

***Mesochariodes* RAZOWSKI & WOJTUSIAK, 2006, a Neotropical
Eucosmini genus, with a description of a new species
(Lepidoptera: Tortricidae)**

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ABSTRACT. A revision of *Mesochariodes* is provided with a list of known species and characteristics of *Proteoteras* and *Acroclita*. Three species are described as new: *Mesochariodes armifera* sp. n., *M. obrimospina* sp. n., *M. ochyrosetaria* sp. n. Male genitalia of *M. tablonica* are redescribed.

KEY WORDS: Lepidoptera, Tortricidae, *Mesochariodes*, new species, Ecuador.

INTRODUCTION

Mesochariodes RAZOWSKI & WOJTUSIAK, 2006 is an Olethreutinae, Eucosmini genus that includes two species from Venezuela. Two other species have been described by RAZOWSKI & WOJTUSIAK (2008, 2009). After the study of additional material from Ecuador collected by V.O. BECKER, we can now add three new species to this very characteristic genus and to give new diagnostic characters to distinguish it from the nearest related Eucosmini genera.

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MATERIAL

All the specimens were collected by the junior author in Ecuador. The types of the newly described species have been temporarily deposited in the BECKER Collection, Camacan, Brazil, and will eventually be housed in one of the Brazilian museums. A few specimens have been donated to the Institute of Systematics and Evolution of Animals, PAS, Kraków.

Abbreviations used: GS – genitalia slide, WZ – Witold ZAJDA.

SYSTEMATIC PART

Mesochariodes RAZOWSKI & WOJTUSIAK, 2006

Diagnosis

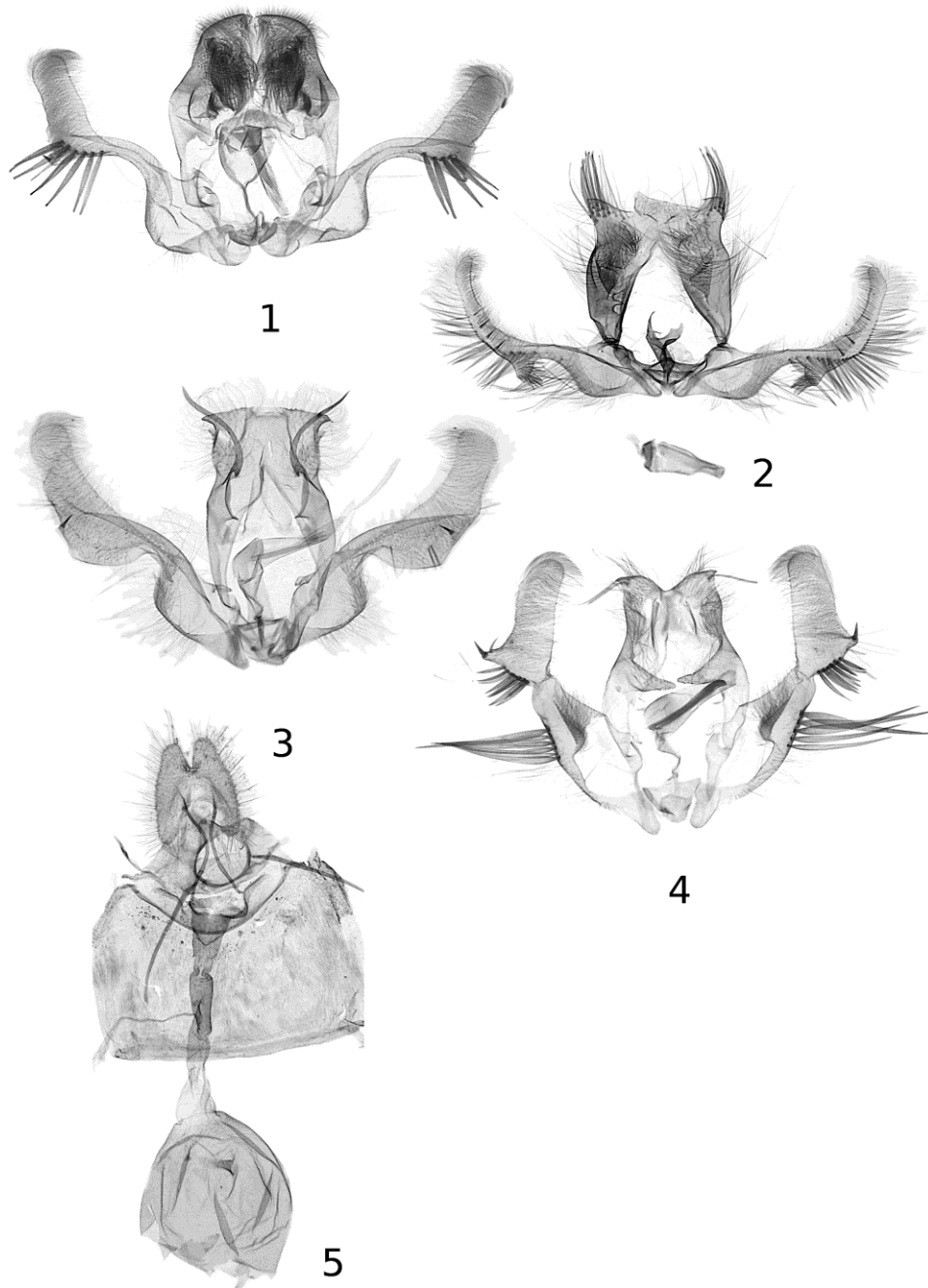
In the male genitalia the uncus is broadly fused with the tegumen and forms a broad apical lobe with lateral sclerotized projections which may be armed with additional, lateral thorns or spines. The socius consists of two parts, a more or less long proximal one, and a distal, rather flat one, which may be simple or armed with processes or setae. The pulvinus is ill-defined; the ventral edge of the valva is usually armed with strong setae.

Originally *Mesochariodes* was compared to *Mesocharis* DIAKONOFF, 1981. The following is a comparison with two further genera.

Proteoteras RILEY, 1881 is represented by eight North American species and one Neotropical species (*P. atromacula* RAZOWSKI & LANDRY, 2008, Galapagos). The males have modified scaling forming a subcostal hindwing scent organ, absent in *Mesochariodes*. In the male genitalia the uncus is almost completely reduced, the socii are rather well sclerotized, and the valva is armed with strong outer and/or ventral spines, but *Proteoteras* mainly differs from *Mesochariodes* in the lack of a pulvinus and a long sterigma situated in a deep incision of the subgenital sternite, and in the absence of transverse rib.

In the female genitalia the sterigma is elongate, situated in and fused with a deep incision of the subgenital sternite with an anterior, transverse rib marked with a pair of submedian thorns.

Acroclita LEDERER, 1859 is known mainly from southern Europe and Asia. HORAK (2006) included in this genus the Australian *Hylotropha bryopa* MEYRICK, 1911, which differs, however, from *A. subsequana* (HERRICH-SCHÄFFER, 1851) from SW Europe, especially in the shape and position of the uncus and socii (the scent organs are similar in the two genera). *H. bryopa* has bifid, weakly sclerotized socii similar to *Mesochariodes*, but like *A. subsequana* has no pollex and has a simple subgenital sternite.



Figs 1-5. Male and female genitalia: 1 – *Mesochariodes armifera* sp. n., holotype; 2 – *M. tablonica* RAZOWSKI & WOJTUSIAK, 2006, Tungurahua, Ecuador; 3 – *M. obrimospina* sp. n., holotype; 4 – *M. ochyrosetaria* sp. n., holotype.

List of *Mesochariodes* species

- *M. armifera* sp. n., male and female genitalia; Ecuador: Loja Province.
- *M. micropollex* RAZOWSKI & WOJTUSIAK 2008 (*Mesotrichodes*), male genitalia; Ecuador: Zamora-Chinchi Province.
- *M. obrimospina* sp. n., male genitalia; Ecuador: Loja Province.
- *M. ochyrosetaria* sp. n., male genitalia; Ecuador: Pastaza Province.
- *M. polytrichota* RAZOWSKI & WOJTUSIAK, 2006, male and female genitalia; Venezuela.
- *M. secunda* RAZOWSKI & WOJTUSIAK, 2006 (*Mesotrichodes*), female genitalia; Venezuela.
- *M. tablonica* RAZOWSKI & WOJTUSIAK, 2009 (*Mesotrichodes*), male genitalia; Ecuador: Tungurahua Province.

***Mesochariodes armifera* sp. n.**

(Figs 1, 2, 6)

Diagnosis

The facies of *M. armifera* is similar to that of *M. secunda* (Fig. 42 on page 58 in RAZOWSKI & WOJTUSIAK 2006) but it has a paler, brownish cream, forewing dorsum. The male genitalia are as in *M. tablonica* (Fig 11 on page 163 in RAZOWSKI & WOJTUSIAK), but in *M. armifera* the uncus is broadly rounded and aedeagus long, slender. The female genitalia are similar to *M. secunda* (Fig. 117 in RAZOWSKI & WOJTUSIAK 2006), but in *M. armifera* the posterior lobes of sterigma are directed distad, the sclerite of the antrum tapers proximally, and the lobes of subgenital sternite are slenderer.

Description

Wing span 21 mm. Head and thorax brownish cream; median joint of labial palpus with weak brownish grey marking, base of tegula tinged brown. Forewing somewhat expanding terminad; termen slightly concave beneath apex, then bent. Ground colour cream present along dorsum and medioposteriorly, in other parts of wing mixed ferruginous; costal strigulae mostly creamish, divisions brownish and rust brown; ocellus dark cream, median spots minute, blackish; lines silver; silver spot beneath ternal blotch which is ferruginous black spotted. Markings indistinct, rust brown; dorsal longitudinal markings typical, browner than transverse elements. Cilia cream with brown interruptions and basal line. Hindwing whitish cream in costal half slightly tinged brownish grey; subcostal scent organ rather short with broad brown surrounding area in basal half of wing; cilia cream, in apical part yellower.

Variation. Paratype forewing ground colour cream tinged yellow, sprinkled blackish, extending along costa and in almost entire terminal area; remaining area brownish cream with ferruginous remnants of markings and suffusions (some of them and ternal blotch marked black).



Figs 6-8. Adults: 6 – *Mesochariodes armifera* sp. n., holotype; 7 – *M. obrimospina* sp. n., holotype; 8 – *M. ochyrosetaria* sp. n., holotype.

Male genitalia (Fig. 1). Uncus broad, hairy, rounded posteriorly with small thorn at base of socius; the latter broad, densely setose; neck of valva long, slender with a series of six (seven in left valva) strong outer spines extending to base of cucullus; cucullus ventro-proximal; aedeagus long, slender; cornuti long.

Female genitalia (Fig. 5). Sclerite limiting the ostium area large, rounded; lateral lobes of sterigma broad; sclerite of antrum broad, triangular proximally; antrum connected to lateral lobes extending from subgenital sclerite by means of slender sclerites; cingulum well developed, median; one large and one very small signum present.

Material

Holotype male: “Ecuador: Loja [Province], Loja, 2750 m, 21. XII. 1992; V.O. BECKER; Col BECKER 103163”; GS 821 WZ.; paratype female, same label data, GS 822 WZ.

Etymology

The specific name refers to the series of strong spines of the valva; Latin: arma – a weapon, fere – I carry.

***Mesotrichodes tablonica* RAZOWSKI & WOJTUSIAK, 2009**

(Fig. 2)

Description

Male genitalia (Fig. 2). Uncus short, broad, with posterior corners large, provided with numerous long setae; socius consisting of two broad hairy lobes; valva slender with distinct neck posteriorly limited by elongate, setose ventral lobe of cucullus; cucullus slender, long with a few (2-4) submarginal spines and dense row of marginal spines which continue proximad as far as the middle of neck of valva; sacculus angulate; aedeagus short, broad to middle, rather weakly sclerotized posteriorly; cornuti not found.

Material examined

One male from Ecuador, "Tungurahua [Province], Patate, 3000 m, 7. XII. 1992; V.O. BECKER Col BECKER 100115"; GS 147 WZ.

Remarks

This species was described from a single male collected in the same province of Ecuador, in a locality at an altitude of 3000 m. The holotype male genitalia differ from the present specimen (described above) in that they lack the series of strong setae on the valva.

***Mesochariodes obrimospina* sp. n.**

(Figs 3, 7)

Diagnosis

The facies of *M. obrimospina* (Fig. 7) resembles that of *M. polytrichota* (Fig. 41 in RAZOWSKI & WOJTUSIAK 2006), but this species has a distinct black-brown, straight fascia along the cubital arm of the median cell. The male genitalia of *M. obrimospina* are closely related to *M. micropollex* (Fig. 49 in RAZOWSKI & WOJTUSIAK 2008), as the shape of valva shows, but the socius in *obrimospina* bears a very large spine, which is absent in the latter and in other congeners.

Description

Wing span 17 mm. Head and thorax white, labial palpus long (over 5 times longer than eye diameter) with some brown dots on median joint; base of tegula brownish. Forewing slender, weakly expanding terminally; costa weakly convex; termen rather straight, slightly oblique. Ground colour white, finely dotted, and partially suffused brown; brownish dots in distal area; costal divisions small, brownish; ocellus reduced to ochreous lines and greyish median field. Markings: black-brown fascia from base of wing concave, postmedially with yellowish

suffusion, cubital part of median cell suffused brownish; oblique line parallel to termen from end of radial fascia; three brown spots subcostally. Cilia brownish with some white interruptions. Hindwing white, slightly tinged brownish terminally; subcostal bunch of scales white.

Male genitalia (Fig. 3). Uncus very broad with two lateral thorns, postmedian and terminal; distal part of socius hairy, proximal part reduced to a sharp process extending posterad to the former, a very large, bent spine at the junction of the two parts; ventral incision of valva deep followed by broad ventral lobe of cucullus marked by three slender spines; pollex subventral; sacculus angulate; aedeagus moderate, simple; cornuti long.

Female not known.

Material

Holotype male: "Ecuador: Loja [Province], Loja, 2750 m, 21. XII. 192, V.O. BECKER; Col BECKER 103162"; GS 807 WZ.

Etymology

The name refers to the spine of the socius; Greek: obrimos – strong.

***Mesochariodes ochyrosetaria* sp. n.**

(Fig. 4, 8)

Diagnosis

M. ochyrosetaria is closely related to *M. micropollex* and *M. tablonica* in that it has similar lateroterminal thorns of uncus, a distinct, hairy proximal part of the socius and a row of spines beyond the ventral incision of the valva; however, it shows a row of long setae along the sacculus that is not present in its closest congeners.

Description

Wing span 14 mm. Head and thorax cream with brownish grey admixture. Forewing not expanding terminally; costa weakly, gradually convex; termen rather straight. Ground colour pale brownish suffused and diffusely spotted brownish, paler posteriorly; brown lines along posterior, radial and first median lines; ocellus with whitish posterior lobe, limiting a few brown perpendicular lines; inner spots of ocellus in form of two elongate black marks. Markings reduced to two black subdorsal marks in basal area. Cilia concolorous with suffusions. Hindwing grey brown; cilia similar; large tuft of long whitish scales from base of subcostal vein.

Male genitalia (Fig. 4). Uncus with lateroterminal thorn and distinct median concavity of distal edge; two long setae near base of the thorn present; posterior part of socius broad,

proximal part long, tapering terminad, both hairy; ventral incision of valva weak but neck slender; sacculus weak with a group of five very strong marginal setae, a row of eight much shorter spines at the ventral lobe of cucullus; pollex subventral; aedeagus fairly short; cornuti long.

Female not known.

Material

Holotype male: "Ecuador Past[aza Province], Mera, 1300 m, VII. 1992; V. O. BECKER Col BECKER 103162"; GS 1295 WZ.

Etymology

The specific name refers to the setae of valva; Greek: ochyros – strong.

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