P O L I S H J O U R N A L O F E N T O M O L O G Y
P O L S K I E P I S M O E N T O M O L O G I C Z N E

VOL. **78**: 223-252 Bydgoszcz 30 September 2009

Revision of *Mictopsichia* HÜBNER with descriptions of new species and two new genera (Lepidoptera: Tortricidae)

JÓZEF RAZOWSKI

Institute of Systematics and Evolution of Animals PAS, Sławkowska 17, 31-016 Kraków, Poland, e-mail: Razowski@isez.pan.krakow.pl

ABSTRACT. The *Mictopsichia*-group of genera is characterized and included in the tribe Archipini; two genera (*Rubropsichia* and *Chamaepsichia*) and 16 species (*Mictopsichia cubilgruitza* sp. n., *M. cubae* sp.n., *M. guatemalae* sp. n., *M. panamae* sp. n., *M. egae* sp.n., *M. atoyaca* sp. n., *M. boliviae* sp. n., *M. buenavistae* sp. n., *M. marowijneae* sp. n., *M. benevides* sp. n., *M. chlidonata* sp. n., *M. mincae* sp. n., *M. jamaicana* sp. n., *Rubropsichia brasiliana* sp. n., *R. santaremana* sp. n., *Chamaepsichia rubrochroa* sp. n. are described as new. The data on distribution and morphology of six other species are provided. Oriental genus *Mictocommosis* is for the first time recorded from the New World.

KEY WORDS: Tortricidae, *Mictopsichia*, *Rubropsichia*, *Chamaeopsichia*, new genera, new species, Neotropics.

INTRODUCTION

Since description of the tribe Hilarographini (DIAKONOFF 1977) several papers dealing with telochromatic tortricines appeared in a comparatively short time. They concerned chiefly the Oriental and Palaearctic faunas. Then HEPPNER published the synopsis of the world fauna of Hilarographini s. lat. (HEPPNER 1982b) and a revision of American *Thaumatographa* (HEPPNER 1982a). During the last 27 years there was no continuation of their studies except for some papers by DIAKONOFF but none dealing with the Neotropics. Hence, I am returning to my manuscript from before 20 years completing it with some new data. I am separating *Mictopsichia* and its allies from true hilarographines. In the present paper this group is included in Archipini. In the World Catalogue by BROWN (2005) *Mic-*

topsichia is placed in a "new tribe 3" of Tortricinae. We (RAZOWSKI & BROWN, in preparation) shall return to the problem of its separation in a nearest feature.

Mictopsichia belongs to the telochromatic tortricines which form a polyphyletic grouping (cf. RAZOWSKI & WOJTUSIAK, 2008). Until now this grouping consists of the members of Archipini, Atteriini, Sparganothini, and Polyorthini.

A preliminary characteristics of the *Mictopsichia*-group is as follows.

The species of *Mictopsichia*-group share the presence of the specialized pattern in the cubito-anal field of the hindwing. It consists chiefly of black and silver marks. In male genitalia the most important is structure of the disc of valva (Fig. 1). The basal area is membranous except for a longitudinal belt-shaped sclerite (submedian belt) occasionally terminating in a pulvinus-like soft apex. Dorsal edge of the belt is usually strongly sclerotized. Pulvinus its more or less distinct, situated more dorsally. The signum resembles that of Archipini, e.g. it has a well developed capitulum and a blade. In two new genera (*Rubropsichia* and *Chamaepsichia*) the basal cavity is devoid of the submedian belt and the pulvinus is reduced.

Material

This paper is based on the material cureted by the Natural History Museum, London and the Carnegie Museum of Natural History, Pittsburgh. It has been collected in numerous countries from Mexico to Brazil and Bolivia. The specimens examined have been compared with the type material in the London Museum.

The types of the new species are deposited in the above mentioned museums.

The adults are published in colour because of the importance of the pattern of the *Mictopsichia*-group of genera the species of which often show rather slight genital differences.

Abbreviations used in the text are as follows: CMNH - the Carnegie Museum Natural History, Pittsburgh, GS - genitalia slide, NHML - the Natural History Museum London, TL - type locality.

Acknowledgements

The author thanks Mr. Kevin R. TUCK, London and Dr. John RAWLINS, Pittsburgh for providing the material for study and making possible my work in their institutions. Thanks are also due to Dr. Łukasz PRZYBYŁOWICZ, Mr Krzysztof FIOŁEK, and Mr Witold ZAJDA Cracow who photographed the genitalia slides and arranged the plates.

SYSTEMATICS

Mictopsichia HÜBNER, [1825]

Type-species: *Tortrix hubneriana* STOLL, 1791

Description

Pattern telochromatic: Forewing ground colour orange cream, orange, brownish or similar; markings blackish or brown, often diffuse; refractive markings present, bluish silver; hindwing orange with blackish or brownish markings and refractive elements.

Venation. Figure of forewing provided by DIAKONOFF (1977) and others.

Male genitalia. Pedunculi fused with vinculum, both with strongly sclerotized inner edges; posterior part of tegumen short; uncus minute or atrophied; socii erect, long hairy, fused with base of uncus; gnathos originating at base of uncus-socii complex; terminal parts of arms of gnathos broadening, weakly connected with one another by means of a membrane; costa of valva developed; sacculus simple or with posterior lobe; distal half of disc of valva weakly sclerotized, sparsely hairy, with more or less distinct area of longer hairs near middle; proximal part of disc with elongate belt between sacculus and the subcostal area; end of this belt forms an indistict pulvinus-like belt the dorsal edge of which is strongly sclerotized (a dorsal rib); transtilla a simple belt or with median broadening; juxta small; aedeagus with long coecum penis and more or less reduced caulis; cornuti short, capitate or a bunch of numerous spines usually accompanied by an elongate plate, if present.

Female genitalia. Sterigma moderately large, partially submembranous, with well developed anteostial part; antrum weakly sclerotized or with large sclerite; ductus bursae with weak sclerite, granulate sculpture or membranous; signum with distinct blade, usually with capitulum and basal plate; occasionally accompanied by broad sclerite.

Biology

No data except for collection dates of the moths.

Distribution

This genus is known from Mexico to Brazil.

***Mictopsichia cubilgruitza* sp. n.**
(Fig. 42)

Diagnosis

Of the previously described species *cubilgruitza* is externally similar to *gemmisparsana* from which it differs is reticulate marking of the median part of the cubital area of the hindwing. However, *cubilgruitza* is closest to *cubae* but the latter has much shorter aedeagus and slenderer submedian belt.

Description

Wing spans 14 mm. Head and thorax brownish, labial palpus creamer, ca 1,5. Forewing not expanding terminad, termen rather long, not oblique. Ground colour pale brownish, in terminal area orange, paler orange along costa; dorsum amd median area cream reticulate black; blackish diffuse spot at end of median cell, three weaker spots near dorsum; refractive marking in form of lines before and middle, subterminally and near apex; subapical streak weak, orange. Markinds ill-defined brownish. Cilia brownish, whitish at median part of termen, with brown basal line. Hindwing orange with brownish apical markings; anal area with several black spots chiefly along anal edge and subterminally where this area is limited by a silver line; mediocubital area cream with black reticulation. Cilia brownish in cubital part of wing orange cream.

Male genitalia (Figs 2, 3). Socii rather broad with short, pointed terminal part; valva broad to beyond middle with submedian belt short and submedian rib weak; sacculus simple, short; transtilla weakly sclerotized, somewhat expanding laterally; aedeagus large (twice longer than valva) with dorsoterminal lobe; coecum penis short, rounded; a large, elongate plate in vesica.

Female not known.

Material examined

Holotype male: "Cubilgruitz, 1050 ft., Vera Paz, Guatemala, Chmpn 1880, 66652 (Godm-Salv); GS 31702. Coll. NHML.

Etymology

The name refers to the type locality.

Mictopsichia cubae sp. n.

(Fig. 43)

Diagnosis

Facies similar to that in *gemmisparsana* and *cubilgruitza* but *cubae* with short aedeagus, pulvinar belt and long distal parts of socii.

Description

Wing span ca 12 mm; head and thorax brownish; forewing somewhat expanding terminally with termen weakly oblique. Ground colour (worn) pale brownish; markings brown diffuse, incomplete; postmedian line curved submedially; subapical streak cream. Cilia (remnants) brown. Hindwing orange; apical marking small, brownish with two dark brown spots; cubito-anal area with marginal black and silver spots and small reticulate part; cilia brownish, pale orange at median area.

Male genitalia (Figs 4, 5). Socius slender with long terminal pointed parts; uncus vestigial; valva slender, with moderate basal parts; submedian belt broad, short, dentate with atrophied submedian rib; sacculus simple, short; transtilla expanding medially; aedeagus somewhat longer than valva with dorsoterminal lobe; cornutus an elongate plate.

Material examined

Holotype male: "Cuba (S.E.) Santiago. II, 02. W. SCHAUS. 1905-244"; GS 31697. Coll. NHML.

Etymology

The specific epithet refers to the country of origin of this species, Cuba.

Mictopsichia guatemalae sp. n.

(Fig. 44)

Diagnosis

This species is comparable with *cubae* and *cubilgruitza* but is distinguished by marginal row of red spots of the cubitoanal area of the hindwing, long terminal part of the socius, and spike like, well sclerotized submedian belt of the disc of valva.

Description

Wing span 14 mm. Head and thorax brownish; labial palpus 1,7 paler than head. Forewing as in *cubilgruitza*. Ground colour brownish orange except for basal and subapical

streak and dorsomedian area which is cream reticulated brown; large surfaces, e.g. base of wing, suffused brownish. Markings ill-defined, with some brown marks. Cilia brownish with two creamish parts. Hindwing orange; markings of apical area brownish divided into some spots; cubitoanal area orange red spotted black and silver; median part of this surface directed towards median cell cream with brown dashes; cilia creamish with brownish parts.

Male genitalia (Figs 6, 7). Distal half of socius slender, long; arm of gnathos long; valva tapering in distal third terminally; saccullus long, rounded posteriorly; submedian belt of valva slender, long, pointed; aedeagus fairly large, weakly curved upwards beyond zone, protruding dorsoterminally; cornutus large, plate-shaped.

Female not known.

Material examined

Holotype male: "Vera Paz, Cubilgruitz, CHAMPION"; GS 31695. Paratypes 8 males: one labelled as above, one from same locality (Cubilgruitz, 1050 m, Vera Paz, ... 1880), five from Panama 1800 ft, Vera Paz, X. 1879...., one from Bogota, Colombia, ..., and one from Tabasco, Mexico, March. Three paratypes dissected.

Etymology

The name refers to the country of origin.

***Mictopsichia atoyaca* sp. n.**
(Fig. 45)

Diagnosis

This species is close to *cubilqruitza* and *cubae* as tha shapes of the socii and aedeagus show; facies also similar to that in the mentioned species and to *gemmisparsana*. *M. atoyaca* differs from them chiefly in the shape of the valva which extends ventroterminally.

Description

Wing span 14 mm. Head olive cream, frons and labial palpus (1,8) cream; thorax similarly coloured as head, with two brownish transversae fasciae. Forewing as in *gemmisparsana*, with termen hardly oblique, straight. Ground colour at costa pale orange, dorsomedian area creamish densely reticulate brown; basal and subapical streaks yellow orange. Marking ill-defined olive brown with some brown spots. Cilia brownish with whitish parts and brown basal line. Hindwing pale orange with brownish apical and subapical fascia; cubitoanal area blackish; anal edge with silver refractive spots. Cilia (damaged) creamish with brownish parts.

Male genitalia (Figs 8, 9). Socius rather broad triangularly tapering apicad; distal part of tegumen weakly sclerotized; arms of gnathos slender ventroterminally each with submedian rounded lobe; caudal edge of valva oblique, convex ventrally; sacculus rounded; submedian belt tapering terminad with ill-defined dorsal rib; aedeagus 1,3 times longer than costa of valva, protruding dorsoterminally; plate-shaped cornutus in vesica.

Female not known.

Material examined

Holotype male: "Atoyac, Veracruz, Mexico, IV. 18, (H. H. SMITH) GODM SLVN, 66650"; GS 31708. Coll. NHML.

Etymology

The name refers to the type locality of this species.

***Mictopsichia marowijneae* sp. n.**
(Fig. 46)

Diagnosis

Externally similar to *atoyaca* but with smaller dorsomedian cream area; in male genitalia this species differs chiefly from *atoyaca* in the rounded, not ventrally protruding caudal edge of valva and ca three times longer aedeagus.

Description

Wing span 13 mm. Head brownish, frons more orange, labial palpus (1,5) cream, brownish terminally; thorax olive brown with brownish diffuse fasciae. Forewing as in *atoyaca*. Ground colour orange in form of submedian blotch at costa, basal and subapical streaks, and indistinct marks along subterminal refractive line and termen; dorsomedian area moderate, distinctly reticulate. Median facia diffuse with some dark brown spots. Cilia brown with whitish parts. Hindwing orange with brownish apical fascia and spot reaching end of median cell; cubitoanal area with black spots; simlar spots between marginal refractive spots. Cilia brownish with whiter parts.

Male genitalia (Figs 10, 11). Uncus minute; socius curved subapically with short apical tip; connecting rod between arms of gnathos very short, ventral lobes large; valva tapring in posterior half, rounded caudally; setose area of disc weak; submedian belt short, rather broad; sacculus simple, weakly convex; transtilla weakly sclerotized; aedeagus very long with dorsoterminal process; coecum penis large; cornuti very many small non-capitate spines arranged in two belts.

Female not known.

Material examined

Holotype male: "Surinam: Suriname, Langatambettie, Marowijne River 22 - 30. VII. 1980; B.V. RIDOUT B.M. 1980 - 408"; GS 31703; paratypes 4 males with identical labels and one from "Bartica British Guiana. Parish, 12. 12"; GS 31704. Coll. NHML.

Etymology

The name refers to the name of the river at which the species was collected.

***Mictopsichia benevides* sp. n.**
(Fig. 47)

Diagnosis

This species is very similar and closely related with *gemmisparsana* but is distinguished by slenderer subapical orange yellow strip of the forewing and long, thorny ventral termination of aedeagus.

Description

Wing span 10,5 mm. Head and thorax olive brown; labial palpus ca 1,3 cream with weak brownish marks. Forewing as in *gemmisparsana*; ground colour brownish orange, orange yellow along costa postbasally and submedially, suffused olive brown along edges of markings; dorsal area between 1/3 of edge to before tornus more yellow, reticulate brown; refractive lines distinct, subterminal line gently convex; subapical strip slender. Cilia brownish, in median area whitish, at tornus brownish white. Hindwing orange bellow; apical markings pale brownish divided into three blotches; cubito-anal area blackish with numerous orange dots; bluish refractive dots along anal edge; cilia pale brownish with whiter parts.

Male genitalia (Figs 12, 13). Uncus minute; socius long with curved sharp termination; gnathos arms broadening and minutely spiny terminally; vinculum a fairly broad ring; valva broad to middle with large oval membranous area; submedian rib curved; pulvinus short, well sclerotized; sacculus short, broad ventral lobe; transtilla submembranous; juxta small; aedeagus broad proximally, with slender ventro-posterior termination armed with a few minute thorns; coecum penis large; cornuti a series of moderate spines.

Female genitalia (Fig. 32). Sterigma short, minutely spiny, with slender belt-like anteostial part; antrum sclerite weak; ductus bursae moderate, sculptured anteriorly; corpus bursae sclerotized proximally to signum; signum with rather broad basal plate and moderate blade.

Material examined

Holotype male: "Benevides, Para, Brazil Oct. 1918, S. M. KLAGES, C.M. Acc. 6174"; GS 12376; paratype female, same label. Coll. CMNH.

Etymology

The specific epithet refers to the type locality.

***Mictopsichia panamae* sp. n.**
(Fig. 48)

Diagnosis

Facies as in two preceding species but subterminal refractive fascia posteriorly edged with a complete yellow orange line and cubito-anal area with confluent black spots; from *guatemalae* it differs chiefly in lack of orange marginal spots. From *benevides* this species differs chifly in the lack of the signum.

Description

Wing span 15,5 mm. Head brownish orange, labial palpus 1,5 cream white; thorax brownish, tegula yellow orange. Forewing as in preceding species. Ground colour yellowish orange preserved in form of groups of dots, rust orange terminally, paler at refractive subterminal line and at costa; streaks yellow orange; dorso-median area small, orange with dark brown reticulation. Cilia brownish with paler parts. Hindwing pale orange with two pale brownish fasciae in apical area and brownish cubito-anal area confluently spotted with black, accompanied by cream reticulate brown, small surface directed towards middle of median cell; refractive dots and two fasciae present. Cilia pale brownish with white broad interruptions.

Maled not known.

Female genitalia (Fig. 33). Papilla analis broadest at 1/3; sterigma short, broader posteriorly than anteriorly, with small latero-proximal prominences; short sclerite in antrum; ductus bursae long; no signum in corpus bursae.

Material examined

Holotype female: "Bugaba 800 - 1500 ft, Chiriqui, Panama CHMPN, 1881-3, 66659 (GODM SALV.); GS 31700. Paratype female, same label, GS 31705. Coll. NHML.

Etymology

The name refers to the country of origin of this species.

Mictopsichia gemmisparsana (WALKER, 1863)

Material examined

The lectotype from Ega (Amazonas, Brazil) is housed in the NHML.

Description

Cubito-anal area of hindwing with confluent greyish brown marks between which numerous orange spots of the ground colour; anal edge black marked with row on refractive spots.

Male genitalia (Figs 14, 15). Socii large, terminating in a short process; arms of gnathos long, broadening terminally; valva tapering terminad with disc above submedian rib strong, arched and membranous oval area; sacculus short; end of pulvinus broad, well sclerotized; aedeagus rather short, tapering posteriorly, terminated in a short, ventral tip; cornuti a group of dense spines.

Female not known.

Remarks

This species was described from Ega, Amazonas, Brazil but the type, located in the NHML, lacks its abdomen. Other specimens of the type series belong to different species (*M. egae*). One of the paralectotypes, male with genitalia on slide 31691[NHML] externally identical with the lectotype is illustrated in this paper.

Mictopsichia miocentra (MEYRICK, 1920)

Material examined

The lectotype (from Obidos, Brazil) of this species was illustrated by CLARKE (1969).

Remarks

This species is characteristic by the very slender aedeaus and presence of a large lobe extending probably from distal part of sacculus. Unfortunately the position and morphological importance of this lobe cannot be interpreted on basis of the examined slide.

Mictopsichia chlidonata sp. n.
(Fig. 49)

Diagnosis

Externally similar to *gemmisparsana* and its allies; male genitalia as in the mentioned species and *benevides* but in this species sacculus is simple and arm of gnathos expanding latero-terminally.

Description

Wing span 11 mm. Head olive brown, frons more ferruginous, labial palpus (1,5) much paler; thorax brownish. Forewing rather slender, similar to that in all preceding species. Ground colour in form of orange basal and subapical streaks accompanied by two short submedian marks at costa and a darker line edging subterminal refractive line; termen dark orange; dorso-median area with series of longitutinal orange dots between the veins and two refractive marks. Cilia brown with small paler interruptions. Hindwing orange with broad, almost confluent brownish terminal markings; cubito-anal area blackish with some dark orange dots and a series of refractive spots along wing edge. Cilia brown.

Male genitalia (Figs 16, 17). Uncus slender, minute; socius broad with short, sharp process near middle of posterior edge; arm of gnathos rather short, with a subtriangular lateral projection terminally; transtilla delicate; valva elongate, rounded terminally; sacculus not convex; submedian belt with short termination and distinct dorsal rib; aedeagus short, protruding ventro-terminally; large plate-shaped cornutus in vesica.

Female not known.

Material examined

Holotype male: "Jurimaguas, Peru, Parish. 3.20"; GS 31698. Coll. NHML.

Etymology

The name refers to beatiful colouration of this moth; Greek: chlidon - a decoration.

Mictopsichia periopta MEYRICK, 1913

Material examined

This species described from Bartica, British Guiana is housed in the NHML. The lectotype male is figured by CLARKE (1969).

Remarks

In the male genitalia the terminal part of the submedian belt of the disc of valva is similar to that in *chlidonata* and the pulvinus is well developed, elongate; the shape of socii cannot be recognized from the genitalia slide; the aedeagus is very characteristic, short with a dorso-terminal lobe.

***Mictopsichia egae* sp. n.**
(Fig. 50)

Diagnosis

Similar to *gemmisparsana* but *egae* without reticulate dorsomedian area of the forewing and large black markings in cubito-anal field of the hindwing. Female genitalia as in *boliviae* (similar signum) but this species with small sterigma and antrum.

Description

Wing span 16 mm. Head and thorax olive brown. Forewing weakly expanding terminad, with costa straight and termen hardly oblique. Ground colour orange yellow in form of basal and subapical streaks and postbasal incomplete interfascia; other parts of ground colour suffused olive brownish, terminal area more orange brownish; line beyond subterminal refractive marking and some indistinct marks in dorso-median area slightly darker; no reticulate area. Refractive markings distinct. Markings diffuse, brown with some dark brown marks. Cilia brownish white with darker parts. Hindwing orange; apical third of wing with brownish confluent marking; cubito-anal pattern large, blackish with a few orange dots and refractive elements. Cilia brownish with whiter parts.

Male not known.

Female genitalia (Fig. 34). All parts of sterigma slender, the anteostial sterigma arch-shaped; sclerite of antrum very small; ductus bursae slender with proximal granulate sclerite; signum with large blade and capitulum and a moderate basal plate.

Material examined

Holotype female: "Ega", [Brazil], paralectotype of *gemmisparsana*; GS 31699. Coll. NHML.

Etymology

The specific epithet refers to the type locality.

***Mictopsichia boliviae* sp. n.**
(Fig. 51)

Diagnosis

This species is very close to *egae* from which it differs in small cubito-anal pattern and large sterigma and sclerite of the antrum. The presence of a series of the refractive spots of the hindwing distinguishes this species from *godmani*.

Description

Wing span 19,5 mm. Head and thorax brownish; labial palpus ca 2, cream with indistinct brownish marks. Forewing broad weakly expanding terminad with costa and termen slightly convex. Ground colour pale orange preserved as diffuse costal blotches and spots in dorso-median area; subapical streak orange yellow. Markinks olive brown: median fascia ill-defined, subterminal fascia rather distinct. Cilia brownish. Hindwing broad with short, rounded apex, orange; apical markings pale brownish, weak; cubito-anal al area reticulate; blackish and refractive spots along anal margin. Cilia (worn) orange cream with browm parts.

Male not known.

Female genitalia (Fig. 35). Sterigma fairly broad with rounded corners; antrum broad posteriorly, slender proximally, with rather weak inner sclerite; ductus bursae short; a row of granules in proximal half of ductus bursae; blade of signum very long, slender, capitulum broad, basal plate oval.

Material examined

Holotype female: "Prov. del Sara, Bolivia 450 m, J. STEINBACH"; GS 12366. Coll. CMNH.

***Mictopsichia mincae* sp. n.**
(Fig. 52)

Diagnosis

This species is similar and close to *chlidonata* but differs from it chiefly the elongate-triangular end of the sacculus and rounded socii; female has an elongate, slender antrum and a strogly curved blade of signum.

Description

Wing span 12 mm. Head and thorax brownish ochreous with browner parts; labial palpus ca 1,5 cream with brown mark subterminally. Forewing weakly expanding terminad;

termen hardly convex. Ground colour pale orange consisting of basal and subapical streaks, weak mark at mid-costa and a line beyond subterminal refractive marking; termen brownish; dorso-median area cream, reticulate brown, extending towards costa; some orange dots postbasally. Markings brown. Cilia brownish. Hindwing pale orange; apical markings brownish; cubito-anal area with blackish and refractive spots, extending towards median cell by means of posterior brownish blotch and more median area densely dashed brown. Cilia rather cream with distinct, brown basal line.

Male genitalia (Figs 18, 19). Socius convex laterally, with short, pointed tip; uncus minute; end of arm of gnathos broadly expanding; valva tapering terminally; submedian belt of disc ill-defined terminating in a hairy broadening; weakly developed pulvinus dorsally to this last; sacculus with large ventro-posterior, pointed lobe; aedeagus slender, weakly bent, with small coecum penis; no cornuti in vesica.

Female genitalia (Fig. 36). Sterigma slender, in distal third expanding laterally; antrum slender, long; ductus bursae rather short with bulbous distal portion; signum with large base and curved blade.

Material examined

Holotype male: "Colombia Minca, 2000 ft, VI. 1899, H. H. SMITH 68736"; GS 31707. Paratypes 3 males and 3 females with identical labeld and numbers 68732 - 68738. Four specimens from Tabasco, Mexico (III. 18; (H. H. SMITH) GDM SLV) are not included in the type series.

Etymology

The name refers to the type locality.

***Mictopsichia buenavistae* sp. n.**
(Fig. 53)

Diagnosis

Facies similar to that of *godmani* and *ornatissima* but *buenavistae* with brownish suffusion of the terminal third of forewing and black centred metallic spots beneath tornus.

Description

Wing span 18 mm. Head and thorax pale brownish, frons tinged orange. Forewing rather broad, somewhat expanding terminad; costa weakly convex; termen sinuate. Ground colour orange cream, orange along costa, tinged brownish medially; dorsal area strigulated blackish; four black, silver inside spots beneath tornus; base of wing and termen suffused olive brown. Markings indistinct, olive brown consisting of median and subterminal fasciae. Transverse refractive lines weak. Cilia (worn) orange brownish with brown parts.

Hindwing pale orange with some black dots at apex, strigulate anal area and four black spots marked with silver in cubital area; cilia pale orange.

Male not known.

Female genitalia (Fig. 37). Papilla analis slender; sterigma rounded proximally; sclerite of antrum distinct; ductus bursae fairly long, slender; signum with large, sculptured basal plate and small blade.

Material examined

Holotype female: "Buenavista, East Bolivia, 750 m, Aug. 06 - April 07 (STEINBACH); 31709. Coll. NHML.

Remarks

Externally simmilar to *ornatissima* especially in the maculation of the hindwing and the shape of the forewing. Untill the male genitalia are known the accurate systematic position of this species is doubtful.

***Mictopsichia hubneriana* (STOLL, 1791)**
(Fig. 54)

Description

Male genitalia (Figs 20, 21). Uncus broadest postbasally, tapering terminad; socius rather short, sparsely hairy; gnathos arm slender, long, terminal plate reduced; valva with large area of specialized bristles near middle of disc; sacculus simple, short; transtilla a transverse simple sclerite; aedeagus slender with ventro-terminal process and a sclerite; three short cornuti in vesica; coecum penis very large.

Female genitalia (Fig. 38). Sterigma subsquare, in part rather weakly sclerotized, with fairly large anteostial part and small latero-proximal corners and pair of submedian lobes; antrum fairly broad with weak transverse sclerite before which ductus seminalis extends; rather long, coiled sclerite in posterior third of ductus bursae; signum large with indistinct basal plate and strong blade.

Material examined

12 specimens from Benevides, Para, Brazil, October; Icacoatiara, Pará, October and Parentinas, Brazil, 8. X. 1919. One specimen is from from Cuatro Ojos, Bolivia (CNH). One example from Bartica, British Guiana (NHML) and one from Kartabo, same country (CMNH).

Remarks

This species exhibits a rather constant markings and colouration but varies in size, some specimens are smaller by 2-3 mm of alar expanse than the others.

The systematic position within the genus is rather unclear. The facies is similar to that in the representatives of *Mictocommosis* and *Rubropsichia* in which the cubito-anal area of the hindwing is devoid black and refractive spots. The setose area of the disc of valva is very distinct, with numerous pectinate scales and in the vesica there are non-deciduous cornuti.

***Mictopsichia ornatissima* (DOGNIN, 1909)**

Material examined

This species was described from Pebas, Peru. The holotype, not dissected male is housed in the NHML.

Remarks

The systematic position of this species is doubtful but until the genitalia are examined I am preserving its previous systematic position.

***Mictopsichia jamaicana* sp. n.**
(Fig. 55)

Diagnosis

Externally this new species differs from all known species of *Mictopsichia* s.l. especially in the presence of subtornal black blotch of the forewing; it is closest to *callicharis* and *hubneriana* as the shapes of sterigma and signum show but *jamaicana* without sclerites in corpus bursae and much shorter blade of signum.

Description

Wing span 14,5 mm. Head and thorax olive grey; flagellum of antenna yellowish cream to middle, tinged orange basally; frons cream; labial palpus 1,5 cream, marked brown terminally. Forewing rather slender with costa weakly convex, termen slightly oblique, straight; costal fold slender, reaching to before middle. Ground colour to mid-costa and end of termen pale orange yellow almost completely suffused olive grey, ground colour in terminal third of wing orange; refractive markings bluish silver. Markings atrophied except for rounded black, edged yellow blotch at termen marked with orange median dot and two refractive spots. Cilia olive grey. Hindwing orange, mixed brown on periphery, more cream basad; brown suffusion along distal part of costa.

Male not known.

Female genitalia (Fig. 39). Papilla analis broad postmedially; apophyses short; sterigma moderately short with slender, submembranous antero-ostial part and broad lateral lobes of the postostial part; antrum membranous; ductus bursae moderate; basal plate of signum slender, well sclerotized distally, forming a very long belt of microspines proximally, blade slender.

Material examined

Holotype female: "Corn Puss Gap, Jamaica, July, 19, 1936, Coll. by AVINOFF & SHOUMATOFF"; GS 12363. Coll. CMNH.

Etymology

The name refers to the country of origin.

Mictopsichia callicharis MEYRICK, 1921

Remarks

This species was described from Teffé (Amazonas, Brazil) and the female holotype is illustrated by CLARKE (1969). It characterizes with long capitulum and very long blade of the signum.

Mictopsichia miocentra (MEYRICK, 1920)

Remarks

The lectotype of this species was illustrated by CLARKE (1969). It is distinct by a very slender, long aedeagus terminationg in a ventral process and a large lobe above the sacculus. Unfortunately it is difficult to realize whether this lobe represents the end part of the submedian belt of disc or is a part of the sacculus.

Mictocommosis DIAKONOFF, 1977

Until now this genus comprised four Old World species (Palaearctic, Oriental and Afrotropical). Now, one Mexican species is included. It (*Mictopsichia godmani* WALSINGHAM, 1914 from Tabasco) does not exibit any generic differences from the type-species (*Simaethis nigromaculana* ISSIKI, 1930, Japan). This genus was placed until now in Hilarographini (cf. DIAKONOFF 1977, HEPPNER 1982b). It is closely related to *Mictopsichia* as the pesence of the submedian belt of disc of valva, the shape of gnathos and aedeagus show.

***Mictocommosis godmani* (WALSINGHAM, 1914), comb. n.**
(Fig. 56)

Description

Male genitalia (Figs 22, 23). Uncus large, moderately broad, setose; socius large, broadest medially, heavily bristled; gnathos weak, without terminal plate; vinculum rather slender; valva broad in basal third; sacculus simple; submedian belt of disc strong; fold terminating at the basal membrane of valva; transtilla with small median process; aedeagus large with one non-deciduous and one plate-shaped cornutus.

Female not known.

Material examined

Holotype male: "Mexico, Teapa, Tabasco, III. 18, (H.H. SMITH)GDM.SLV., 65373", GS 31690. Coll. NHML.

***Rubropsichia* gen. n.**

Type species: *Rubropsichia brasiliana* sp.n.

Diagnosis

Facies as in *Mictopsichia*. Male genitalia with similar tegumen, vinculum, and aedeagus but *Rubropsichia* with gnathos lateral, socii fused with one another into a mush-room-shaped, densely bristled structure. Uncus short, broad hidden by the socii. Signum transverse.

Description

Head typical tortricine; labial palpus short, usually ca 1,5. Forewing broad with apex sickle-shaped and termen sinuate. Ground colour orange; pattern consisting of remnants of the tortricine elements, with dense reticulation, and bluish refractive markings.

Venation as in *Mictopsichia*.

Male genitalia. Uncus broad; socii fused with one another extending beyond uncus; gnathos very weak; distinct attachment sclerites from ventral parts of pedunculi at their junction with vinculum; valva broad basally, with distinct neck and slender posterior part; costa simple, well developed; sacculus short with ventral and/or caudal lobes; transtilla broad laterally with long rod-like median part; juxta large; distal half of aedeagus with short dorsal sclerite; coecum penis long, slender; caulis vestigial; cornuti long capitate spines found in one species.

Female not known.

Distribution and biology

Tropical South America; three species known. Biology not known.

Etymology

The name refers to the second part of the name *Mictopsichia* and the main colour of the moth; Latin: ruber - red.

Remarks

This genus and *Chamaepsichia* are closely related to *Mictopsichia* but are more advanced. The proximal membranous part of valva which resembles the basal cavity of olethreutines is devoid of the submedian belt, the gnathos is represented by weak lateral arms not connected terminally, the transtilla in the two is very similar, rod-like with large lateral lobes, and the signum is belt-shaped, transverse. In the colouration they preserved apical markings of the hindwing but have atrophied anal markings of the hindwing. Some of the above characters remind those of *Mictocommosis*.

***Rubropsichia fuesliniana* (STOLL, 1781)**
(Fig. 57)

Material examined

Four specimens from Benevides, Para (Brazil); October 1918, S. M. KLAGES. Coll. CMNH.

Description

Male genitalia (Figs 24, 25). Socii complex large; uncus short, broad; sacculus rather slender, rounded caudally; aedeagus long.

Remarks

The syntype male of this species is deposited in the USNM. Described from Surinam.

***Rubropsichia brasiliana* sp. n.**
(Fig. 58)

Diagnosis

Closely related and similar to *fuesliniana* but *brasiliana* sacculus broad, more expanding caudally, indistinctly so ventrally and the coecum penis long, slender.

Description

Wing span 20 mm. Head brown, labial palpus over 1, dirty cream; thorax greyish brown with weak orange fasciae. Shape of forewing and colouration as in *santaremana* but reticulation less dense, apical area of ground colour smaller and darker, and dorso-postbasal fascia slightly concave posteriorly. Hindwing pale orange with strong blackish apical and subapical strips accompanied by weaker anterior marking. Cilia creamish brown with black basal line terminating at the cubital veins.

Male genitalia (Figs 26, 27). Uncus short, broad, straight apically; socii fused posteriorly, broad; posterior part of valva broadest medially; sacculus not expanding ventrally forming a large caudal lobe; postzonal part of aedeagus rather short, broad; coecum penis slender, weakly bent.

Female not known.

Material examined

Holotype male: "S. Paulo de Olivenca, Brazil, S. KLAGES"; GS 12368. Coll. CMNH.

***Rubropsichia santaremana* sp. n.**
(Fig. 59)

Diagnosis

This species is very similar and closely related to *brasiliana* and *fuesliniana* but *santaremana* with broad postbasal part of valva, group of slender spines and small ventro-basal lobe of sacculus.

Description

Wing span 16,5 mm. Head dark brown, orange rust dorsally; thorax brown with broad orange fasciae. Forewing typical of the genus. Ground colour dark orange confluently reticulate dark grey, with distinct blusih refractive marks. Markings brownish black consisting of postbasal fascia limited to dorsal half of wing and blotch at mid-costa. Cilia brown with black basal line, white before apex. Hindwing orange with brown-black fascia limiting the apex field accompanied by weak subapical mark and some three anterior dots. Cilia in apical area brownish, otherwise much paler, with black basal line.

Male genitalia (Figs 28, 29). Uncus very short, broad, with minute apical convexity; post-saccular part of valva proportionally broad; disc with group of long spines; caudal lobe of sacculus short, angulate dorsally, ventrobasal lobe vestigial; postzonal part of aedeagus short; coecum penis longer than the latter; 7 cornuti in vesica.

Female not known.

Material examined

Holotype male: "Santarem, May 1919, S. M. KLAGES. Acc. 6324"; GS 12367. Coll. CMNH.

Chamaepsichia gen. n.

Type-species: *Mictosichia durranti* WALSINGHAM, 1914

Diagnosis

This genus is very close to *Rubropsichia* but differs from it in the presence of the rod-like uncus and the complete atrophy of the socii. See also the remarks to *Rubropsichia.*

Description

Male genitalia with long, strongly sclerotrized uncus; socii atrophied; gnathos, weak slerites membranously connected terminally; vinculum large; valva as in *Rubropsichia* but with area of strong spines beyond the neck; sacculus with a free caudal process; aedeagus as in the mentioned genus.

Female genitalia. Proximal part of sterigma cup-shaped; ductus bursae slender; signum a transverse microthorny sclerite.

Biology and distribution

No data on biology. The genus comprises two Neotropical species, one Brazilian (from Pará) and one Bolivian.

Etymology

The generic name refers to the name of the close genus *Mictopsichia* and Greek: chamai - not genuine.

Chamaepsichia durranti (WALSINGHAM, 1914), comb. n.

(Fig. 60)

Material examined

Lectotype male, not dissected; paralectotype: Pará, Amazonas, 23. IX. 1892, both coll. NHML. Three males and one female from Benevides, Pará, Brazil collected in October.

Description

Male genitalia (Figs 30, 31). Uncus strong, expanding terminally, long hairy; socii reduced; gnathos preserved in form of slender arms membranously connected medially; vin-

culum large, with small apical prominence; valva slender except for basal part, with some long bristles in middle of disc; sacculus with large terminal process; transtilla a slender rod with broad lateral parts; aedeagus as long as costa of valva; coecum penis long, slender; cornuti four spines expanding posteriorly; caulis absent.

Female genitalia (Fig. 40). Papilla analis large, broadest medially; apophyses short, slender; sterigma cup-shaped with slender latero-posterior arms; ductus bursae fairly broad; ductus seminalis subterminal; signum a weak transverse plate in posterior part of corpus bursae with two confluent belts of minute thorns directed towards mid-corpus.

Remarks

This species was described from Pará, Brazil. The lectotype, a not disseced male, is housed in the NHML. The specimens illustrated are compared with the above mentioned specimens from NHML.

***Chamaepsichia rubrochroa* sp. n.**
(Fig. 61)

Diagnosis

This species is closely related and externally similar to *durranti* but can be distinguished by white labial palpus (in *durranti* it is black-brown), a reduction of dorso-postbasal black fascia, the broader cup-shaped part of sterigma, and the large, transverse signum.

Description

Wing span 19 mm. Head pale ochreous cream, frons black-brown; labial palpus over 1, white; thorax orange with brownish grey parts and creamish collar. Forewing as in *durranti* but markings (also blotch at mid-costa) atrophying. Cilia brownish cream; basal line weak, brown. Hindwing with subapical line longer than in *durranti*; cilia creamer with much shorter black-brown basal line.

Male not known.

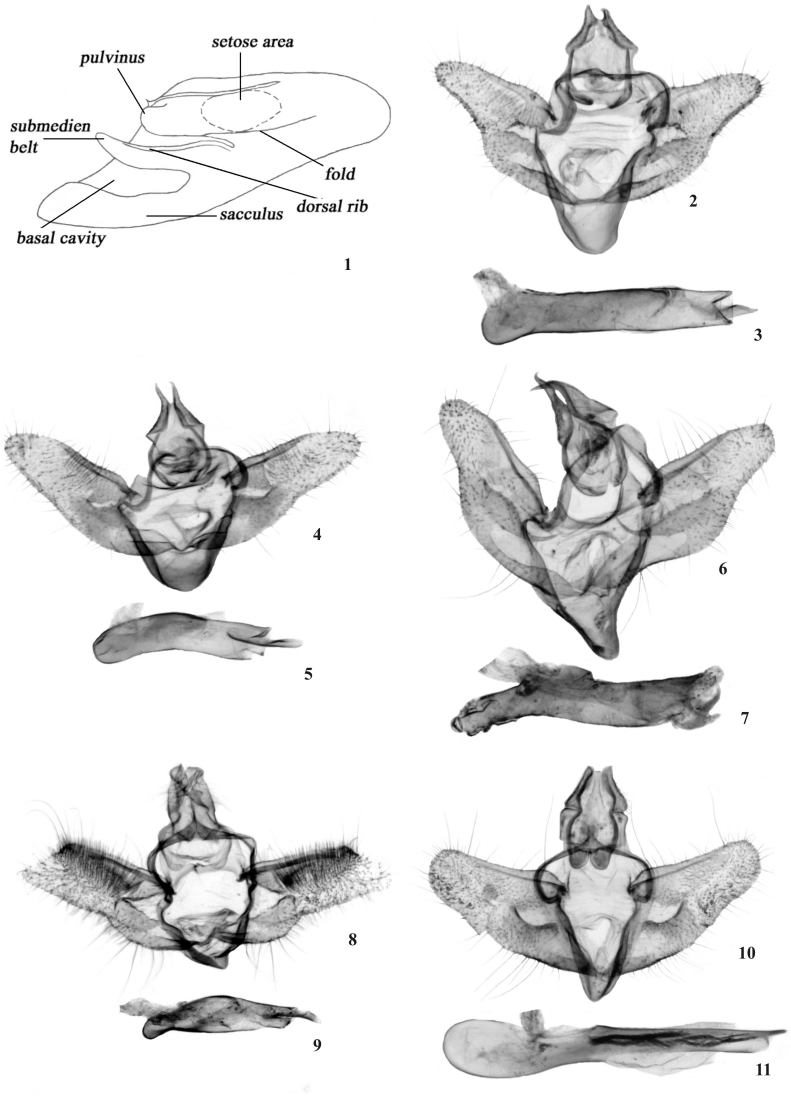
Female genitalia (Fig. 41). Papilla analis elongate-oval; cup-shaped part of sterigma large, rounded proximally; signum large, transverse sclerite near base od ductus bursae.

Material examined

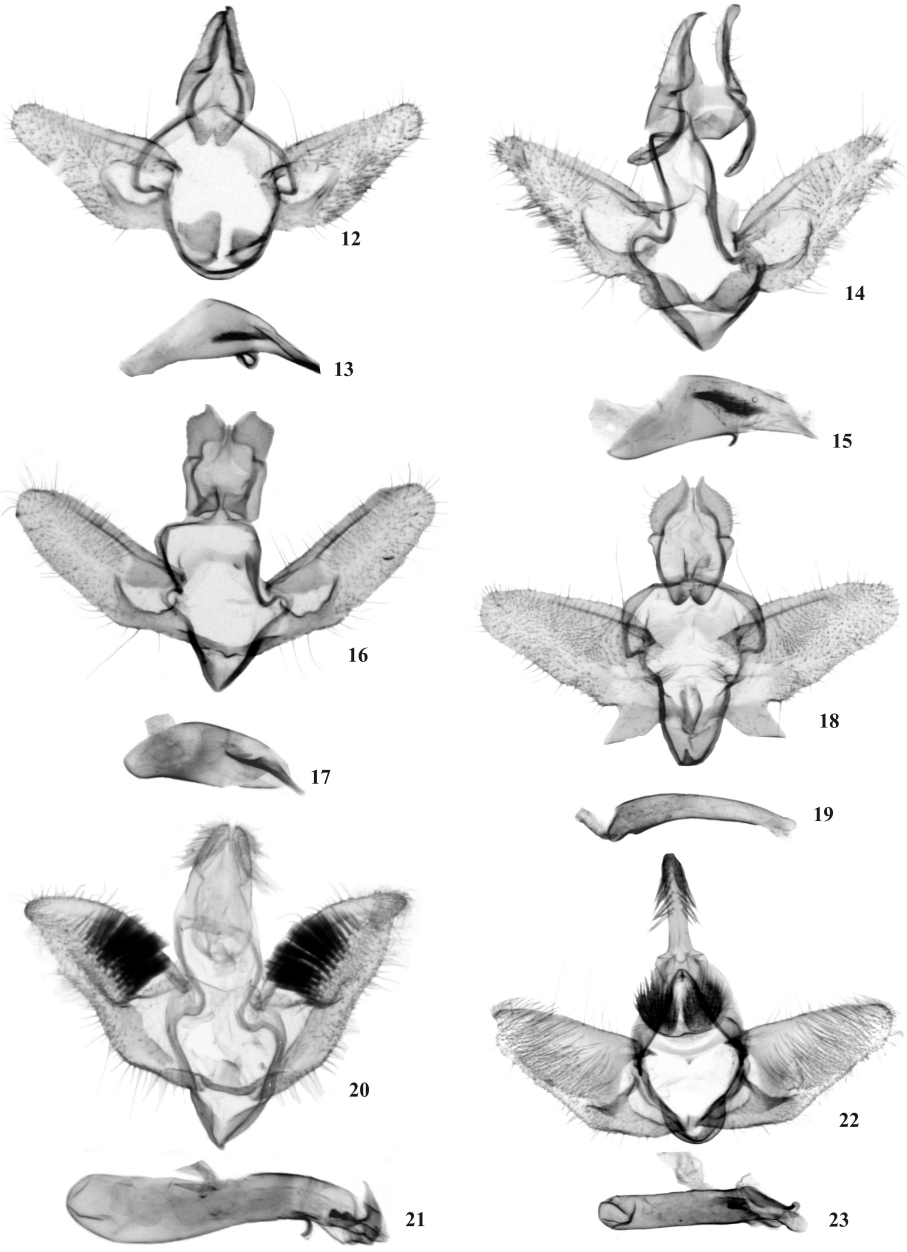
Holotype male: "STEINBACH Acc. 5058, P.[rovince] del Sara, Bol.[ivia]; GS 12369. Coll. CMNH.

Etymology

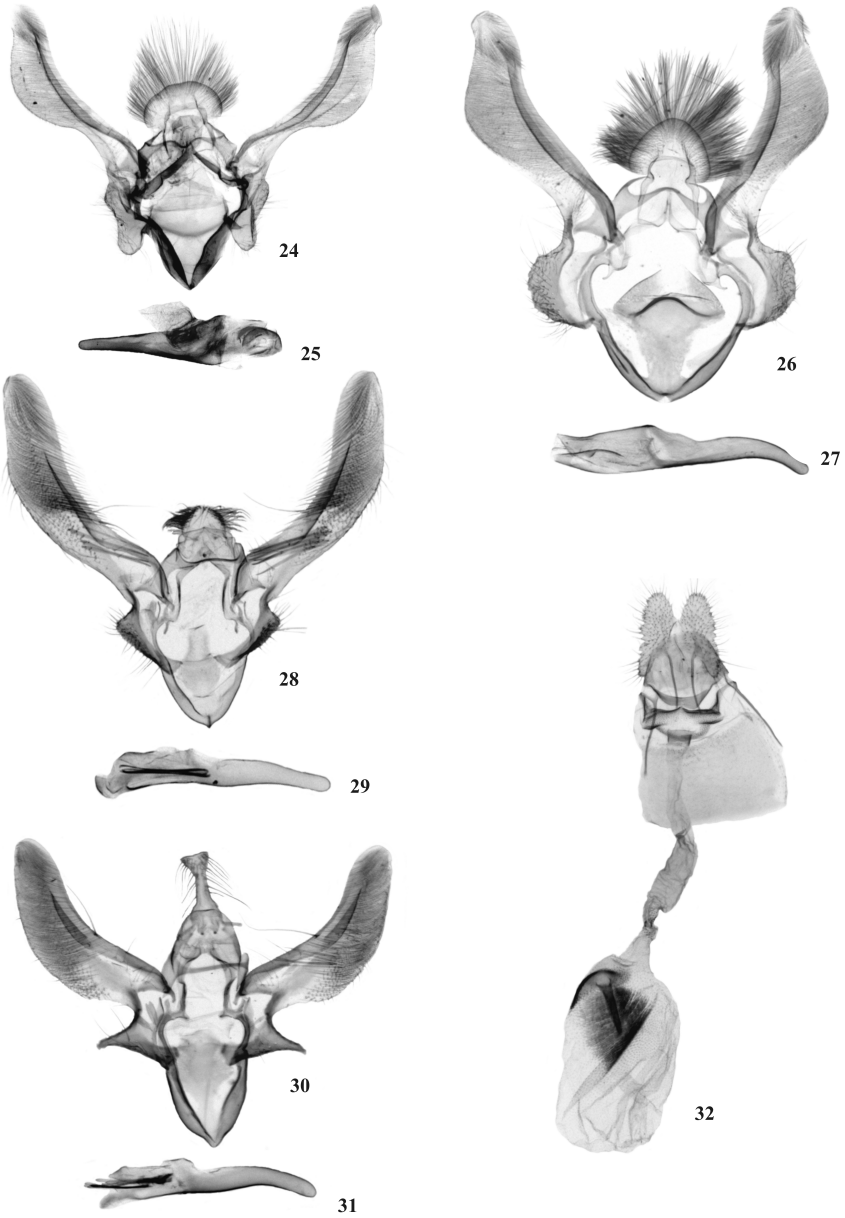
The specific epithet refers to the colouration of the moth; Latin: ruber - red, Greek: chroa [from chroos] - skin of body.



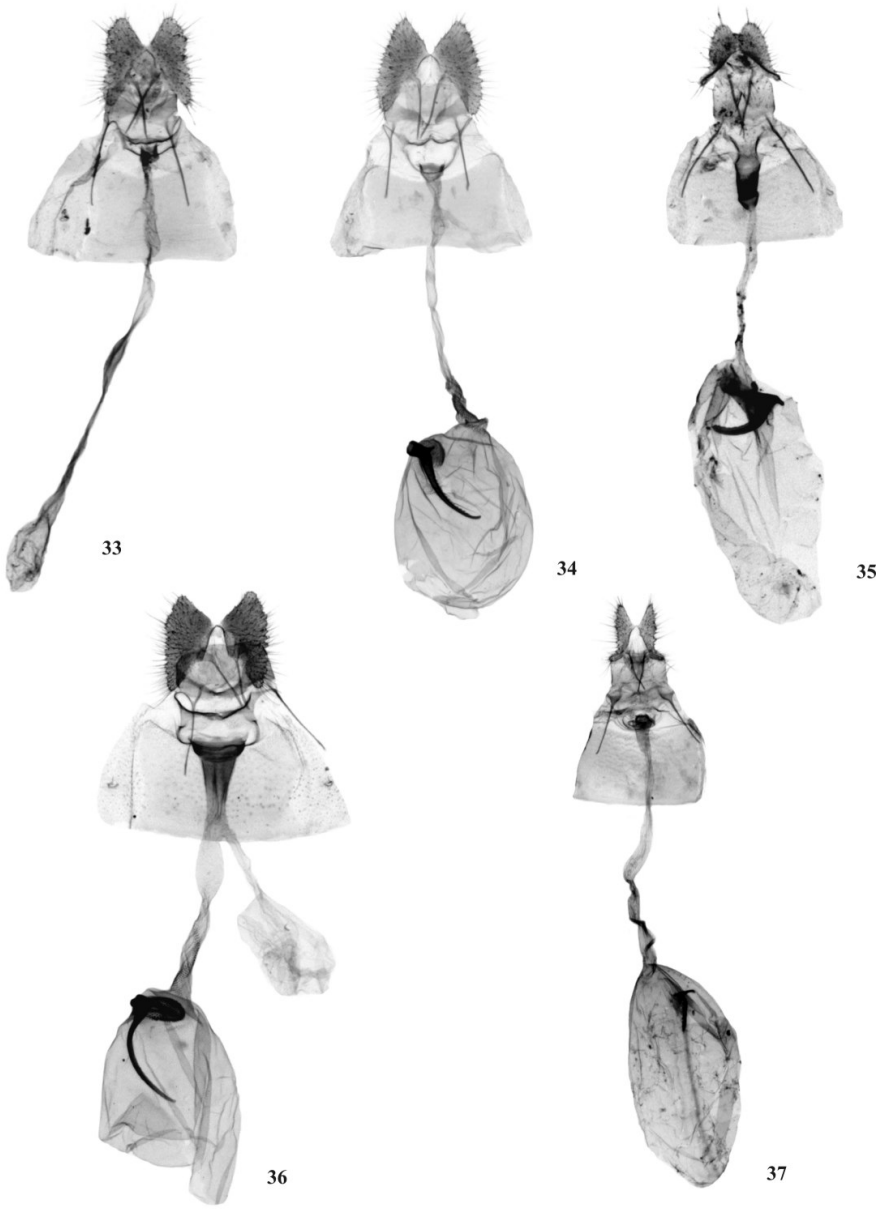
Figs 1-11. Male genitalia of *Mictopsichia* HÜBNER: 1 – discal surface of valva; 2, 3 – *M. cubilgruitza* sp.n., holotype; 4, 5 – *M. cubae* sp. n., holotype; 6, 7 – *M. guatemalae* sp. n., holotype; 8, 9 – *M. atoyaca* sp. n., holotype; 10, 11 – *M. marowijneae* sp. n., holotype.



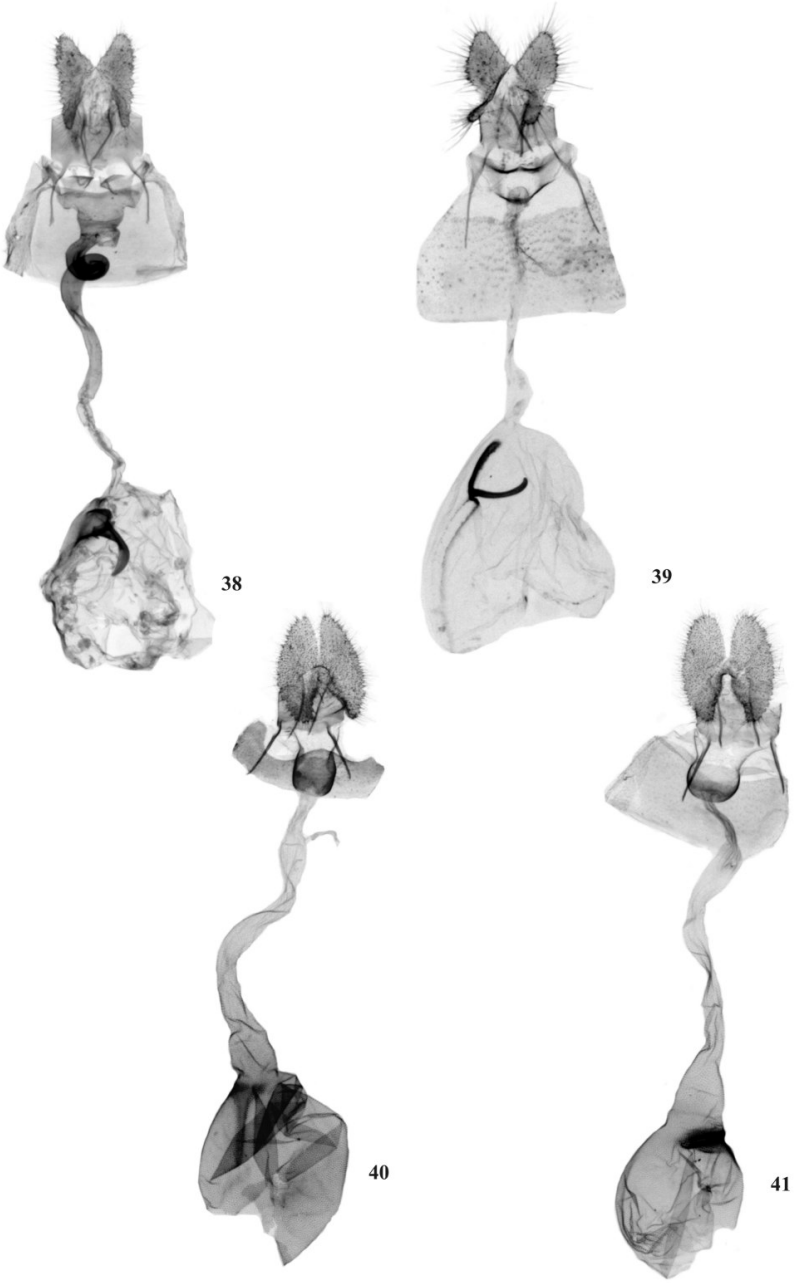
Figs 12-23 Male genitalia of *Mictopsichia* HÜBNER and *Mictocommosis* DIAKONOFF: 12, 13 – *M. benevides* sp. n., holotype; 14, 15 – *M. gemmisparsana* (WALKER), paralectotype; 16, 17 – *M. chlidonata* sp. n., holotype; 18, 19 – *M. mincae* sp. n., holotype; 20, 21 – *M. huebneriana* (STOLL), Kartabo, British Guiana; 22, 23 – *Mictocommosis godmani* (WALSINGHAM), holotype.



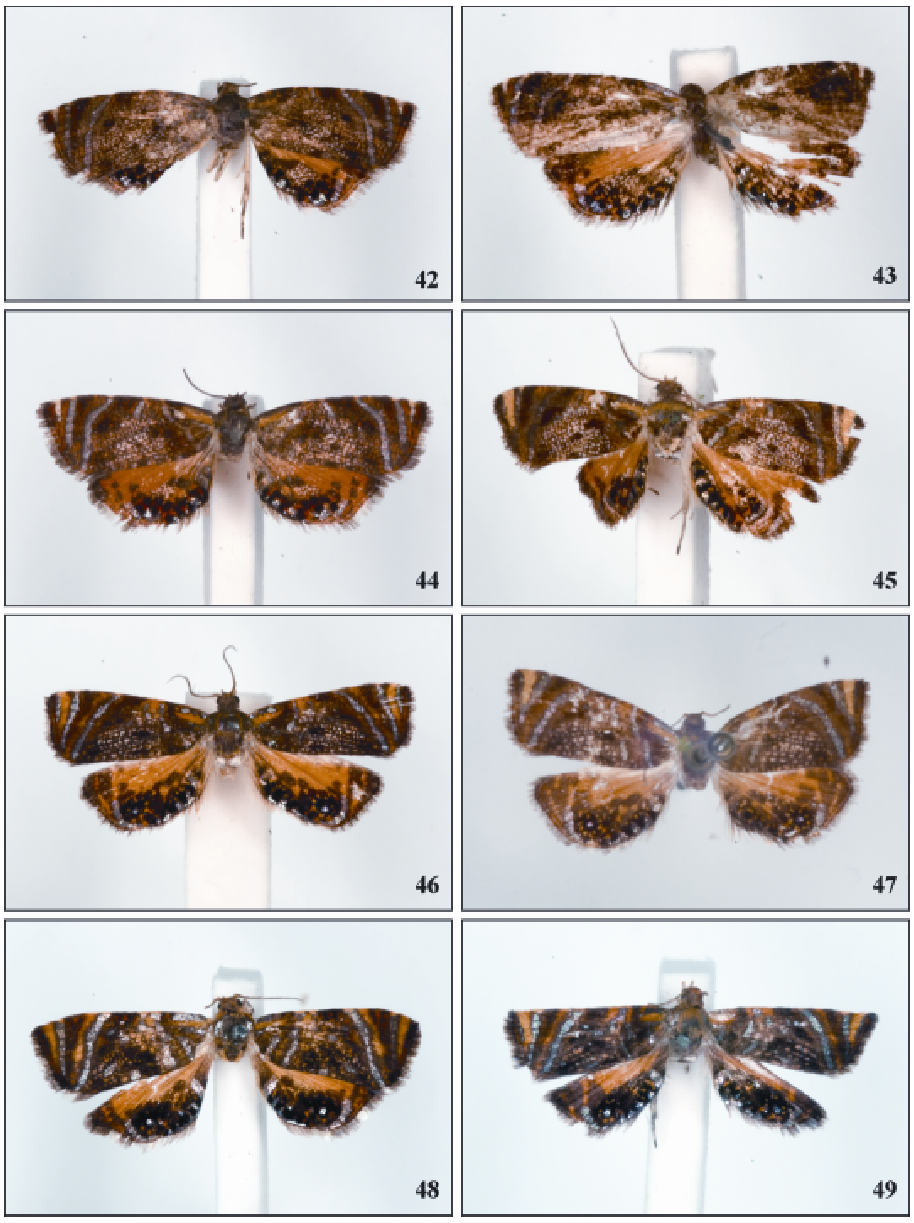
Figs 24-32. Male and female genitalia: 24, 25 – *Rubropsichia fuesliniana* (STOLL), Pará, Brazil; 26, 27 – *R. brasiliana* sp. n., holotype; 28, 29 – *R. santaremana* sp. n., holotype; 30, 31 – *Chamaepsichia durranti* (WALSINGHAM), Pará, Brazil; 32 – *Mictopsichia benevides* sp. n., paratype.



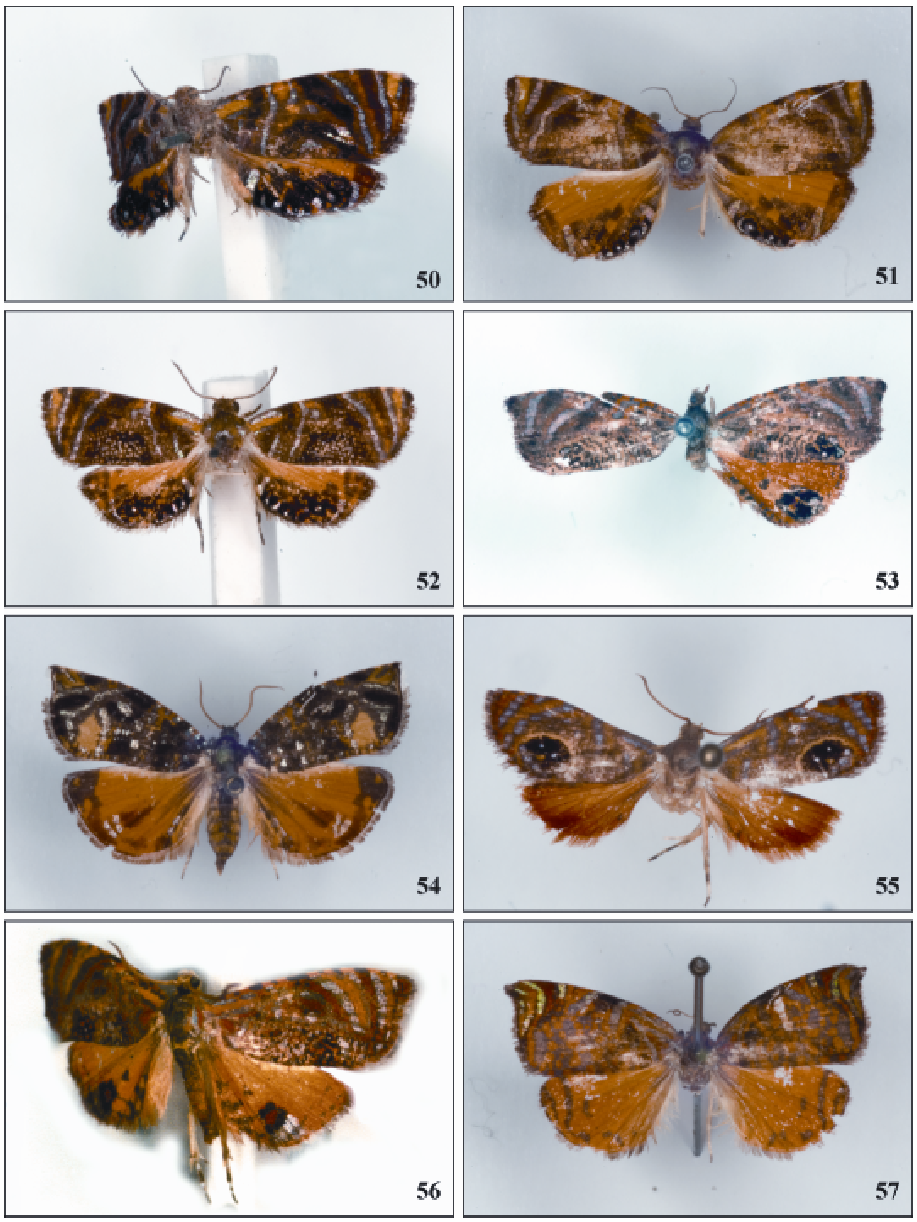
Figs 33-37. Female genitalia of *Mictopsicha* HÜBNER: 33 – *M. panamae* sp. n., holotype; 34 – *M. egae* sp. n., holotype; 35 – *M. boliviae* sp. n., holotype; 36 – *M. mincae* sp. n., paratype; 37 – *M. buenavistae* sp. n., holotype.



Figs 38-41. Female genitalia: 38 – *Mictopsichia hubneriana* (STOLL), Bolivia; 39 – *Mictopsichia jamaicana* sp. n., holotype; 40 – *Chamaepsichia durranti* (WALSINGHAM), Pará, Brazil; 41 – *Chamaepsichia rubrochroa* sp. n., holotype.



Figs 42-49. Adults of *Mictopsichia* HÜBNER: 42 – *M. cubilgruitza* sp.n., holotype; 43 – *M. cubae* sp. n., holotype; 44 – *M. guatemalae* sp. n., holotype; 45 – *M. atoyaca* sp. n., holotype; 46 – *M. marowijneae* sp. n., holotype; 47 – *M. benevides* sp. n., holotype; 48 – *M. panamae* sp. n., holotype; 49 – *M. chlidonata* sp. n., holotype.



Figs 50-57. Adults of *Mictopsichia* HÜBNER, *Mictocommosis* DIAKONOFF and *Rubropsichia* gen. n., : 50 – *M. egae* sp. n., holotype; 51 – *M. boliviae* sp. n., holotype; 52 – *M. mincae* sp. n., paratype; 53 – *M. buenavistae* sp. n., holotype; 54 – *Mictopsichia hubneriana* (STOLL), Bolivia; 55 – *Mictopsichia jamaicana* sp. n., holotype; 56 – *Mictocommosis godmani* (WALSINGHAM), holotype; 57 – *Rubropsichia fuesliniana* (STOLL), Pará, Brazil.

Figs 58-61. Adults of *Rubropsichia* gen. n. and *Chamaepsichia* gen. n.: 58 – *R. brasiliana* sp. n., holotype; 59 – *R. santaremana* sp. n., holotype; 60 – *C. durranti* (WALSINGHAM), Pará, Brazil; 61 – *R. rubrochra* sp. n., holotype.

REFERENCES

BROWN J. W. 2005. Tortricidae (Lepidoptera) [in:] World catalogue of insects,**5**, Apollo Books, Stenstrup: 1 - 741,

DIAKONOFF A. 1977. Rearrangement of certain Glyphipyterigidae sensu MEYRICK, 1913, with descriptions of new taxa (Lepidoptera). Zool. Verhandl., Nr. 158: 1-55.

HEPPNER J. B. 1982a. Revision of American *Thaumatographa*, with a new species from Cuba (Lepidoptera: Tortricidae: Chlidanotinae). Pan-Pacif. Ent.,**58**(3): 165-176.

HEPPNER J. B. 1982b. Synopsis of the Hilarographini (Lepidoptera: Tortricidae) of the world. Proc. Entomol. Soc. Wash.,**84**(4): 704-715.

RAZOWSKI J., WOJTUSIAK J. 2008. Some telochromatic *Tortricidae* from Western South America (Lepidoptera: Tortricidae). SHILAP Revta lepid.,**36**(142): 209-218.

Received: July 29, 2009
Accepted: September 01, 2009