POLISH JOURNAL OF ENTOMOLOGY

POLSKIE PISMO ENTOMOLOGICZNE

VOL. 79: 171-186

Bydgoszcz

30 June 2010

Neotropical Rhopobota LEDERER (Lepidoptera: Tortricidae)

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ABSTRACT. The Neotropical species of *Rhopobota* are listed; nine species (*R. larocana* sp. n., *R. mostardana* sp. n., *R. mayarica* sp. n., *R. ventriloba* sp. n., *R. monospina* sp. n., *R. granpiedrae* sp. n., *R. lacteicaput* sp. n., *R. cornifera* sp. n., *R. platyceria* sp. n.) are newly described from Cuba and Brazil. Distribution of the genus is mentioned.

KEY WORDS: Lepidoptera, Tortricidae, Rhopobota, Neotropic, new species.

INTRODUCTION

Rhopobota LEDERER, 1859 (synonymies: *Erinaea* MEYRICK, 1907, *Norma* HEINRICH, 1923, *Kundrya* HEINRICH, 1923, *Eumarissa* CLARKE, 1976) was characterized by RAZOWSKI (1989) and HORAK (2006). 54 species of *Rhopobota* are known of which 21 are Oriental, 15 Palaearctic, 13 Neotropical, 3 Nearctic, and 3 Australian (incl. Micronesia). *Rhopobota* was first found in the Neotropical region by RAZOWSKI (1999, four species), now further nine species are discovered in Cuba and Brazil. Thus it may be supposed that this, originally Asian genus, is widely distributed in the New World.

Systematic list of Neotropical species

larocana sp. n., male and female genitalia, Brazil: Paraná *mostardana* sp. n., male genitalia, Brazil: Rio Grande do Sul *mayarica* sp. n., male and female genitalia, Cuba

ventriloba sp. n., male and female genitalia, Cuba monospina sp. n., male and female genitalia, Cuba granpiedrae sp. n., female genitalia, Cuba lacteicaput sp.n., male and female genitalia, Brazil: Santa Catarina cornifera sp. n., male genitalia, Brazil: Federal District platyceria sp. n., male and female genitalia, Brazil: Parana macroceria RAZOWSKI, 1999, male genitalia, Dominican Republic microceria RAZOWSKI, 1999, male genitalia, Dominican Republic unidens RAZOWSKI, 1999, male and female genitalia, Dominican Republic cicatrix RAZOWSKI, 1999, female genitalia, Dominican Republic

SYSTEMATICS

Rhopobota larocana sp. n. (Fig. 15)

Diagnosis

Related with Nearctic *R. dietzniana* KEARFOTT, 1907 but this species with reduced dorsal lobe of cucullus, sharp prominence of the angle of cucullus, large sclerite of antrum, and presence of arch-shaped sclerite posterior to ostium bursae.

Description

Wing span 13 mm. Head and thorax greyish, labial palpus white posteriorly, thorax with some brownish grey spots. Forewing not expanding terminad; costa weakly convex; termen not oblique, concave beneath apex. Ground colour in basal third pale grey, otherwise whitish with grey suffusions; costal strigulae fine, whitish, divisions ill-defined except for a few subterminal ones; tornal fourth of wing grey; basal third with darker marks and posterior dorsal blotch consisting of two brownish grey parts. Markings vestigial, grey; dark brown-grey spet at apex. Cilia grey. Hindwing greyish with paler cilia.

Variation. Female wing span 14 mm; ground colour of forewing white grey in dorsoterminal fourth whitish. Markings rather distinct, broader and browner than in male.

Male genitalia (Fig. 1). Terminal part of tegumen broad, concave medially; uncus in form of two slender, sublateral processes broadening apically; socius large, postmedian; neck of valva moderately long; ventral incision rather shallow; sacculus with triangular process beyond angle; cucullus elongate-oval with indistinct lobes.

Female genitalia (Fig. 9). Subgenital sternite large; sterigma short forming semicircular sclerite extending proximally in weaker, broader plate; antrum sclerite broad; proximal part of ductus bursae broad; sclerite of corpus bursae long; signa large, similar in size.

Material

Holotype male: "Brazil: Paraná, Morro de Meio, S. J. PINHAIS, 15.V.1970, BECKER & LA-ROCA; Col. BECKER 7297"; GS 773 WZ, paratypes: two pairs with identical labels [VOB 7298, 7299], 1 female from Quatro Barras, 800 m, 24. IV. 1971 [VOB 11801], and 2 males from Rio Negro, 800 m, 22. IX. 1970 [VOB 11924, 12058]; all same state.

Etymology

This species is named in honour of our friend Dr. Sebastiao LAROCA, Curitiba, the collector of this species.

Rhopobota mostardana sp. n. (Fig. 16)

Diagnosis

Related to *larocana* but easily distinguished by long angular setae of sacculus and the presence of sharp process at base of cucullus.

Description

Wing span 13 mm. Head and thorax brownish cream, frons and labial palpus whiter. Forewing not expanding terminally; costa slightly convex; termen sinuate. Ground colour whitish in distal half mixed grey; costal strigulae fine, whitish, grey near apex; divisions grey. Basal area grey with brownish gray strigulae and dots; dark brown blotch before middorsum. Median fascia indistinct, grey tinged brownish subcostally, with a few brownish dots; apex brown-grey followed by white and brown-grey marks in costal half of termen. Cilia grey, creamish in tornal third. Hindwing brownish cream, cream basally; cilia white cream.

Male genitalia (Fig. 2). Distance between arms of uncus short; the latter moderately long; socius broad; neck of valva indistinct; sacculus rounded caudally with large group of long setae posteriorly; sharp ventral process before cucullus; aedeagus short.

Female not know.

Material

Holotype male: "Brasil: RS, Mostardas, 5 m, 13. I. 1989, V.O. BECLER Col; Col. BECKER 61209"; GS 1046 WZ, paratypes: 4 males and 3 females, same data.

Etymology

The name refers to the type locality.

Rhopobota mayarica sp. n. (Fig. 17)

Diagnosis

R. mayarica is close to *R. unidens* from the Dominican Republic but differs from it in elongate cucullus similar to this in *larocana*; sterigma slender, without arched sclerite; it is distinct also by dark coloruration and white remnants of the ground colour. This species is very distinct by large costal fold and, in the paratypes, blackish hindwing cilia.

Description

Wing span 15 mm. Head brown densely scaled (especially the frons) whitish; thorax brownish grey, tegula brown. Forewing weakly expanding terminally; costa hardly concave medially with very large fold with extending brownish grey scales; termen not oblique, slightly sinuate, convex postmedially. Ground colour whitish suffused with reddish brown in form of submedian interfascia; similar, small suffusions in basal area and costally, in part on dark markings; costal strigulae ill-defined; ocellus and termen glossy grey. Markings (basal blotch, median fascia, spots fusing with one another in costal and partially terminal parts of wing) dark brown. Cilia whitish grey, whitish towards tornus, with brown basal line in costal half of wing. Hindwing with weak costal fold, grey with greenish cream medio-basal suffusions formed by short, altered scales; cilia pale grey.

Variation. In paratypes ground colour of forewing greyish, more or less suffused greybrown, the markings dark blackish grey with paler parts and darker marks; costal triangle more or less distinct, wing base and costal part of termen suffused with same colour. Hindwing grey; cilia blackish except for anal area.

Male genitalia (Fig. 3). Terminal concavity of tegumen large; uncus in form of two slender processes originating at the lateral tops of tegumen; socius moderate, postmedian; neck of valva rather slender, incision distinct but shallow; cucullus elongate-oval; sacculus almost straight ventrally, terminating in a rather broad process.

Material

Holotype male: "Cuba: Holguin Pin., Mayari, 640 m,, VII. 1990, V. O. BECKER col.; Col. BECKER 72033; GS 1180 WZ. Paratype female: "Cuba: Stgo. Gran Piedra, 20. VII. 1990, V.O. BECKER col.; Col BECKER 72996, Paratype female: paratypes a pair.

Etymology

This name refers to the type locality.

Rhopobota ventriloba sp. n. (Fig. 18, 19)

Diagnosis

Related with *macroceria* from Dominican republic but *ventriloba* with slender parts of uncus and terminal process of sacculus; female similar to *granpiedrae* but this species with longer sterigma concave posteriorly and with long lateral sclerites.

Description

Wing span 22 mm. Head and thorax brownish, frons and upper part of labial palpus whitish. Forewing rather slender, costa not convex; termen convex medially. Ground colour creamish strongly suffused reddish rust in form of median line extending from wing base to submedian interfascia, towards tornus and postmedially; costal strigulae indistinct, divisions brown. Basal area suffused olive cream with some brown spots; darker suffusion along dorsum. Markings brown: Median fascia atrophying in dorsal half, connected with apex by means of a broad fascia. Cilia brownish cream, cream at tornus. Hindwing grey with large area of olive cream short scales; cilia greyish.

Variation (a female most probably conspecific with the holotype).Head, thorax and forewing ground colour brown ferruginous. Costa of forewing convex, termen weakly convex, concave beneath apex. Dorsum paler than remaining area; strigulation fine darker; costal strigulae weak, brownish cream, divisions brown; ocellus atrophied. Markings dark brown in form of median fascia atrophying at dorsum, connected with apex, and a paler fascia limiting basal area.

Male genitalia (Fig. 4). Terminal incision of tegumen shallow; arms of uncus long, slender; socius long, tapering terminally; neck of valva long, slender; ventral lobe of cucullus large, thorny; angle of sacculus with rather large lobe.

Female genitalia (Fig. 10). Subgenital sternite simple; sterigma elongate, concave apically, edged laterally with small lateral prominence proximally; sclerite of ductus bursae postmedian; posterior sclerite of corpus bursae short, with broad arms; signa moderate.

Material

Holotype, male: "Cuba: Stgo Sier. Maestra, P. Cuba, 31. VII. 1990, 1500 m, V. O. BECKER Col.; Col. BECKER 73600"; GS 012 WZ.

Paratype an identically labelled female; GS 1166 WZ. Paratypes 4 males and 2 females same data as holotype.

Etymology

This name refers to the presence of large ventral lobe of cucullus.

Rhopobota monospina sp. n. (Fig. 20, 21)

Diagnosis

This species, despite very distinct by the genitalia, certainly belongs to the group of species here represented by *larocana* to *ventriloba* as having similar slender arms of uncus and rather simple valva (e.g *larocana*). The cucullus in this species is curved upwards, with atrophied ventral lobe armed with a single dorsal spine and corpus bursae without any sclerite. The shape of cucullus may be distinctly altered (e.g. in Australian *R. hortaria*) but a complete reduction of the sclerite of corpus bursae has never been realized.

Description

Wing span 11 mm. Head brownish cream, labial palpus with black postmedian and white terminal part; thorax whiter than head, tegula blackish. Forewing slender typical for the genus. Ground colour whitish, in apical part orange rust; suffusions greyish, strigulation darker; costal strigulae white, divisions blackish except in posterior third of costa where brownish or rust; ocellus grey, with indistinct spots. Markings grey black posteriorly; black-brown spot at apex. Cilia greyish, brown at apex. Hindwing transparent, pale greyish brown, darker on periphery, with brownish venation; cilia concolorous with middle of wing.

Female. Wing span 12 mm. Forewing darker than in male with black-brown markings (cf. photograph).

Male genitalia (Fig. 5). Arms of uncus slender, slightly bent; socius moderately large; basal third of valva broad; neck very slender; cucullus curved upwards without ventral lobe, with distinct spine at top of dorsal lobe; aedeagus short.

Female genitalia (Fig. 11). Sterigma fused with subgenital sternite; sclerite of antrum (= distal part of ductus bursae) rather weak; sclerite of corpus bursae reduced; signa small.

Material

Holotype male: "Cuba: Pinar Rio, Sierra Rosario 400 m, 5-15. VI. 1990, V.O. BECKER Col; Col. BECKER 71539"; GS 1175. Paratypes three identically labelled specimens, female with genitalia on slide 1174.

Rhopobota granpiedrae sp. n. (Fig. 22)

Diagnosis

Very close to *ventriloba* but *granpiedrae* distinct by the presence of greyish ocellus and two white dorsal blotches; posterior edge of sterigma is in this species convex medially and its lateral sclerites are very slender.

Description

Wing span 17 mm. Head and thorax brownish cream, labial palpus browner, base of tegula brown. Forewing not expanding terminally; costa slightly depressed beyond middle; termen slightly sinuate, convexly rounded medially. Ground colour cream mixed reddish ferruginous, suffused and spotted brown; two white dorsal blotches, the posterior triangular, submedian; ocellus glossy grey, creamer proximally, brown medially; costal strigulae weak, divisions brown. Markings brown consisting of median fascia extending medialy to apex and triangular postbasal blotch. Cilia creamish brown, cream at tornus, brown at apex of wing, with some brown terminations. Hindwing greyish; cilia whitish grey.

Male not known.

Female genitalia (Fig.12). Subgenital sternite rather small, fusing with slender sterigma; antrum sclerite weak, median; weak sclerite just beyond base of ductus bursae; posterior sclerite of corpus bursae short; signa slender, subequal.

Material

Holotype female: "Cuba: Stgo Gran Piedra, 20. VII. 1990, V.O. BECLER Col; Col. BECKER 72995"; GS 1314 WZ. Paratype, 1 female, same data.

Etymology

The name refers to the type locality.

Rhopobota lacteicaput sp. n. (Fig. 23, 24)

Diagnosis

Similar to *dietziana* but this species with long, curved arms of uncus, atrophied lobes of cucullus, large termination of sacculus, and broad, rounded posterior lobes of sterigma.

Description

Wing span ca 15 mm. Head cream, thorax cream grey. Forewing not expanding terminad; costa weakly convex; termen not oblique. Ground colour creamish grey sprinkled blackish; costal strigulae small, whitish, divisions blackish; ocellus ill-defined, creamer. Markings reduced to blackish spot near middle of dorsal area. Cilia grey cream. Hindwing brownish cream, creamer basally; cilia similar to ground color of wing.

Female. Wing span 17 mm. Head greyer, thorax darker than in male. Markings: Yellowish brown remnants of median fascia, brown mark at mid-tornus followed by whitish area of ground colour reaching tornus; cilia greysish.

Male genitalia (Fig. 6). Apical concavity of tegumen indistinct; arms of uncus long, curved; socius large, rounded apically; neck of valva indistinct; cucullus elongate; sacculus concave medially with broad terminal lobe; aedeagus short; cornuti two short spines.

Female genitalia (Fig. 13). Subgenital sternite large with numerous oblique folds; latero-posterior parts of sterigma broad, rounded; antrum sclerite short; posterior sclerite of curpus bursae deeply incised; signa rathe weak, unequal.

Material

Holotype male: "Brasil: SC [Santa Catarina], Sao Joaquim 1400 m, 25. X. 1995; V. O. BECKER Col.; Col. BECKER 98175; GS 1046 WZ. Paratype female: "Brasil: GO [Goias], Alto Paraiso 1400 m, 3. X. 1985, V. O. BECKER Col.; Col. BECKER 66432"; GS 877 WZ,

Etymology

The name refers to the colour of head; Latin: lacteus - colour of milk, caput - head.

Rhopobota cornifera sp. n. (Fig. 25)

Diagnosis

Closely related with *lacteicaput* but *cornifera* with long, curved arms of uncus, large socii, and long cornuti. From the Nearctic *R. finitimana* Heinrich, 1923 this species differs chiefly in an absence of a long spine from the dorsal lobe of cucullus.

Description

Wing span 12 mm. Head and thorax grey cream. Forewing slightly expanding terminally; costa gradually weakly convex; termern not oblique to middle. Ground colour whitish with grey admixture and cream grey strigulation and suffusions; costal strigulae fine, whitish; divisions grey-brown. Markings grey with darker strigulae consisting of large basal blotch grey edged posteriorly, indistinct median fascia convex in middle of posterior edge marked by brown-grey spot connected with apical dark brown-grey spot by means of a weak suffusion. Cilia brownish grey, paler towards tornus. Hindwing pale grey, cilia similar.

Male genitalia (Fig. 7). Tegumen not incised apically; arm of uncus long, strongly curved, minutely granulated dorsally; socius very large, rather not tapering terminally; neck of valva atrophied; cucullus without lobes; sacculus terminating in a small triangle; aedeagus fairly short; cornuti long.

Female not known.

Material

Holotype male: Brasil: DF [Distrito Federal], Planaltina, 1000 m, 11, XI. 1976, 15.35'S 47.42'W, V. O. BECKER Col.; Col. BECKER 19683"; GS 850 WZ.

Etymology

The specific epithet refers to the shape of the arms of uncus; latin: cornu - horn, fero - carry.

Rhopobota platyceria sp. n. (Fig. 27)

Diagnosis

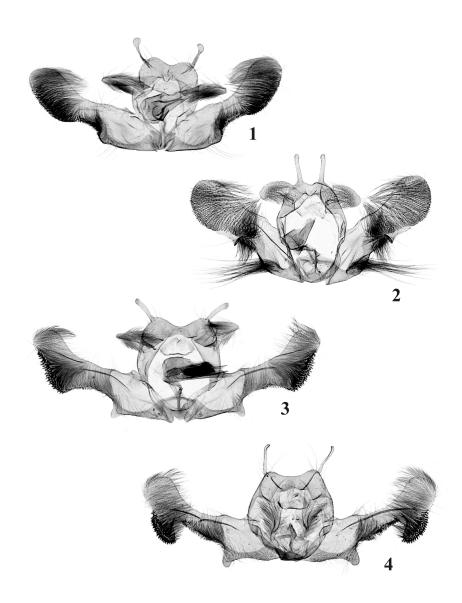
Facies somewhat similar to *lacteicaput* and *cornigera*, female genitalia resembling those of *ventriloba* but *platyceria* is distinct by short, broad arms of uncus, strongly curved, slender neck of valva, and the presence of a transverse sclerite of sterigma.

Description

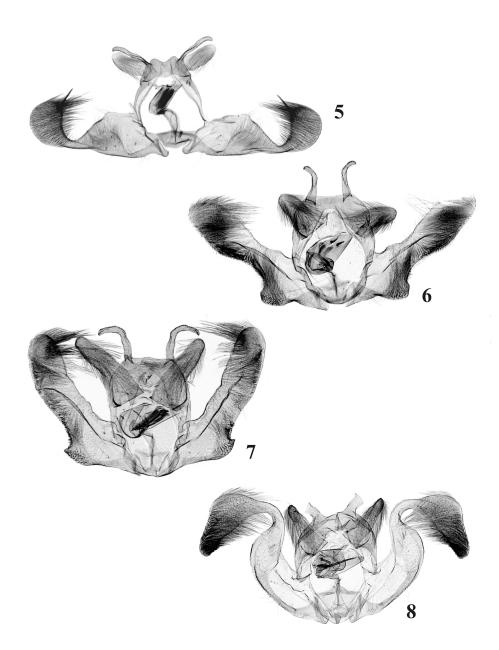
Wing span 16 mm. Head and thorax grey-cream. Forewing rather not expanding terminally; costa weakly convex to middle; termen not oblique. Ground colour whitish grey, whitish in costal part of submedian interfascia; strigulation, dots and suffusions brownish grey. Markings weakly developed darker than strigulation with similar edges; median fascia marked by grey-brown spot at middle of posterior edge; apex and some subterminal lines brownish. Cilia concolorous with ground colour. Hindwing pale brownish grey, cilia whiter.

Female 16 mm. Forewing uniformly broad. Ground colour greyish white, dorsum and parts of terminal and costal areas suffused grey. Markings brownish grey edged brownish yellow, with brown marks (largest, dark marks in middle of fasciae).

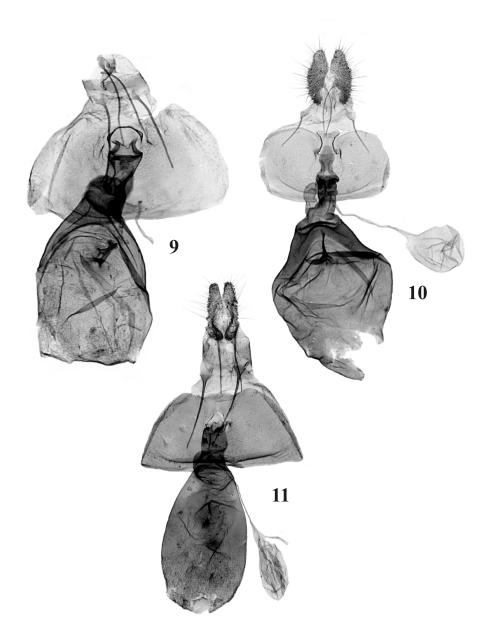
Male genitalia (Fig. 8). Apex of tegumen not concave; arm of uncus broad, short, pointed apically; socius large, rather slender; valva slender with very slender, curved neck; cucullus with very long ventral lobe and weak, broad dorsal lobe; sacculus convexly rounded; aedeagus short; two conuti present.



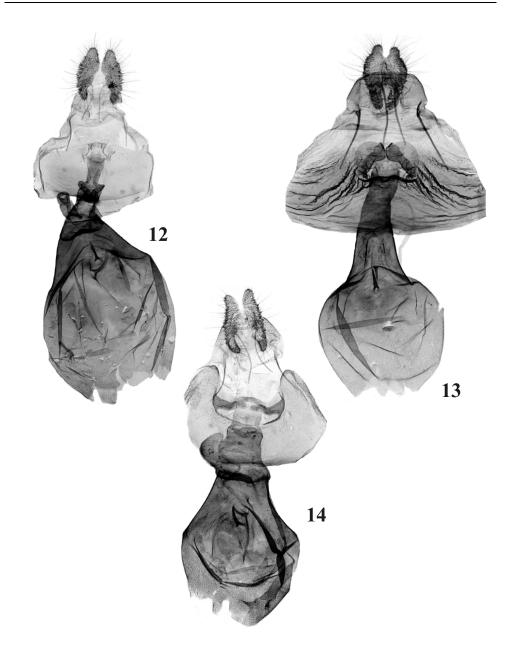
Figs 1-4. Male genitalia of *Rhopobota* LEDERER. 1 - R. *larocana* sp. n., holotype, 2 - R. *mostardana* sp. n., holotype, 3 - R. *mayarica* sp. n., holotype, 4 - R. *ventriloba* sp. n., holotype.



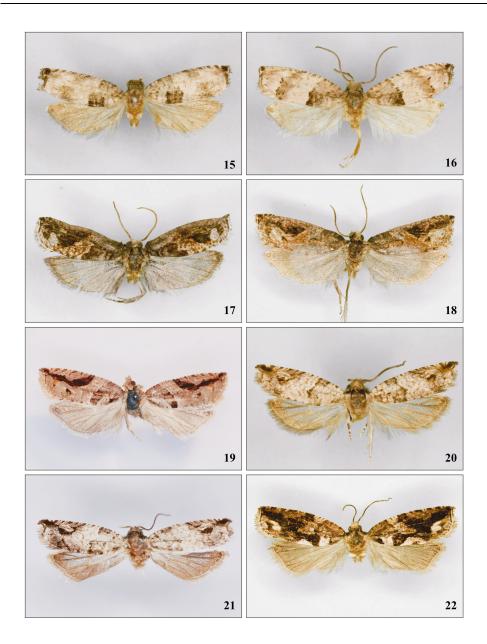
Figs 5-8. Male genitalia of *Rhopobota* LEDERER. 5 - R. *monospina* sp. n., holotype, 6 - R. *lacteicaput* sp. n., holotype, 7 - R. *cornifera* sp. n., holotype, 8 - R. *platyceria* sp. n., holotype.



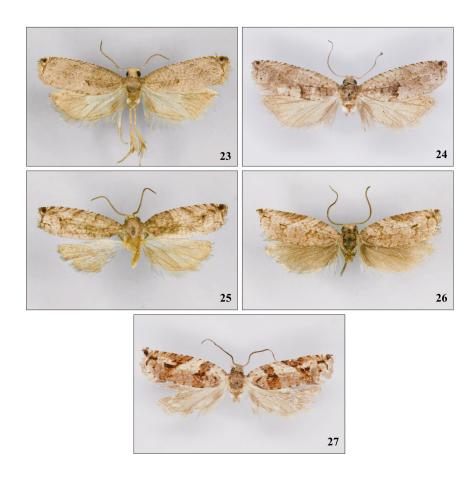
Figs 9-11. Female genitalia of *Rhopobota* LEDERER. 9 – *R. larocana* sp. n., paratype, 10 - R. *ventriloba* sp. n., paratype, 11 - R. *monospina* sp. n., paratype.



Figs 12-14. Female genitalia of *Rhopobota* LEDERER. 12 - R. *granpiedrae* sp. n., holotype, 13 - R. *lacteicaput* sp. n., paratype, 14 - R. *platyceria* sp. n., paratype.



Figs 15-22. Adults of *Rhopobota* LEDERER. 15 - R. *larocana* sp. n., holotype, 16 - R. *mostardana* sp. n., holotype, 17 - R. *mayarica* sp. n., holotype, 18 - R. *ventriloba* sp. n., holotype, 19 - R. *ventriloba* sp. n., paratype, 20 - R. *mospina* sp. n., holotype, 21 - R. *monospina* sp. n., paratype, 22 - R. *granpiedrae* sp. n., holotype.



Figs 23-27. Adults of *Rhopobota* LEDERER. 23 - R. *lacteicaput* sp. n., holotype, 24 - R. *lacteicaput* sp. n., paratype, 25 - R. *cornifera* sp. n., holotype, 26 - R. *platyceria* sp. n., holotype, 27 - R. *platyceria* sp. n., paratype.

Female genitalia (Fig. 14). Subgenital sternite deeply concave in middle posteriorly; sterigma broad weakly sclerotized posteriorly, with slender lateral sclerites extending towards middle; sclerite of antrum indistinct; sclerite fo ductus bursae postmedian; large sac at base of ductus bursae; posterior slecrite of copus bursae farily broad; signa slender. Material

Holotype male: "Cuba: Stgo. 1500 m, Sier[ra]. Maestra P. Cuba, 31. VII. 1990, V. O. BECKER Col, Col. BECKER 73604"; GS 73604", GS 1268 WZ; paratypes three examples, female with same label, GS 1269 WZ.

Etymology

The name refers to the shape of the arm of uncus; Greek: platys - flat, keras - horn.

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Received: April 28, 2010 Accepted: May 07, 2010