards, tapering towards tornus, connected by means of a short marking with subtornal triangle; subapical spot short, accompanied with subterminal fascia; this last almost reaching end of termen. Cilia concolorous with ground colour. Hindwing greyish white, mixed pale brownish grey on periphery; cilia whitish with pale brownish grey median line.

MALE GENITALIA (figs 3-4): uncus broad distally; sacculus with well developed free termination; transtilla broad. Otherwise as described for the genus.

Holotype, male: <<Brasil: MG, Unai, 700 m, 3.XI.1983, V.O. Becker col.; [49871]>>, genitalia on slide 22125.

REMARKS. This species is easily distinguished from *chapada* by the presence of the free termination of sacculus, the broad median portion of transtilla and the terminal broadening of uncus.

***Sinxema chapada* sp.n.**

ADULT. Wing span 11 mm. Head pale ferruginous, front and end of labial palpus creamy, this last ca 1.5; thorax pale ferruginous. Forewing weakly expanding terminally; costa uniformly convex, termen weakly oblique. Ground colour creamy densely suffused cinnamon rust especially in basal part of costa. Markings rust, rust brown at costa consisting of dorso-basal blotch and costal spot, subtriangular blotch near mid-dorsum, median fascia narrowing subcostally extending in a line towards tornus, subapical blotch, and much paler terminal marking at mid-termen. Cilia creamy. Hindwing pale brownish grey; cilia creamy.

MALE GENITALIA (figs 5-6): uncus uniformly broad throughout, tapering apically; valva as in the type-species but sacculus simple, without terminal process; transtilla strongly constricted medially.

Holotype, male: <<Brasil: MT, Chapada Gulmaraes, 25.V.1989, V.O. Becker col.; [75746]>>; genitalia on slide 22431.

REMARKS. This species is very closely related to *xenisma* showing great similarity in the shapes of the valva and aedeagus. It differs, however, in having sharp termination of uncus, the slenderer terminal plate of gnathos, the simple sacculus without a free end, and the smaller, strongly constricted median portion of transtilla.

***Monimosocia parvisignis* (Meyrick, 1931)**
Eulia parvisignis Meyrick, 1931, Exotic Microlepid., 4: 152.

Type-locality: Brazil: Sao Paulo. Razowski 1964, Annls zool., Warsz., 22 (21): 462, figs 30-31 (male genitalia of holotype - *Monimosocia parvisignis*: Razowski, 1990, ibid., 43 (20): 402.

FEMALE GENITALIA (fig. 7) are described as follows: sterigma broad consisting of anterior and submedian lobes, with large lateral angular portion, sclerotization unequal, spinulation dense.

DISTRIBUTION. To this date this species was known from the type-locality only. A series from Parana' (Maringa) and further examples from Sao Paulo (Campos do Jordao, 1500 m) examined.

REMARKS. The examination of a female did not change our opinion on the systematic position of the genus.

***Galomecalpa* Razowski, 1990**
Galomecalpa Razowski, 1990, Annls zool., Warsz., 43 (20): 397.
 Type-species: *Eulia megaloplaca* Meyrick, 1932.

Four species of this genus were discussed by Razowski & Becker (2001), but one of them unfortunately without a diagnosis. Now, its description is completed and another species is added. The species included differ distinctly in the male genitalia mainly in the shapes of aedeagus, transtilla, and valva. Further, however, smaller differences are in the sizes and shapes of uncus and socii. No female is found to this date.

Key to the identification of the species of *Galomecalpa* based on the male genitalia

1. Caudal edge of sacculus deeply concave postbasally.....2
- Caudal edge of sacculus not concave postbasally *G. megaloplaca* (Meyrick, 1932)
2. Aedeagus with short ventral termination *G. empirica* sp.n.
- Aedeagus with long ventral termination or without it.....3

- 3. Socius shorter than half length of costa, transtilla densely spined dorsally
..... *G. hydrochoa* (Meyrick, 1930)
- Socius almost as long as costa of valva
..... *G. secunda*

***Galomecalpa empirica* sp.n.**

ADULT. Wing span ca 20 mm. Head creamy white; labial palpus 3.5; thorax concolorous with head, tegula with greyish transverse line medially. Forewing broad, slightly expanding terminally; costa distinctly convex; apex elongate, sharp; termen somewhat sinuate. Ground colour creamy whitish with some brownish dots and indistinct striae. Markings brownish with dark brown suffusions and edges. Basal blotch pale proximally, with straight, oblique distal edge extending from 1/4 of costa to before mid-termen; proximal edge of median fascia rather parallel, atrophying in median cell, fused with subapical blotch forming with it a large subsquare blotch, dark brown in median cell and in middle posteriorly; two parallel lines from this last towards tornus; a weak median suffusion between these lines. Cilia concolorous with ground colour. Hindwing pale greyish creamy with diffuse pale brownish grey spots; cilia creamy white (worn).

MALE GENITALIA (figs 8-9): uncus fairly broad; socius rather short; valva narrowing medially with somewhat irregular caudal edge; distal part of sacculus much longer than the basal portion; median part of transtilla helmet like, minutely spined; aedeagus stout, with large ventral termination; two strong cornuti in vesica present.

Holotype, male: <<Ecuador: Morona Indanza, 2800 m, 24.XII.1992, V.O. Becker col.>>, [103480]; genitalia on slide 22537.

REMARKS. The species is distinct by the very broad aedeagus and the stout cornuti, in the shape of valva complex, especially that of sacculus it is close to *megaloplaca*, *secunda*, and *hydrochroa*.

***Galomecalpa secunda* sp.n.**

The description of this species is completed by a diagnosis as follows. The male genitalia are very similar to those in *megaloplaca* and *hydrochroa* having a dip post-basal concavity but is easily distinguished by the very slender aedeagus and the large convexity of caudal edge of valva. The description and illustration provided by Razowski & Becker, 2001: 20.

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