ZAKŁAD ZOOLOGII SYSTEMATYCZNEJ POLSKIEJ AKADEMII NAUK

A C T A Z O O L O G I C A C R A C O V I E N S I A

Tom XII

Kraków, 30. IX. 1967

Nr 8

Józef Razowski

South American Cochylidae (Lepidoptera) from the Collection of the British Museum (Natural History)

[Pp. 163-210, pl. XV, XVI and 91 text-figs.]

Południowoamerykańskie Cochylidae (Lepidoptera) ze zbiorów Brytyjskiego Muzeum

Южно-американские Cochylidae (Lepidoptera) из коллекции Британского Музея

Abstract. The paper contains the descriptions of one new genus and 26 new species, and the redescritions of some little known South American species.

Several South American Cochylidae species have been described by Meyrick Zeller, Walsingham and by other authors. Some of those species are, however, referable to the Tortricidae (e. g. Euxanthis pyrrhodelta Meyr.), while some were described under the generic names Phalonia Hbn. or Euxanthis Hbn. now synonymous. In the indetermined material from the British Museum (N. H.) I have found several species known till now from single specimens or one sex only. I have found several new species too. It seems very interesting that there are many representatives of the genera Aethes Billb. and Phalonidia Le March. in South America. There are also numerous species of the genus Cochylis Treit. the majority of which build an interesting group characterized by some features resembling those of Phalonidia Le March. but having the socii placed in a membraneous scaphium. The species of this group are known also from North America but there is no similar species in the Palaearctic Region.

Phalonidia ochracea sp. nov.

[Pl. XV, fig. 1]

Labial palpus about 1.5, slenderer and paler in male than in female, with median joint rather narrow anteriorly, broadening terminally. Terminal joint protruding. Colour of palpi ochreous brownish. Head brownish, front cream. Forewing slightly dilated posteriorly; costa delicately curved outwards in male, rather straight in middle in female; apex short, pointed; termen less oblique in female than in male. Ground colour brownish cream, pattern brownish. Costa suffused with brownish to before middle. In male median fascia narrow at costa, atrophied beyond it, broadening and darkening in middle of wing, ill-defined dorsally. Large, tinged ochreous elongate blotch from subapical part of costa towards posterior part of termen, tapering terminad, dark basally. In female median fascia atrophied in dorsal and antemedian portions of wing, broad, marked with some brown scales medially; additional brownish suffusion between base of costa and costal spot of median fascia medially; another large diffused brownish grey suffusion before middle of dorsum; posterior blotch brownish, ill-defined at costa and termen. Fringes pale ochreous brownish. Hindwing pale brownish grey, rather transparent anteriorly, provided with elongate, pointed apex; fringes pale brownish. Length of forewing about 5 mm.

Male genitalia (figs. 1, 2). Tegumen broad, protruding posteriorly; socii large, broadest in middle, slightly tapered and rounded terminally, coalescent with one another to before end. Valva long with costa well developed; sacculus strong, distinctly sclerotized, rounded in middle ventrally; transtilla with small lateral parts, broad median portion and long, pointed, provided with two minute dents median process; juxta small, narrow. Aedeagus large, broad, with short coecum penis and rather elongate, sharp ventral termination; caulis postmedian; cornutus long, curved, broad basally, pointed terminally.

Female genitalia (fig. 3). Papillae anales and anapophyses fairly large; sterigma delicate with elongate posterior wall and narrow lateral arms; antrum broad, rather short, well sclerotized and delicately spined; ductus bursae short, broad, fairly well sclerotized; ductus seminalis medially; corpus bursae very large, ovate, densely spined postero-laterally with characteristic rounded area built of similar spines arranged concentrically.

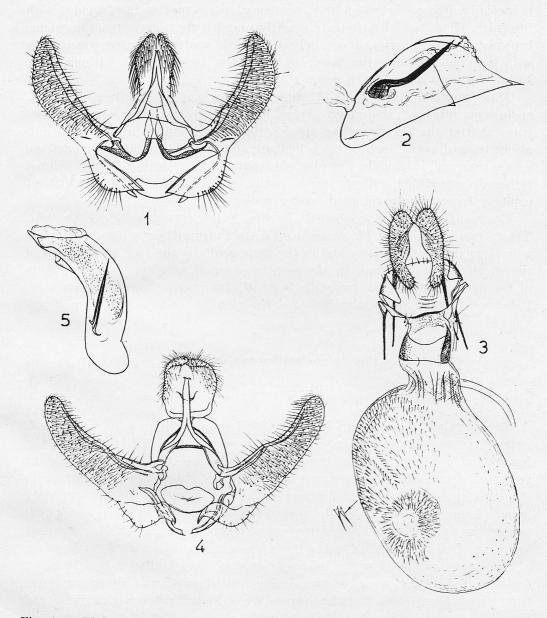
Type (male): "Huigra, Ecuador 4500 ft., Parish, VI. [19]14", G. Sl. 7131. Typoid (female): "Bartica, Brit. Guiana, Parish, I. [19]13", G. Sl. 7132.

Comments. Both specimens bear the labels "Phalonia scarificata Meyr." and are the typoids of that species. There are some slight differences in the shape of the forewing and in the colouration between the male and the female, but similar differences are found in other species of this genus too.

Phalonidia swammerdamiana (ZELLER), comb. nov.

Conchylis swammerdamiana Zeller, 1877, Horae Soc. ent. ross., 13: 133 pl. 2 fig. 46. Labial palpus about 1.5, curved upwards; basal joint rather large, yellowish grey; median joint fairly slender, delicately broadening posteriorly, ochreous

yellow sprinkled with yellow-brown along middle and basally; terminal joint short, yellowish. Head brownish grey, front greyer (damaged scales), antenna grey suffused brownish. Forewing slightly expanding terminad; costa rather straight, bent before apex only; apex almost rounded; termen tolerably straight, oblique. Ground colour brownish grey, sprinkled with brown, delicately strigulated with brown, provided with ill-defined ochreous shades along costa and



Figs. 1—5. Phalonidia Le March.: 1 — male genitalia of Ph. ochracea sp. nov., type, 2 — aedeagus of same specimen, 3 — female genitalia of same species, typoid, 4 — male genitalia of Ph. swammerdamiana (Zell.), type, 5 — aedeagus of same specimen

in middle area of wing. Pattern brownish to brown consisting of basal spot atrophied dorsally, paler anteriorly than posteriorly, followed at costa by well developed anterior portion of median fascia reaching 1/3 of wing breadth. Median portion of this fascia atrophied, dorsal part smaller than costal part, rather rounded. Subapical blotch large, marked by three darker, brown spots most posterior of which reaches to apex; small dark spots at termen, one below it medially. Fringes brownish grey, ochreous beyond median line, divided with brownish. Hindwing with elongate, slightly rounded apex, grey-cream in colour, brownish on peripheries, there delicately dark spotted; fringes concolorous with wing base, dividing line brownish to vein cu_2 , terminations of fringes grey. Length of forewing about 6 mm.

Male genitalia (figs. 4, 5). Tegumen proportionately small; socii broad, coalescent, bifurcate posteriorly. Valva long, slightly tapering terminad; sacculus shorter than in preceding species, delicately rounded at ventral angulation; transtilla with long, slender median part; juxta fairly large, rounded on edges, concave in middle dorsally. Aedeagus rather slender, bent, pointed terminally, provided with posterior caulis; cornutus slender, long, without capitate base; minute spines in vesica present.

Comments. The type is labelled "Bogota, Type, Zeller coll.", G. Sl. 4087. The species is similar to *Ph. saxicolana* (Walsm.) from Oregon but its forewing is less expanding posteriorly and in the male genitalia the socii are longer and the sacculus broader than in the mentioned species, while the termination of the median part of the transtilla is small. The species resembles also some Palaearctic species, especially East Asiatic ones, in the genitalia. Female unknown.

Phalonidia walkerana sp. nov.

[Pl. XV, fig. 2]

Labial palpus shorter than 1.5; basal joint small; median joint very broad, strongly expanding terminad; terminal joint short, concealed in scales of the former joint. Colour of palpi brown-grey, scaled whitish grey, median joint grey posteriorly. Head concolorous with palpi, front greyish, antenna brownish; thorax brownish grey with delicate ochreous tint. Forewing almost uniformly broad throughout; costa slightly curved outwards; apex delicately rounded; termen hardly convex, oblique. Anterior and terminal portions of wing ochreous brownish, densely sprinkled with brown or even black, suffused with brown at base and middle of wing, delicately spotted subapically, strigulate along costa to middle. Between the two dark coloured parts whitish cream fascia from about 3/4 of costa to before tornus, broad costally, narrow medially and directed tornad posteriorly. Delicate spots at costa and in middle on pale ground colour. In the type posterior portion of the wing paler than in the typoids except for elongate blotch, directed obliquely towards middle of vein m_2 and

commencing beyond pale pattern, and some few paler than it spots in subapical area. Fringes ochreous-cream divided with brownish beyond darker spots and in apical portion. Hindwing pale, brownish grey, suffused terminally, or greyish throughout. Length of forewing about 5 mm.

Male genitalia (figs. 6, 7). Tegumen delicate; socii rather slender, large, with anterior coalescent part as long as posterior arm which is slender, delicately curved and rounded apically. Valva long, bent upwards, with well sclerotized, long costa; sacculus distinctly sclerotized, almost uniformly broad, delicately convex beyond middle ventrally, provided with elongate, tapering apicad, pointed free termination. Transtilla with broad lateral arms and thin, provided with two minute dents median part; juxta proportionately large Aedeagus slender, bent, tapering posteriorly, pointed apically, with short coecum penis and postmedian caulis; cornutus short, pointed.

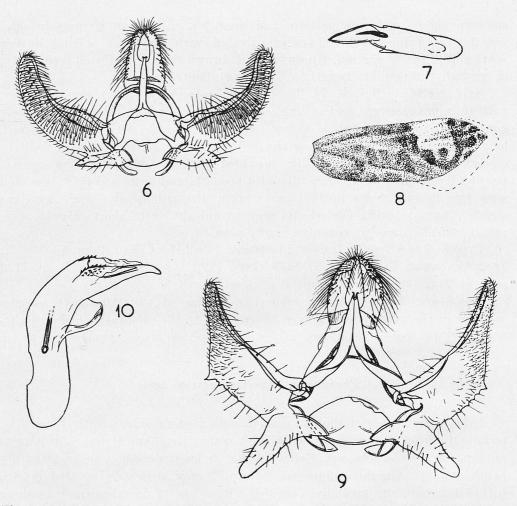
Type and two typoids (males) identically labelled: "Callao, Peru, 13—16. V. 1882, Walker". Type bears Nr 2444, G. Sl. 7122, typoids: Nr 2443, G. Sl. 7123 and Nr 2442, the latter in author's collection.

Comments. The species is somewhat similar to the Palaearctic species grouped in the synonymous genus *Piercea* Fil. In the colouration very characteristic is the costal pale spot, a part of posterior fascia. Female unknown.

Phalonidia ecuadorensis sp. nov.

Labial palpus shorter than 2, slender, with median joint slightly expanding terminally, brownish, with scattered black scales. Head and thorax brown-grey, antenna almost concolorous. Forewing (fig. 8) long, slender with costa hardly bent outwards. Ground colour pale brownish grey, delicately spotted brown, suffused at base and medially, provided with a row of dark brown spots along median cell and in middle of dorsum and costa. Median fascia ill-defined, rather brown, marked by browner suffusion beyond middle of costa, atrophying in middle of wing. Posterior part of wing whitish grey, glossy, crossed by brownish arched outwards fascia extending from costa before apex to termen before tornus and accompanied by some paler irregularly edged small spots below and at apex. Fringes completely damaged. Hindwing glossy, whitish; fringes damaged. Length of forewing 6 mm.

Male genitalia (figs. 9, 10). Tegumen broad anteriorly, tapering posteriorly; socii long with very short basal, coalescent portions. Valva elongate, broad to middle, decidedly tapering apicad, provided with strong costa and dentate anterior half of ventral edge; sacculus large with long, rounded ventral termination. Transtilla with slender lateral arms and broad, tapering terminad, provided with small apical bifurcation median part; juxta large, ovate. Aedeagus large, rather slender, strongly curved in middle, tapering in posterior portion, pointed; remarkable dentation before end dorsally. Caulis medially; cornutus slender, probably long (broken in the type).



Figs. 6—10. Phalonidia Le March.: 6 — male genitalia of Ph. walkerana sp. nov., type,
7 — aedeagus of same specimen, 8 — forewing of Ph. ecuadorensis sp. nov., type,
9 — male genitalia of same specimen,
10 — aedeagus of same specimen

Type: "Huigra, Ecuador, 4500 ft., Parish, VI. [19]14", G. Sl. 7129. Comments. Externally this species is similar to the preceding one, but has slenderer forewing. The colouration is probably darker and more contrasting than described above as the specimen is in poor condition.

Phalonidia ochrimixtana (ZELLER), comb. nov.

Conchylis ochrimixtana Zeller, 1877, Horae Soc. ent. ross., 13: 134.

Labial palpus 1.5, ochreous-yellow; basal joint rather large, median joint distinctly broadening terminally, terminal joint protruding, rather pale. Head and scape of antenna ochreous-yellow, front creamer. Thorax darker than head, brown anteriorly. Forewing slightly expanding posteriorly with costa

almost straight except for posterior fourth which is bent; apex rather rounded; termen slightly convex, oblique. Ground colour brownish yellow, brownish cream on places, hardly glossy; costa spotted with yellow-brown, one of spots larger than remaining ones. Stripes and narrow ill-defined fascias from these spots towards dorsum, dense subdorsally; ill-defined spots in middle of costa followed by pale area; group of erect, partially dark brown scales in 1/3 of wing subdorsally; elongate brownish yellow blotch from end of median cell to termen just beyond tronus; all the posterior portion of wing spotted with brownish, rather pale, marked with delicate, transverse brownish lines; apex brownish yellow. Fringes concolorous with ground colour, at apex concolorous with pattern, divided with brown in remaining part. Hindwing with apex protruding; pointed, glossy cream, paler and greyer anteriorly, hardly spotted with brownish, fringes cream, darker at apex. Length of forewing about 7 mm.

Male genitalia (figs. 10, 11). Tegumen large; socii broad, coalescent, triangularly tapering apicad, with very short free ends. Valva elongate; sacculus very long, curved outwards ventrally, then rather straight, provided with distinct, well sclerotized free termination beyond which valva very slender. Transtilla with long lateral arms and proportionately short, slender median portion terminated in two minute tips; juxta large. Aedeagus slender, long, pointed ventro-terminally, with long, slender cornutus, minute sculptures and median caulis.

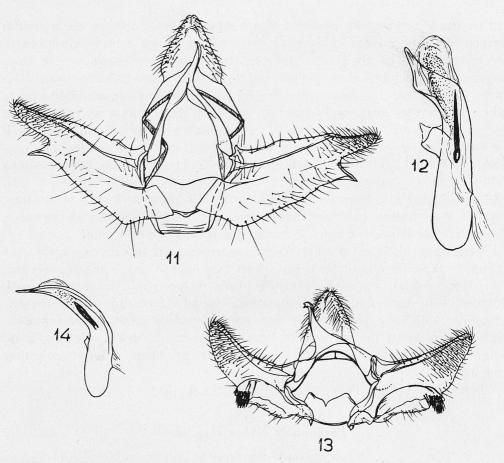
Type labelled "83, Type, Zeller coll.", G. Sl. 4088.

Phalonidia aetheria sp. nov.

[Pl. XV, fig. 3]

Labial palpus about 1.5, slender, pale brownish ochreous. Head and thorax rather concolorous with palpi, front paler, creamer. Forewing not dilated posteriorly: costa hardly curved anteriorly, then almost straight, apex short, pointed; termen oblique, straight. Ground colour pale yellowish ochreous, glossy, suffused with ochreous especially along costa and medially. Median fascia represented by brownish ochreous spot in middle of costa, atrophied subcostally, scaled with brown at edges, followed towards dorsum by dark ochreous irregularly intense suffusion. Two or three small dots concolorous with mentioned spot at costa anteriorly and another one at 3/4 of costa protruding and forming broad ochreous brown blotch directed towards middle of termen and atrophied before it. Small spot of same colour at apex and in mid-way to the formen element as well as at tornus. Fringes darker than ground colour. Hindwing cream, rather narrow, with apex protruding, pointed; fringes pale cream. Length of forewing 3 mm.

Male genitalia (figs. 13, 14). Tegumen delicate; socii proportionately very large, coalescent, tapering terminally, with very short free ends. Valva broad, tapering terminad beyond middle, with costa well developed; sacculus strong,



Figs. 11—14. Phalonidia Le March.: 11 — male genitalia of Ph. ochrimixtana (Zell.), type, 12 — aedeagus of same specimen, 13 — male genitalia of Ph. aetheria sp. nov., type, 14 — aedeagus of same specimen

irregularly shaped ventrally, convex before middle, curved outwards dorsally, marked with group of rather long spines posteriorly that covers short free termination. Transtilla with proportionately broad lateral parts and elongate, broad anteriorly median portion. Aedeagus slender, bent in middle, protruding and pointed terminally; short, rather broad cornutus and some minute spines in vesica present.

Type: "Sao Paulo, S. Brazil, E. D. Jones", G. Sl. 7130.

Phalonidia aeraria sp. nov.

[Pl. XV, fig. 4]

Labial palpus about 1.5, pale ochreous-brown; basal joint short; median joint slightly broadening terminally; terminal joint protruding. Head brownish; front greyish cream; antenna brown; thorax ochreous-brown. Forewing broad,

hardly dilated posteriorly in anterior portion, then of constant width; costa slightly arched outwards to 3/4 then strongly bent, especially in female. Ground colour pale ochreous-cream to cream, preserved around median pattern; base of wing ochreous-orange, pale medially along cell, dark dorsally, especially along oblique edge that is tolerably parallel to ventral edge of broad dorsal blotch originating at 1/3 of dorsum, terminating rather at base of veins r_2-r_3 , dark ochreous tinged with orange inside black-brown along ventral and costal edges dark ochreous-orange, paler medially, greyer terminally, slightly curved wedge-shaped blotch opposite to end of the former pattern at middle of costa. Posterior third or half (in female) of wing grey with brown-violet hue and delicate gloss, crossed with slightly arched outwards dark brown fascia directed from posterior third of costa towards posterior part of termen accompanied by some more or less distinct but paler spots. Fringes rather concolorous with posterior part of wing. Hindwing with slightly elongate, rounded apex, brown. Length of forewing 5—6 mm.

Male genitalia (figs. 15, 16). Tegumen delicate, socii fairly large with very short, partially membraneous basal portion, rounded apically. Valva slender, long, rather thin posteriorly, sacculus short but distinct, however, without any free termination. Transtilla strong with broad, expanding terminally rather bifurcate termination, juxta small, vinculum parts broad, connected membraneously. Aedeagus fairly large, bent, tapering and pointed apically with long coecum penis and median caulis opposite to ductus ejaculatorius, cornutus strong.

Female genitalia (fig. 17). Papillae anales moderate, anapophyses long. Sterigma membraneous, very delicate; antrum cup-like, heavily sclerotized and minutely sculptured, rounded, concave in middle anteriorly, with protruding rather narrow dorsal wall; ductus bursae long, strongly sclerotized medially, membraneous in short parts near antrum and beyond corpus bursae which is small, rounded, delicately spined.

Type (male): "Cuzco Mts., Peru, Garlepp 1905, Stgr., 73513", G. Sl. 7104; typoid (female) identically labelled, No. 73511, G. Sl. 7105.

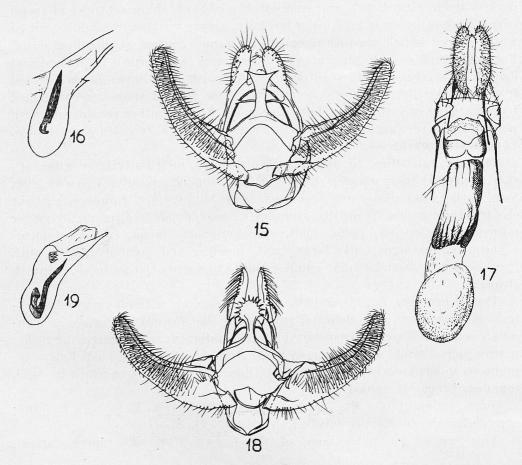
This species resembles none of the known Phalonidia-representatives.

Phalonidia aculeata sp. nov.

[Pl. XV, fig. 5]

Labial palpus longer than 1, slightly expanding posteriorly, brownish, pale terminally. Head brownish with front rather cream; thorax ochreous brownish, browner anteriorly. Forewing narrow, almost of constant width throughout; costa slightly curved outwards at base, delicately concave in 2/3, then slightly protruding, straight to apex which is almost rounded; termen convex, strongly oblique. Ground colour ochreous cream, darker along costa and dorsum especially anteriorly, suffused ochreous in middle and anteriorly,

glossy pearl in posterior third. Median fascia reduced to ill-defined brownish suffusion extending from before middle of dorsum to ochreous-brown spot situated beyond middle of costa. Beyond this spot a pale cream area interrupted in its posterior part by brown costal spot and limited by another elongate one originating in beyond 3/4 of costa and terminating before middle of termen



Figs. 15—19. Phalonidia LE MARCH.: 15 — male genitalia of Ph. aeraria sp. nov., type,
 16 — aedeagus of same specimen, 17 — female genitalia of same species, typoid, 18 — male genitalia of Ph. aculeata sp. nov., type, 19 — aedeagus of same specimen

as a bifurcate pattern. Small groups of brown scales, one beyond median cell, two or three at apex and termen. Fringes pale cream. Hindwing pale cream with similar cilia. Length of forewing 4 mm.

Male genitalia (figs. 18, 19). Tegumen slender; socii long, coalescent basally. Valva slender, elongate, curved upwards; sacculus without free termination, rather broad, heavily sclerotized. Transtilla with broad lateral arms and elongate strongly broadened posteriorly rounded and provided with long spines median part. Juxta small; vinculum with lateral arms distinctly broadening medially.

Aedeagus proportionately short, pointed ventro-posteriorly, provided with long, bent, capitate cornutus and a group of less strongly sclerotized thorns.

Type (male): "Huigra, 4500 ft., Ecuador, Parish, VI. [19]14", G. Sl. 7137; typoid (male) without abdomen and hindwings, identically labelled.

The both specimens were designated as the typoids of *Phalonia scarificata* MEYR. The species is distinct by the shape of the transtilla and aedeagus.

Phalonidia sphragidias (MEYRICK), comb. nov.

Phalonia sphragidias Meyrick, 1932, Exot. *Micr.*, **4**: 265; Razowski, 1964, Ann. zool., **22**: 478 fig. 76.

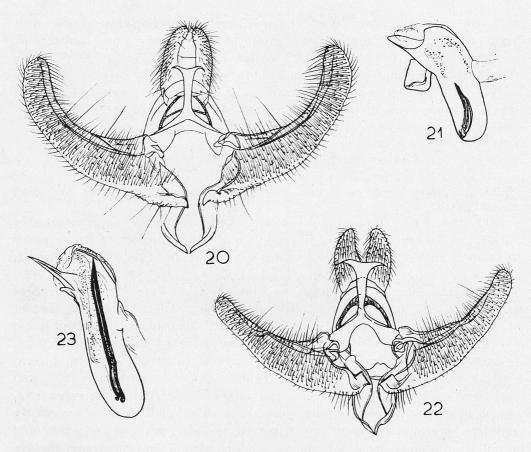
The type of this species preserved in the collection of the Naturhistorisches Museum in Vienna is a female, the genitalia of which are figured in my paper mentioned above. In the collection of the British Museum (N. H.) there is a single male specimen bearing a label "Bolivia, Stgr., 1903, [No.] 71192". This differs slightly in the colouration from the type. Forewing is paler, more ochreous, tinged with brownish, pale along costa. All the posterior portion of the wing suffused with red-brown, marked with concolorous ill-defined spots, one of which (curved, elongate marking extending from 3/4 of costa) is distinct. Fringes concolorous with ground colour, several times divided with brown.

Male genitalia (figs. 20, 21) large; tegumen moderate; socii large with well developed coalescent basal portions and rather slender free ends; valva long, curved upwards with costa strong, concave: sacculus small, delicate, irregularly undulate ventrally; vinculum broad, curved medially, rounded and expanding in middle internally, membraneous on opposite edge. Transtilla strong, slightly broadening posteriorly with large termination; juxta small. Aedeagus proportionately short, protruding and pointed postero-ventrally, with long coecum penis and postmedian caulis; cornutus strong, bent.

Phalonidia delicatulana (ZELLER), comb. nov.

Cochylis delicatulana Zeller, 1877, Horae Soc. ent. ross., 13: 137.

Labial palpus about 1.5; two anterior joints yellowish, median one whiter posteriorly; terminal joint protruding, narrow, concolorous with median joint. Head whitish, yellowish above and posteriorly; antenna yellowish; thorax pale brownish, tegula cream, ochreous-yellow anteriorly. Forewing uniformly broad throughout; costa slightly arched outwards at base, delicately concave medially, bent in 3/4; apex pointed; termen very strongly oblique, straight. Ground colour cream tinged with yellowish, pale ochreous-yellow at places, glossy along pattern. Pattern brownish ochreous marked with brown scales at edges. Basal area to 1/4 of costa suffused, paler towards dorsum where oblique strigulation present. Triangular blotch with vertical posterior edge in middle of costa; delicate suffusion at same level in wing middle becoming paler towards



Figs. 20—23. Phalonidia Le March.: 20 — male genitalia of Ph. sphragidias (Meyr.), "Bolivia, Stgr., 1903, No. 71192", G. Sl. 7098, 21 — aedeagus of same specimen, 22 — male genitalia of Ph. delicatulana (Zell.), type, 23 — aedegus of same specimen

dorsum, atrophied dorsally, dark strigulae along dorsum; strongly oblique, delicately broadening posteriorly fascia from 3/4 of costa to before middle of termen limiting distinctly pale apical area; dark suffusion beyond this marking at tornus terminating at veins m_2 — m_3 ; apical portion of costa and apex yellow-ochreous. Fringes concolorous with ground colour, with ochreous dividing line. Hindwing whitish, pale ochreous-cream apically; apex elongate, pointed; fringes whitish, cream at apex. Length of forewing 6.5 mm.

Male genitalia (figs. 22, 23) similar to those in the preceding species but with longer characterized by long free ends socii, shorter more tapered posteriorly valva, and less distinct sacculus which shows small, curved convexity just beyond base. Transtilla longer and more strongly broadening terminad than in preceding species; vinculum broad medially. Aedeagus strong, rather uniformly broad, with long, thin pointed termination and long coecum penis; caulis posterior; cornutus very long, pointed.

Type: "Bogota, Zeller coll., Type", G. Sl. 4090.

Phalonidia lactaipalpis (WALSINGHAM), comb. nov.

Conchylis lacteipalpis Walsingham, 1891, Proc. zool. Soc. London, 1891: 500; Saphenista lacteipalpis Walsingham, 1914, Biol. Centr. Amer., 4: 296; Razowski, 1964, Ann. zool., 22: 367.

In 1897 Walsingham described the genus Thyraylia with the type species Conchylis bunteana Rob., but in 1914 the same author described the new genus Saphenista from C. lacteipalpis Walsm. and pointed out that Thyraylia was described from the latter species and that that name "should be cancelled". In 1964 I placed C. lacteipalpis Walsm. in Saphenista Walsm. but preserved the name Thyraylia Walsm. for its type C. bunteana Rob. becouse I did not know the genitalia of the latter. Unfortunately the type of C. lacteipalpis Walsm. had no abdomen and I was unable to examine its genitalia. Now I have examined the typoid of this species and found that it belongs to the genus Phalonidia Le March. So, the name Saphenista Walsm. has to be sunk as a synonyme of the latter.

Female genitalia (fig. 24). Papillae anales rather small; anapophyses fairly long; sterigma ill-defined, reduced to narrow linkage of the anapophyses anteriores and a membrane connecting it to antrum; antrum very short, rounded, rather distinctly sclerotized; ductus bursae proportionately short, broad; corpus bursae very small (as long as ductus bursae), minutely spined.

Among the *Phalonidia*-specimens I have found one strikingly alike the typoid of the species under consideration, but collected in Sao Paulo. The genitalia of this male are very similar to those in *Ph. multistrigata* (Walsm.), but I suppose this specimen belongs to the species in question, however, its place of collection is very far from the type locality.

Phalonidia pruinosana (ZELLER), comb. nov.

Conchylis pruinosana Zeller, 1877, Horae Soc. ent. ross., 13: 129 pl. 2 fig. 44.

Labial palpus longer than 1.5, with median joint broadening terminad and terminal joint protruding; basal and median joints except terminal portion of the latter ochreous-brown, termination of median joint and terminal joint white. Head white, brownish laterally; antenna and thorax brownish. Forewing broadening posteriorly; costa straight to 3/4 then bent; apex delicately rounded; termen oblique, rather straight. Ground colour white delicately suffused with brownish in anterior half, slightly suffused basally. Pattern brown with very slight olive tint, transversely brown strigulate, consisting of large blotch that extends from base of wing along dorsal arm of median cell then from its middle towards veins r_1 — r_2 and then in curved outwards edge to 2/3 of dorsum. This broad posterior part of blotch much darker than its remaining area. At middle of costa brownish spot slightly tinged with ochreous, rather above posterior part of mentioned blotch. Ill-defined markings in subapical area consisting of oblique grey strigulation or suffusion extending from 3/4 of costa towards termen.

Sometimes brownish grey suffusion along posterior part of termen. Fringes concolorous with ground colour. Hindwing pale greyish, brownish grey posteriorly, delicately strigulate or spotted throughout: fringes whitish grey. Length of forewing 8 mm.

Female genitalia (fig. 25). Papillae anales moderate, rather slender: anapophyses long; eighth tergite strong; sterigma delicately sclerotized except for lateral arms which are broad; antrum rather short provided with very large, heavily sclerotized hook-like sack; ductus bursae broad; corpus bursae large, strongly spined with shorter and longer (in middle) thorns.

The type of this species is labelled "Bogota, IV, Type, Zeller coll.", G. Sl. 4085. There are two further specimens in the collection under consideration, one from Sierra del Libano, collected in May at the altitude of 6000 ft., second bearing the label "Pruinosana Z. E. M. 129 f. 44, Bogota" which belong to the type series.

Phalonidia cordifera (MEYRICK), comb. nov.

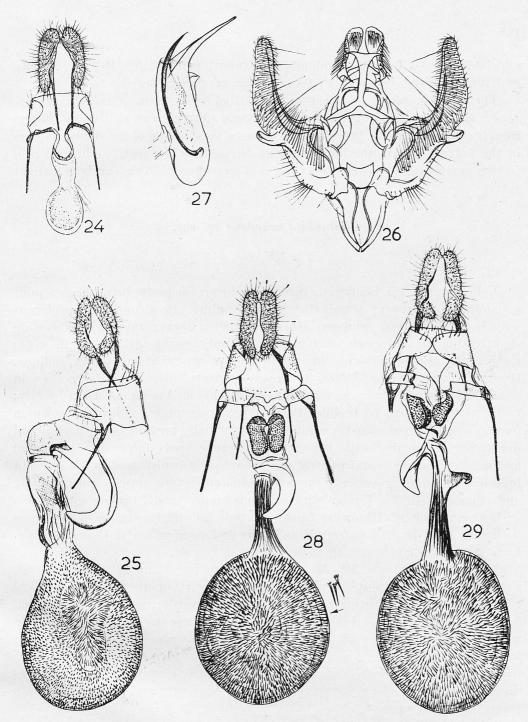
Phtheochroa cordifera MEYRICK, 1932, Exot. Micr., 4: 267.

Very similar to the preceding species but smaller and more contrasting in colouration. Dorsal blotch rounded posteriorly in wing middle, then concave towards vein cu_2 . This concavity is very often suffused with brownish. Metallic grey stripes on dark pattern more distinct than in Ph. pruinosana (Zell.). Costal spot brownish at edge, ochreous to ochreous-orange towards middle of wing. Similar suffusion in median portion of broadest part of dorsal blotch. Pattern of posterior part of wing grey, better developed than in preceding species, in the shape of arched band. Fringes concolorous with ground colour or cream. Delicate cream suffusion very often on wing base. Hindwing brownish grey. Length of forewing 6.5 mm.

Male genitalia (figs. 26, 27). Tegumen elongate; socii strong, distinctly sclerotized laterally, broadening posteriorly; valva elongate, curved upwards, slightly tapering in posterior portion, with well developed costa; sacculus long, arched upwards ventrally, convex beyond base, provided with free termination in middle of ventral edge of valva. Transtilla of normal *Phalonidia*-shape, similar to this in the species closely related to *Ph. delicatulana* (Zell.); juxta small. Aedeagus fairly large, broad anteriorly, strongly protruding in terminal part ventrally, with posterior caulis; cornutus very long, thin, curved.

Female genitalia (fig. 28) as in preceding species but with longer anapophyses and differently shaped spined patches in antrum; sack-like prominence similar in shape but much shorter; ductus bursae narrower than in *Ph. pruinosana* (Zell.), with strongly sclerotized stripes; corpus bursae rounded, densely and uniformly spined throughout.

The type of *Ph. cordifera* (Meyr.) is in the collection of the Naturhistorisches Museum in Vienna and bears a label "Bolivia, Rio Songo, 800 m, Fassl" (without abdomen). In the British Museum (N. H.) there are 17 specimens,



Figs. 24—29. Phalonidia Le March.: 24 — female genitalia of Ph. lacteipalpis (Walsm.), "St. Vincent, W. I[ndies], H. H. Smith", G. Sl. 7143, typoid, 25 — female genitalia of Ph. pruinosana (Zell.), "Sierra del Libano, Colombia, 6000 ft., V. 1899, H. H. Smith, [No.] 69034", G. Sl. 7076, 26 — male genitalia of Ph. cordifera (Meyr.), "La Crumbre, P.[arish], 6000 ft. V. [19]14", G. Sl. 7091, 27 — aedeagus of same specimen, 28 — female genitalia of same species, "Castro, Parana, S. Brazil, Jones, 1898, [No.] 67387", G. Sl. 7099, 29 — female genitalia of Ph. sp., "Zeller coll.", G. Sl. 7077

one labelled "La Crumbre, Colombia, P[ARISH], 6600 ft., V. [19]14" (typoid), and remaining lot collected in Castro, Parana, South Brazil.

There is also one female bearing green label by Zeller: "Conchylis pruinosana" which resembles typical Ph. cordifera (Meyr.) externally but differs from it genitalically (fig. 29). These differences are in shape of the spined patches of the antrum and in the longer ductus bursae provided with additional projection postmedially. Otherwise as Ph. cordifera (Meyr.). This can be a distinct species.

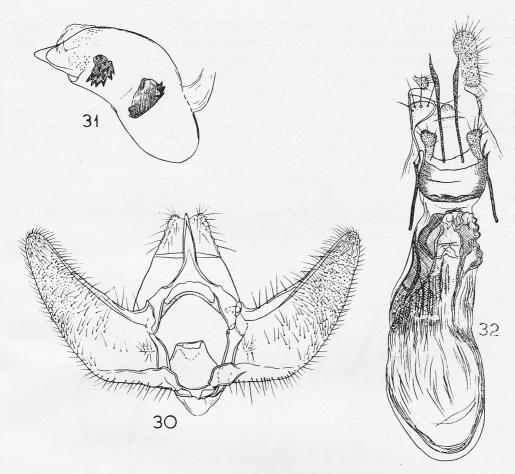
Phalonidia assensus sp. nov.

[Pl. XV, fig. 6]

Labial palpus 1.5, ochreous, tinged with brownish posteriorly; median joint expanding posteriorly; terminal joint protruding. Head rather concolorous with palpi, but front yellower; thorax ochreous, darker anteriorly. Forewing slightly dilated posteriorly in female, uniformly broad throughout in male; costa gently arched outwards; apex delicately pointed; termen convex, oblique. Ground colour ochreous-yellow to cream-ochreous, paler posteriorly than in basal half of wing, glossy in terminal part. Ochreous-brown suffusion basally; costa spotted brown to middle. Pattern brown in male, yellowish brown in female, consisting of transverse interrupted medially median fascia with broad dorsal part (provided with two ochreous-orange spots internally in female) and smaller, narrow costal portion and subapical brownish spot in 3/4 of costa followed by another concolorous spot situated before termen postmedially and connected to the former with ochreous-orange shade. Fringes concolorous with ground colour. Hindwing brownish, pale anteriorly; fringes concolorous with wing base. In male pattern less distinct and more yellowish than in female. Length of forewing 6 mm in male, 7 mm in female.

Male genitalia (figs. 30, 31). Tegumen tapering terminally; socii broad, similarly tapering, almost completely coalescent, with small concavity of apical edge. Valva broad, tapering terminad, curved upwards; sacculus slender, well sclerotized, slightly tapering posteriorly, without free termination. Transtilla with broad lateral arms and long, slender median process, pointed apically; juxta large, protruding dorsally. Aedeagus very broad, proportionately short, with short coecum penis and rather short ventral termination; caulis postmedian; cornuti in shape of two broad, dentate sclerites and numerous minute spines in vesica present.

Female genitalia (fig. 32). Papillae anales short; anapophyses rather strong, fairly short; sterigma transparent; antrum very broad, cup-like, strongly sclerotized, concave posteriorly, rounded anteriorly, with dorsal wall provided with a pair of minutely spined patches; ductus bursae not differentiate from bursa copulatrix, with narrowest part just before antrum. This part is devoid of sclerites while all the anterior broad part is strongly sclerotized in places;



Figs. 30—32. Phalonidia assensus sp. nov.: 30 — male genitalia of type, 31 — aedeagus of same specimen, 32 — female genitalia of typoid

a group of short thorns on sclerite medially; anterior portion (corpus bursae) transparent.

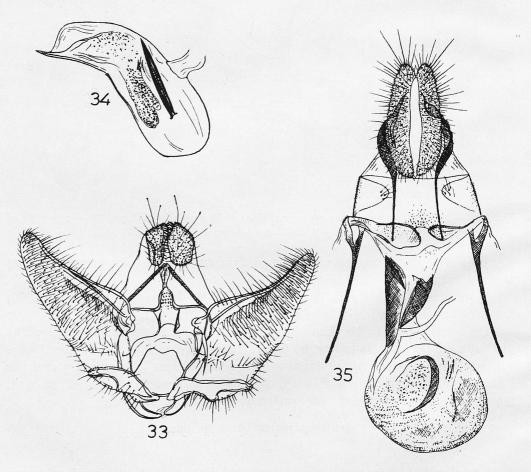
Type (male) "Sao Paulo, S. E. Brazil, E. D. Jones, 1895", G. Sl. 7070; typoid (female) identically labelled as type, G. Sl. 7071.

The species is alike the European Aethes badiana (HBN.) superficially. The genitalia are peculiar, but show no bigger differences with these of other Phalonidia-species. The cornuti are, however, quite different than usually and the female genitalia are provided with characteristic spined patches of antrum. The venation does not show any differences with that in known species.

Irazona penthinana sp. nov.

[Pl. XV, fig. 7]

Labial palpus 1 in male, 2 in female, whitish, tinged with pale ochreouscream anteriorly: median joint broadening terminad (less in male than in female); terminal joint protruding. Rest of head and scape of antenna white; Acta Zoologica Cracoviensia nr 8 flagellum brownish: thorax brown with slight ochreous-violet tint; abdomen brownish grey. Forewing delicately expanding posteriorly; costa almost straight except for base and 3/4 where it is bent; apex rounded; termen oblique, convex. Anterior half of wing brownish, roughly scaled, strigulate with rusty-brown especially along costa; posterior half of wing white slightly striped transversely with grey, with apical corner suffused with brownish, dark strigulate, limited with rusty-brown arched outwards stripe anteriorly; the border between the two portions of the wing runs in straight line from beyond middle of costa towards middle of dorsum, but this dorsal area suffused with brownish to tornus; black spot in posterior half of median cell. Fringes greyish, with brown median line and posterior portions. Hindwing broad with short, rather rounded apex, greyish to brownish grey (in male), brown strigulate transversely; fringes pale grey to brownish, dark in apical area (to vein m_3). Length of forewing 7-9 mm.



Figs. 33—35. Irazona penthinana sp. nov.: 33 — male genitalia, "Petropolis, Brazil, 1881, Doer, [No.] 68089", G. Sl. 7073, typoid, 34 — aedeagus of same specimen, 35 — female genitalia, "S. E. Brazil, Salto Grande de Paranapanema, E. D. Jones, 1912—534", G. Sl. 7054

Male genitalia (figs. 33, 34). Tegumen slender, tapering apicad; socii broad, plate-shaped, minutely spined, especially internally; uncus absent. Valva broad basally, strongly tapering terminad with rather thin termination; sacculus strongly sclerotized, rather short, curved beyond middle, rounded at free termination. Transtilla with very broad lateral parts and proportionately short, minutely spined, rounded apically median projection; juxta large. Aedeagus broad, protruding and pointed ventro-terminally; strong cornutus and numerous minute spines in vesica present.

Female genitalia (fig. 35). Papillae anales large, elongate; anapophyses long; sterigma with elongate, broad, rounded internally lateral arms connected to antrum by broad membrane; antrum transparent; ductus bursae broad, narrowing towards corpus bursae, provided with two large sclerites; ductus seminalis anterior; corpus bursae rounded, minutely spined in almost all the surface, provided with one narrow crescent-shaped and two ill-defined sclerites.

Type (male): "Petropolis, Brazil, Doer, 1881, No. 68089", G. Sl. 7053 and 12 typoids (9 males and 3 females) ten of which bear labels identical with that of the type, one: "Brazil, Saunders, Stn. Coll., 1893—134", and remaining ones: "Salto Grande de Paranapanema, S. E. Brazil, E. D. Jones, 1912—534". The type and 9 typoids in the collection of the British Museum (N. H.), three typoids in authors collection.

The species is very similar to some Olethreutini-species and bears the label "Phtheochroa penthinana" given probably by Walsingham. It has been, however, undescribed. The male genitalia are rather similar to those of the species of the genus Irazona Raz. and the venation does not show any differences with that of the representatives of the mentioned genus. However, the female genitalia seem to be different, though the female of only one species of Irazona Raz. is known till now. The variability is rather slight and is shown in the intensity of the dark strigulation of the forewing. One female is rather pale, greyer than the remaining specimens, with well developed but shorter strigulae on the whole surface of the wing and with distinct rusty marked termen.

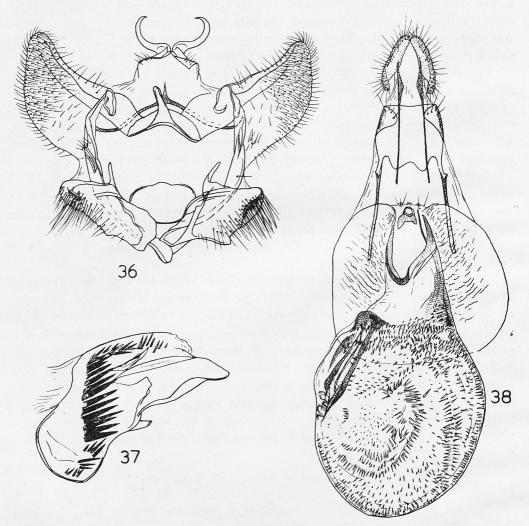
Aethes mordax (MEYRICK), comb. nov.

Phalonia mordax Meyrick, 1917, Trans. ent. Soc. London, 1917: 4; Lozopera mordax: Clarke, 1963, Cat. Micr. Meyr., 4: 20 pl. 10 figs. 3—3b.

The male genitalia of the type of Aethes mordax (MEYR.) are in CLARKE's work figured reversely with costae of the valvae directed downwards and with badly damaged sacculus. Therefore, I am figuring the male genitalia of this species in normal position below. Ae. mordax (MEYR.) builds together with some other species a small group difficult for determination superficially, so I enclose a short redescription of this species.

Labial palpus longer than 2, ochreous brownish with median joint distinctly expanding terminally, and protruding terminal joint. Head, antenna and thorax rather concolorous with palpi, but thorax somewhat greyer. Forewing not

dilated posteriorly; costa hardly but uniformly arched outwards, apex delicately rounded; termen short, straight, oblique. Ground colour pale ochreous-brown, with darker suffusion and very delicate strigulation or punctation. Costa and basal area of wing suffused with brownish especially anteriorly, posterior



Figs. 36—38. Aethes mordax (Meyr.): 36— male genitalia of typoid, "Petropolis, Brazli, 1881, Doer, [No.] 68222", G. Sl. 7102, 37— aedeagus of same specimen, 38— female genitalia of typoid, "Argentina, Parana, R. [19]06", G. Sl. 7210

portion of costa strigulate transversely. Pattern brown, consisting of some oblique, elongate blotches situated at the wing edges. First pair of those beyond base from 1/4 of costa upwards to median cell and from dorsum postbasally towards middle of median cell, or shorter. Second pair represented by spot in middle of costa and elongate blotch extending from beyond middle of dorsum to base of vein cu_2 . Third pair incomplete, represented by spot at 3/4 of costa

and sometimes by elongate pattern extending from tornus. In type specimen large terminal spot from beyond apex to vein m_3 , in typoids ill-defined marking rather postapically. In one specimen the latter very large, broad, situated more medially. In one typoid well developed stripe along anterior part of vein cu_1 , from wing middle and pale triangle of ground colour between this and dorsal part of median pair of spots. In other typoid dark strigulation and punctation very distinct, spots more elongate. Fringes concolorous with ground colour, dark posteriorly. Hindwing brownish to brownish cream, dark strigulate transversely, with apex slightly protruding; fringes cream-grey, dark at apex. Length of forewing about 8 mm.

Male genitalia (figs. 36, 37). Tegumen broad, membraneous laterally, protruding in middle posteriorly; socii fairly long, pointed. Valva broad basally, protruding posteriorly, membraneously connected to dorsal portion of sacculus which is broad, protruding posteriorly, irregularly dentate and prominent in middle ventrally; a group of short dents subterminally and long hairs present. Transtilla broad laterally, rounded medially with long, thin dorsal projection; vinculum arms elongate, broadening and rounded ventrally. Aedeagus very broad, strong, protruding and pointed ventro-terminally, provided with a row of some 10—15 strong spine-like cornuti and two groups of other smaller, rather numerous ones.

Female genitalia (fig. 38). Papillae anales moderate; anapophyses rather long; anapophyses posteriores thin. Sterigma atrophied; antrum narrow, distinctly sclerotized, connected to strongly sclerotized, transformed sternite; ductus bursae broad, fairly short, strongly sclerotized laterally; corpus bursae very large, marked with narrow lateral sclerites and numerous spines which are concentrated mainly in posterior area.

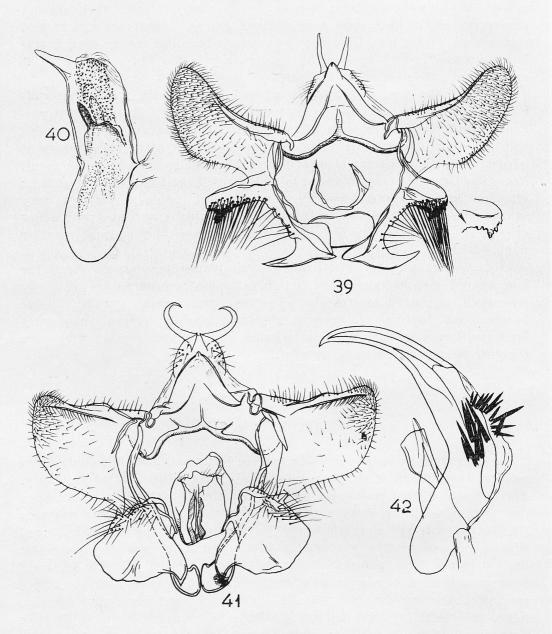
Aethes jonesi sp. nov.

[Pl. XV, fig. 8]

Labial palpus as in the preceding species, badly damaged, remaining scales pale brownish. Head of almost same colour, thorax a little darker anteriorly. Forewing not dilated posteriorly with costa uniformly curved outwards, apex and termen as in Ae. mordax (MEYR.). Ground colour pale ochreous-cream (the specimen is not fresh), delicately strigulated and spotted with brown, slightly suffused with same colour anteriorly and along basal third of costa; dark strigulation along costa, similar spots along termen. Pattern brownish, brown scaled along its edges, similar to this in preceding species but the stripes are longer and narrower than in it and subterminal blotch breadening dorsally, large. Fringes rather pale (damaged). Hindwing brownish cream, with apex protruding, delicately pointed; fringes cream. Length of forewing 7 mm.

Male genitalia (figs. 39, 40). Tegumen as in Ae. mordax (MEYR.) but with larger terminal portion distinctly hairy; socii slender, rather short. Valva with

elongate, rounded apically, slightly concave beyond dorsal portion of sacculus ventral edge; sacculus very strong consisting of two basally coalescent arms: the ventral one hook-shaped, pointed; the dorsal one much longer, irregularly dentate on ventral edge, rounded, blunt posteriorly, long hairy ventrally. Aedeagus long, slender, with elongate, pointed ventro-terminal projection



Figs. 39—42. Aethes Billb.: 39 — male genitalia of Ae. jonesi sp. nov., type, 40 — aedeagus of same specimen, 41 — male genitalia of Ae. inexpecta sp. nov., type, 42 — aedeagus of same specimen

and two lateral sclerites provided with elongate tips; numerous small spine-shaped sclerites in wall of vesica present.

Type: "Castro, Parana, S. Brazil, Jones 1896, [No.] 67571", G. Sl. 7103

Aethes inexpecta sp. nov.

Labial palpus as in the preceding species, pale brownish cream in colour; head and thorax rather concolorous with palpi. Forewing as in *Ae. jonesi* sp. nov.; ground colour pale ochreous-cream (unfortunately the specimen is not fresh); pattern brown represented by pairs of costal and dorsal elongate spots and small but broad subdorsal blotch rather medially. No fringes in examined specimen. Hindwing pale brownish cream, cream anteriorly; fringes pale. Length of forewing 6 mm.

Male genitalia (figs. 41, 42). Tegumen broad anteriorly, transparent laterally, with short hairy terminal portion; socii well developed. Valva broad, almost trapezoidal with strong costa; sacculus very broad, heavily sclerotized, dull, protruding posteriorly, long hairy dorsally. Transtilla with broad, narrowing apicad, pointed terminally median projection; juxta large; vinculum arms broadening terminally. Aedeagus very long, strongly bent, tapering terminad, pointed apically, with short coecum penis. Two groups of cornuti: some ten longer ones and about 15 ones of unequal length in vesica present.

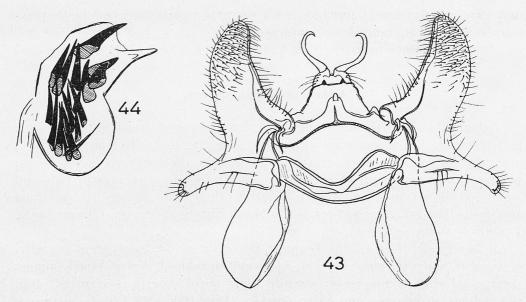
Type: "R.[iver] Parana, Argentina, R. [19]06", G. Sl. 7101.

Aethes austera sp. nov.

[Pl. XV, fig. 9]

Labial palpus 1.5, brownish, tinged with ochreous posteriorly; median joint broadening terminally, protruding ventrally; terminal joint concealed in scales. Head and thorax brownish; front paler. Forewing not dilated posteriorly, costa gently curved outwards; apex rather pointed; termen almost straight, oblique. Ground colour ochreous-cream, suffused or sprinkled with brown along edges and posteriorly. Costa dark brown to middle, then strigulate with same colour; pattern dark brown with anterior pair of spots ill-defined consisting of small spot at costa and elongate, oblique stripe near dorsal arm of median cell atrophied at edge. Median pair of spots well developed, with long spots narrowing towards middle of wing (dorsal one beyond middle of edge); brown stripe or suffusion beyond end of median cell connected to costal spot and protruding towards posterior part of termen. Subapical spot distinct; subterminal spot small. Fringes lacking. Hindwing dark brown, a little paler anteriorly than on peripheries. Length of forewing 7 mm.

Male genitalia (figs. 43, 44). Tegumen rather delicate; socii proportionately long. Valva broad anteriorly with elongate, curved upwards, slightly tapering



Figs. 43—44. Aethes austera sp. nov.: 43 — male genitalia of type, 44 — aedeagus of same specimen

terminally posterior portions; sacculus long, broad anteriorly, protruding posteriorly, rounded apically. Transtilla with very broad, provided with a pair of short thorns median projection; juxta very broad; arms of vinculum enormeously broadening ventrally, membraneous internally, rounded apically. Aedeagus short, very broad, rounded anteriorly, membraneous dorso-posteriorly, with rather short, pointed ventral termination; about 20 very strong, broad and slender cornuti in vesica present.

Type: "Castro, Parana, S. Brazil, Jones 1896, [No.] 67876", G. Sl. 7086.

Aethes dentifera sp. nov.

[Pl. XV, fig. 10]

Labial palpus as in the proceding species; median joint strongly expanding terminally, protruding ventrally, pale cream-brown. Head concolorous with palpi but front a little paler, thorax tinged with brown, more or less pale. Forewing not dilated posteriorly with costa similarly shaped as in the preceding species; apex delicately rounded; termen slightly convex. Ground colour variable: whitish cream to brownish cream, more or less dark, dark strigulated, sprinkled or smooth. Pattern brownish, greyish brown or similarly coloured, more or less distinct, in one specimen strongly reduced. Costa dark anteriorly, then strigulate; dorsum more or less distinctly strigulate or sprinkled. Costal spot of first pair small, opposite spot strongly elongate, atrophied dorsally, sometimes dark edged; median pair strongly reduced with costal spot more distinctly

marked than dorsal one, or with dark suffusion directed from costal spot towards wing middle, accidentally protruding towards tornus; apical pattern ill-defined; subterminal stripe narrow, often atrophied. In one typoid dorso-median area yellowish ochreous in two other ones pattern weak, marked only costally, but transverse strigulation well developed. Fringes darker than ground colour, divided and suffused with smoky grey. Hindwing pale cream-brown or creamgrey, darkening posteriorly, delicately strigulate or spotted. Fringes paler than wing. Length of forewing about 7 mm.

Male genitalia (figs. 45—48). Tegumen broad, membraneous posterolaterally; socii strong. Valva large with costa strongly sclerotized, slender. Anterior part of valva very broad, terminal portion protruding into a tip; sacculus strongly sclerotized, broad, straight ventrally, rounded and irregularly dentate posteriorly, without free termination. Vinculum strong; transtilla with broad, elongate median portion; juxta large. Aedeagus large with rounded coecum penis, slightly protruding pointed ventral termination provided with small dents before end ventro-laterally; cornuti variable in number, unequal in size.

Female genitalia (fig. 49). Papillae anales moderate; anapophyses long; eighth tergite proportionately small; sterigma membraneous, delicately sculptured; antrum short, broad, cup-like, slightly convex anteriorly, concave posteriorly, strongly sclerotized; ductus bursae very broad, provided with elongate sclerites minutely dentate along edges; ductus seminalis rather anterior; corpus bursae broader than ductus bursae, transparent, strongly spined anteriorly and laterally.

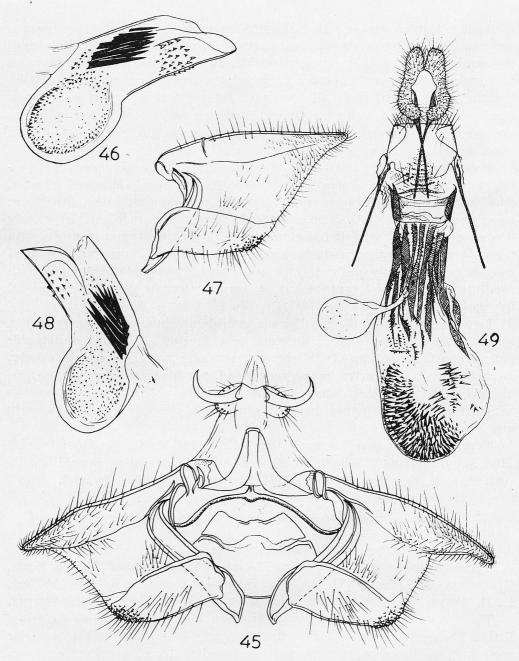
Type (male): "Chauchahuaya, Peru, M. I. [19]13", G. Sl. 7106; typoids "Rio Nepo, Parish, V. [19]20", G. Sl. 7107 (male), "Argentine Republic, Villa Ana, F. C. S. Fe., Dec. 1925, K. J. Hayward", G. Sl. 6827 (female).

Aethes turialba (BUSCK), comb. nov.

Hysterosia turialba Busck, 1920, Ins. inscit., 8: 86.

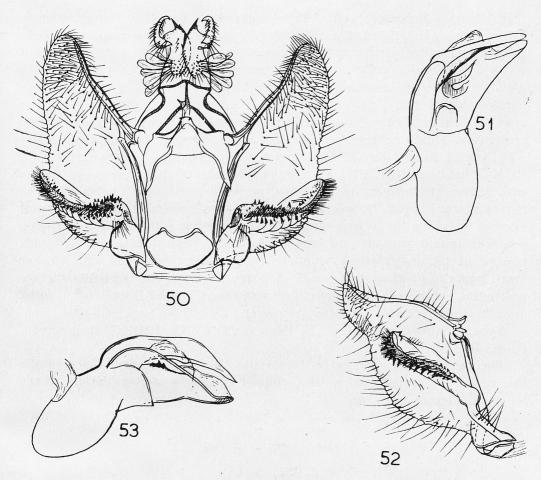
Three specimens in the collection. The labels are as follows: "Val St. Maria, Guatemala, A. B.[usck] VII. [19]19", "Valparaiso, Colombia 4500 ft., IV. 1899, H. H. SMITH, [No.] 69216" and "Minca, Colombia, VI. 1899, H. H. SMITH".

The species has been described from Costa Rica. It is referable to Aethes BILLB. The genitalia are rather peculiar because of the shape of the posterior portion of the tegumen, which is pointed and dentate. Externally the species resembles some Palaearctic Hysterosia-species. The male genitalia (figs. 50—51) are characteristic by elongate tegumen, short socii situated at the posterior part of tegumen folds which are arched outwards and provided with few spines internally. Valva very broad anteriorly, slightly curved upwards, tapering termined; sacculus elongate, arched outwards ventrally, provided with broad sack anteriorly and movable dorsal portion that is spined and bristled to the end. The position of the sacculus depends on the preparation (compare the



Figs. 45—49. Aethes dentifera sp. nov.: 45 — male genitalia of typoid, "Rio Nepo, Parish, V. [19]20", G. Sl. 7107, 46 — aedeagus of same specimen, 47 — valva of type, 48 — aedeagus of type, 49 — female genitalia of typoid, "Argentine Republic, Villa Ana, F. C. S, Fe, Dec. 1925 K. J. HAYWARD", G. Sl. 6827

figures). Transtilla with broad lateral parts and short, marked with lateral thorns median projection; juxta small; arms of vinculum rather slender, slightly broadening ventrally, linked membraneously with one another. Aedeagus



Figs. 50—53. Aethes turialba (Busck): 50 — male genitalia, "Valparaiso, Colombia, 4500 ft., IV. 1899, H. H. Smith, [No.] 69286", G. Sl. 7047, 51 — aedeagus of same specimen, 52 — valva, "Val St. Maria, Guatemala, A. B.[usck], VII. [19]19", G. Sl. 7046, 53 — aedeagus of same species

large, bent, protruding and pointed ventrally, provided with large arm-like, pointed apically process extending from beyond dorsal opening of ductus ejaculatorius. In one specimen two small dents internally.

The species is variably coloured. The female unknown to me.

Aethes annosa sp. nov.

[Pl. XV, fig. 11]

Labial palpus 3, ochreous, median joint blackish subterminally; terminal joint long. Head whitish; thorax whitish-brownish, brownish anteriorly. Forewing distinctly broadening posteriorly; costa slightly arched outwards at base,

then straight, delicately bent before apex; apex rounded; termen slightly oblique, rather straight. Anterior half of wing pale ochreous brownish irregularly spotted and suffused with rusty, tinged with greyish brown before middle of costa. Posterior half of wing whitish, spotted diffusely with pale brownish grey, suffused with brownish rusty along dorsum to tornus, crossed with two hardly parallel rusty stripes extending from costa terminating at termen; apex brownish. Fringes damaged, but probably brownish cream, rusty posteriorly. Hindwing broad, with short, rounded apex, brownish, strigulate with brown. Remainders of fringes cream-grey. Length of forewing 11 mm.

Male genitalia (figs. 54, 55). Tegumen broader than in preceding species with large posterior hairy portion; socii proportionately small; valva elongate, curved upwards, rounded apically; sacculus delicate reaching to 1/5 of ventral edge of valva, without free termination. Transtilla with broad, protruding ventrally lateral portions and broadened median part that is provided with two small minutely spined prominences medially. Vinculum with slender arms; juxta proportionately small. Aedeagus long, rather straight, slightly protruding ventro-terminally, provided with broad, curved before end, pointed apically posterior arm; cornutus very long.

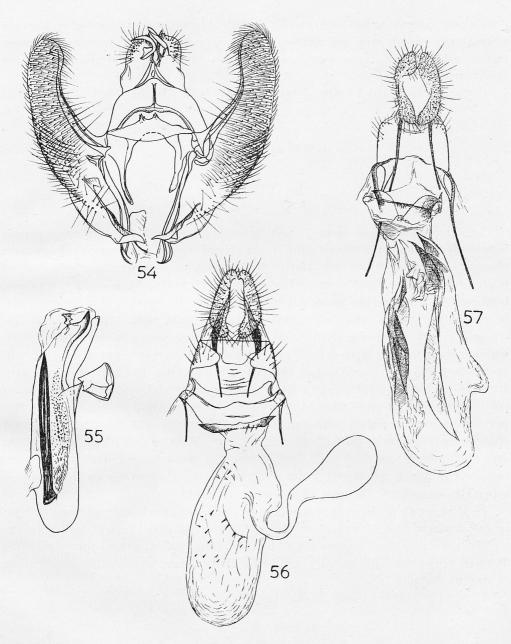
Type: "Santo Domingo, S. E. Peru, 6000 ft., XI. 1904, G. OCKENDEN", G. Sl. 7044.

The species is very similar to Ae. turialba (Busck) but paler. The genitalia also similar by strongly sclerotized, pointed apically posterior portions of the tegumen. Female unknown.

Aethes affinis sp. nov.

[Pl. XV, fig. 12]

Labial palpus 3, ochreous-cream with median joint slightly broadening terminally, terminal joint protruding, thin, tinged with pale rusty. Head cream; antenna brownish; thorax cream, darker anteriorly than posteriorly. Forewing slightly dilated posteriorly; costa almost straight, hardly concave medially; apex rather rounded; termen oblique, convex. Ground colour white, tinged with ochreous anteriorly. Costa spotted dark brown to beyond middle; dorsum so from beyond base; further delicate spots on costal arm of median cell rather anteriorly. Broad, brown-grey suffusion across middle of wing irregularly edged anteriorly, twice concave posteriorly, paler costally than dorsally; apical area suffused with brownish grey especially along venation, strigulate transversely with same colour, edged posteriorly with rusty; large triangular blotch concolorous with median fascia from tornal portion of wing towards 3/4 of costa terminating at vein r_5 . Distinct metallic gloss all over the wing. Fringes concolorous with ground colour, divided with grey-brown, rusty near apex. Hindwing brownish cream, brownish posteriorly, delicately strigulate



Figs. 54—57. Aethes BILLB.: 54— male genitalia of Ae. annosa sp. nov., type, 55— aedeagus of same specimen, 56— female genitalia of. Ae. affinis sp. nov., type, 57— female genitalia of Ae. agelasta sp. nov., type

with brown; fringes concolorous with median part of wing. Length of forewing 8 mm.

Female genitalia (fig. 56). Papillae anales moderate, broadening anteriorly; anapophyses short; eighth tergite broad, rounded anteriorly; sterigma with well

developed lateral arms and small median prominence posteriorly; antrum very short, broad, well sclerotized; ductus bursae short, transparent; corpus bursae rather large, sack-shaped, with ductus seminalis posterior; small scarce spines present.

Type: "Palo Verde, Costa Rica, 5200', [19]20", G. Sl. 7045.

Aethes agelasta sp. nov.

[Pl. XVI, fig. 1]

Labial palpus longer than 2, pale ochreous brownish; median joint broad, long scaled beneath; terminal joint short. Head white; antenna pale brownish; thorax brownish, white anteriorly and medially. Forewing broad, dilated posteriorly; costa slightly curved outwards anteriorly, then hardly concave, bent at 3/4; apex rather rounded; termen delicately convex, less oblique than in preceding species. Ground colour white, suffused with brown posteriorly, strigulate with same colour in basal area and along costa beyond basal third which is dark brown. Median fascia ill-defined at costa, interrupted with whitish grey, dark brown, very broad medially, broadening towards dorsum with anterior edge oblique extending from dorsum postbasally to before middle of costa and posterior edge, three times concave, terminating at tornus. Posterior portion of wing suffused with brown from before apex to termen with broad connection to posterior part of median cell. Apex dark, edged rusty; subterminal area rather light, marked with dark spots. Fringes damaged. Hindwing cream basally, brownish posteriorly, densely strigulate transversely with brownish especially anteriorly. Length of forewing 10 mm.

Female genitalia (fig. 57). Anapophyses long; sterigma membraneous; antrum broad, concave in middle posteriorly with well sclerotized lateral walls; ductus bursae short; corpus bursae long, folded along lateral edge, provided with distinct projection submedially and with some elongate sclerites commencing in ductus bursae.

Type: "San José, Costa Rica, [19]22", G. Sl. 7115.

Aethesoides distigmatana (WALSINGHAM)

Two specimens besides type material, one from Cuba, one from Trinidad. I have figured the female genitalia of this species (RAZOWSKI 1964 a: 4). In the female specimen from Trinidad the corpus bursae is much larger, rounded, but its shape depends probably on the preparation, as the sclerites are very similarly situated as in the type.

Aethesoides enclitica (MEYRICK), comb. nov.

Phalonia enclitica Meyrick, 1917, Trans. ent. Soc. London, 1917: 3; Clarke, 1963, Cat.: Meyr. Micr., 4: 27 pl. 13 figs. 2—2b.

Male genitalia (figs. 58, 59). Tegumen broad anteriorly, but delicate; socii weakly sclerotized, elongate, different than in remaining species of this genus. Valva very broad anteriorly with costal portion distinctly separate, heavily sclerotized. Median portion of valva angulate, protruding upwards, strenghtened by elongate sclerite extending from sacculus towards the tip. Sacculus long, slender, bent ventrally, blunt apically, provided with several long bristles terminally, minutely spined and hairy through out. Transtilla narrow, minutely thorned; juxta large. Aedeagus proportionately short, broad, rounded anteriorly, protruding ventro-posteriorly, pointed apically; cornutus long, capitate.

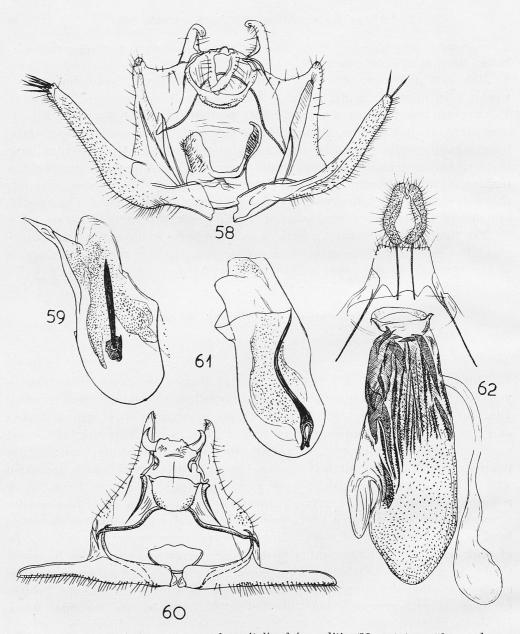
The figure in the CLARKE's work is in some parts indistinct, as the photograph has been taken from rather pale preparation. So I am enclosing a drawing of the genitalia of the type, slightly reconstructed.

Aethesoides columbiana sp. nov.

[Pl. XVI, fig. 2]

Labiai palpus about 1.5 in male, shorter than 2 in female, brownish to yellowish brown, with median joint strongly broadening terminally and terminal joint protruding. Head pale brownish cream, sometimes with grey addition; antenna rather concolorous; thorax darker than head. Forewing of almost constant width throughout; costa uniformly curved outwards; apex rather pointed; termen oblique, slightly convex. Ground colour cream densely sprinkled with ochreous and brownish in type and one typoid, ochreous brownish in remaining typoids. Costa suffused anteriorly with brown spot postbasally; a pair of similarly coloured spots just beyond this at costa and subdorsally; further pair consisting of more elongate, large spots rather beyond middle of wing almost touching one other medially or connected by irregular brownish shade; broad pale brown stripe from posterior fourth of costa towards tornus: small spots along dorsum; some strigulae along costa or/and at dorsum. Fringes concolorous with ground colour, divided with brown beyond terminal spots. Hindwing rather slender with elongate, pointed apex, cream anteriorly, suffused with grey-brown posteriorly, very delicately strigulate with same colour. Fringes white-grey. In the typoids in which the ground colour is brownish cream, the pattern is yellowish brown, the strigulation indistinct or atrophied, the hindwing pale brownish.

Male genitalia (figs. 60, 61). Tegumen of normal shape; socii short, broad, pointed apically. Valva with strong, pointed costal portions, delicately rounded but slightly projecting median parts and membraneous connections to dorsal edge of sacculus. Sacculus very long, straight ventrally, rather pointed apically.



Figs. 58—62. Aethesoides Raz.: 58 — male genitalia of Ae. enclitica (Meyr.), type, 59 — aedeagus of same specimen, 60 — male genitalia of Ae. columbiana sp. nov., type, 61 — aedeagus of same specimen, 62 — female genitalia of same species, "La Union, R. Huayacamayo, Carabaya, 2000 ft., Wets., Nov. 1904 (G. OCKENDEN)", G. Sl. 7113, typoid

Transtilla with atrophied lateral parts and very broad, rounded dorsally median portion; juxta small, vinculum with rounded ventral terminations. Aedeagus very large, rounded anteriorly, blunt posteriorly, slightly protruding ventrally; caulis rather posterior; cornutus very long, broad anteriorly, curved.

Female genitalia (fig. 62). Papillae anales delicate; anapophyses long; sterigma ill-defined; antrum very short, well sclerotized, rounded anteriorly; ductus bursae not differentiate; corpus bursae elongate, strongly sclerotized in posterior half, minutely spined anteriorly, with distinct lateral sack and posterior ductus seminalis.

Type (male): "Valparaiso, Colombia, 4500 ft., IV. 1899, H. H. SMITH, [No.] 69069", G. Sl. 7109.

Typoids (4 females): one labelled as type (G. Sl. 7110), one with label "Rio Nepo, Peru, Parish, V. [19]20", G. Sl. 7108, and two labelled "La Union, R. Huacamayo, Carabaya, 2000 ft., wets., Now. 1904 (G. Ockenden)". One of two latter typoids with genitalia on slide 7113, another not dissected (this in author's collection).

Carolella hysterosiana sp. nov.

[Pl. XVI, fig. 3]

Labial palpus longer than 1.5, brownish grey, rather dark, with median joint broadening posteriorly. Head and antenna brownish; thorax dark brown; termen oblique, hardly convex. Anterior half of wing blackish grey, black spotted and strigulated transversely, diffused with white in middle dorsally, dark posteriorly (forming distinct, broad median fascia which extends from beyond middle of costa to 3/4 of dorsum). Posterior portion of wing clear white, strigulate with blackish, darkening apically or posteriorly (in female). Fringes white, darkened with blackish beyond terminal spots. Hindwing broad with short, delicately rounded apex, brownish, dark brown strigulate transversely, fringes (damaged partially) brownish. Length of forewing 6 mm in male, 8 mm in female.

Male genitalia (figs. 63, 64). Tegumen broad, membraneous before socii laterally, socii very long, tapering terminad, pointed, valva broad anteriorly, narrowing posteriorly with well developed costa and rounded ventral edge; sacculus reaching to before middle of ventral edge of valva, broad anteriorly, narrowing terminad, without free termination. Transtilla with large, dentate apically median portion, juxta large, arms of vinculum proportionately slender, connected membraneously. Aedeagus long, rather slender, bent in middle, slightly protruding ventro-posteriorly, cornutus strong, broad anteriorly.

Female genitalia (fig. 65). Papillae anales slender, anapophyses very long, antrum broad, heavily sclerotized, rounded anteriorly, ductus bursae broad, membraneous, corpus bursae ovate, provided with large sclerite posteriorly.

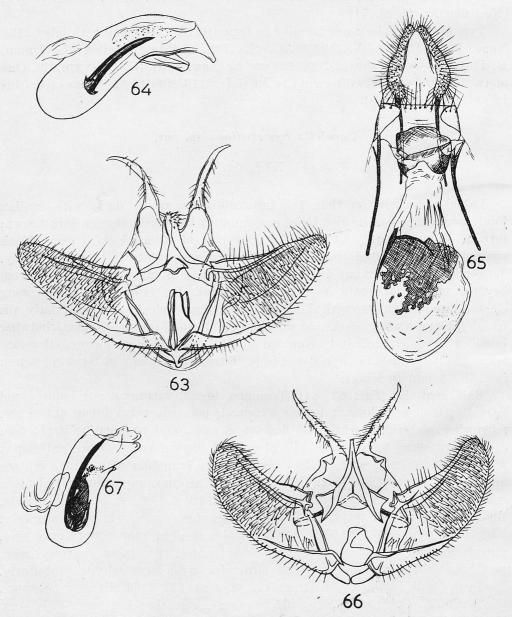
Type (male): "Tucuman, Argentina, 450 m, IV. 1903, DINELLY RSNBG., [No.] 67925", G. Sl. 7055, typoid (female): "Argentine Republic, Villa Ana, F. C. S. Fe., Dec. 1925, K. J. HAYWARD", G. Sl. 7056.

The species is similar to C. aphrobapta (Meyr.) but the aedeagus and cornutus are different.

Carolella argentinae sp. nov.

[Pl. XVI, fig. 4]

Labial palpus 4, pale brownish ochreous, with median joint protruding, bent. Head, antenna and thorax pale brownish cream. Forewing slightly dilated posteriorly in terminal portion, costa delicately concave in middle, slightly



Figs. 63—67. Carolella Busck: 63—male genitalia of C. hysterosiana sp. nov., type, 64—aedeagus of same specimen, 65—female genitalia of same species, typoid, 66—male genitalia of C. argentinae sp. nov., type, 67—aedeagus of same specimen

convex basally, protruding subapically, apex pointed termen rather straight, slightly oblique. Ground colour pale ochreous-cream with peculiar but very slight violet-rosy shine. Anterior portion of wing slightly suffused with brownish, posterior part with pale ochreous; delicate but distinct brownish transverse strigulation mainly along wing edges and in posterior third of wing present; diffused, brown, oblique fascia from before middle of dorsum towards wing middle. Fringes concolorous with strigulation of posterior part of wing. Hindwing rather narrow, with short, almost pointed apex, cream-ochreous, suffused with pale brownish and strigulate posteriorly. Fringes cream. Length of forewing about 8 mm.

Male genitalia (figs. 66, 67). Tegumen broad socii very long, thin, hairy. Valva elongate, rather broad, delicately rounded ventrally; sacculus broad anteriorly, convex beyond base ventrally, reaching to middle of ventral edge of valva. Transtilla with elongate, thin, dentate apically median projection; juxta rather small; arms of vinculum slender. Aedeagus proportionately short, protruding ventro-posteriorly; cornutus very large, slightly bent, provided with very large basal sclerite.

Type: "Argentine Republic, Villa Ana, F. C. S. Fe., October 1924, K. J. HAY-WARD", G. Sl. 6828.

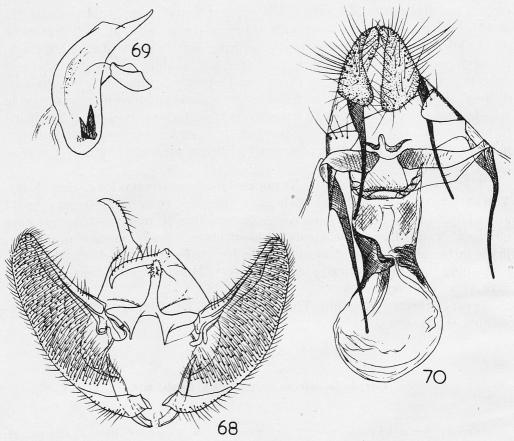
Carolella selecta (MEYRICK), comb. nov.

Euxanthis selecta Meyrick, 1931, Exot. Micr., 4: 158; Razowski, 1964, Ann. 2001., 22: 476 fig. 71.

The type of this species is deposited in the collection of the Naturhistorisches Museum in Vienna; two typoids (from Paraguay too) in the British Museum (N. H.). Besides these 5 further specimens, 4 from Brazil (Castro, Parana), one from La Soledad, Entre Rios, collected in November, rather differing in size and colouration.

The species is rather variable, and this occurs in the ground colour which is pale cream to yellowish-brownish, more or less distinctly suffused with ochreous, and in pattern which is yellow-brown or ochreous, sometimes ill-defined. In typical form the oblique dorsal stripe is distinct, not connected to subterminal stripe. In examined specimens this is either separate or connected to subterminal stripe by elongate shade directed from wing middle towards tornus.

Male genitalia (figs. 68, 69). Tegumen large with strong, pointed socii; valva broad, slightly tapering terminad, sacculus proportionately short reaching to beyond 1/3 of ventral edge of valva, broad basally. Transtilla with broad lateral parts and elongate, cup-like dentate apically median projection. Aedeagus proportionately small, bent, protruding ventro-terminally, cornutus broad, very short, provided with basal sclerite.



Figs. 68—70. Carolella Busck: 68— male genitalia of C. selecta (Meyr.), "Castro, Parana, S. E. Brazil, E. D. Jones", G. Sl. 7097, 69— aedeagus of same specimen, 70— female genitalia of C. molybdanthes (Meyr.), "Castro, Parana, S. Brazil, E. D. Jones, 1898, [No.] 67385", G. Sl. 7049

Carolella molybdanthes (MEYRICK), comb. nov.

Phtheochroa molybdanthes Meyrick, 1932, Exot, Micr., 4: 266; Razowski, 1964, Ann. zool., 22: 479 figs. 80, 81.

The type in the Vienna Museum; two specimens labelled: "Sao Paulo, S. Brazil, 2300 ft., III. 1913" and "Castro, Parana, S. Brazil" in the collection of the British Museum (N. H.).

The species has the venation typical of the genus Carolella Busck, but the shape of the forewing is different. The male genitalia were figured by me (Razowski, 1964 b: 480).

Female genitalia (fig. 70) with broad papillae anales and very strong, long anapophyses. Sterigma consisting of two broad lateral parts tapering towards anapophyses anteriores; antrum large, well sclerotized; ductus bursae broad, strongly sclerotized just before corpus bursae which is proportionately small, without any sclerites.

Spinipogon gen. nov.

Type species: Spinipogon trivius sp. nov.

Head as in *Cochylis* TREIT., labial palpus shorter than 2, with median joint distinctly broadening posteriorly. Terminal joint short. Forewing similar in shape to this in mentioned genus. Venation: sc to 3/4 of costa, r_1 from middle of median cell to middle of costa, the distance between r_1 and r_2 twice longer than between r_2 and r_3 , r_5 to costa just before apex or to apex, median veins distinctly separate from each other, cu_2 from posterior part of median cell. In hindwing rr stalked with m_1 to middle, m_3 rather equidistant to both m_2 and cu_1 . Tegumen and socii similarly shaped as in other genera of this group. Vinculum strong, coalescent ventrally, protruding. Valva differently shaped. Female genitalia with distinctly sclerotized ductus bursae and specifically haped sterigma.

Spinipogon trivius sp. nov.

[Pl. XVI, fig. 5]

Labial palpus 2, pale ochreous-cream, tinged with orange to middle laterally, front pale cream; head and thorax a little darker than front. In male forewing slightly dilated posteriorly; costa gently arched outwards; apex short, delicately rounded; termen rather straight, oblique. Ground colour pale ochreous-cream suffused with ochreous or even ochreous-orange basally and along dorsum postmedially. Costa delicately strigulate with brownish anteriorly, provided with dark spot beyond middle. Median fascia rusty brownish mixed grey, consisting of small costal spot in middle and large, elongate blotch grey-black anteriorly and dorsally before middle of dorsum. In terminal third of wing greyish brown spots and large elongate marking extending from costa subapically. Fringes concolorous with ground colour, brownish in apical area. Hindwing grey-cream, tinged with brownish posteriorly; fringes cream. Length of forewing about 6 mm.

Female somewhat differing from the male, with more yellow-brown head and thorax. Forewing more dilated posteriorly; ground colour ochreous-yellow with delicate brown-yellow hue, more cream in anterior half of wing. Pattern and costal spots yellow-brown with orange hue; median fascia almost complete with small, oblique spot costally and large dorsal portion marked with dark grey along anterior edge dorsally and provided with vertical stripe in median cell. Large subapical triangular spot. Hindwing brownish, pale anteriorly; fringes pale brownish. Legth of forewing as in male.

Male genitalia (figs. 71, 72). Tegumen very large; socii broad, scarcely hairy, fastened in membraneous scaphium. Vinculum very strong, protruding, coalescent ventrally. Valva broad anteriorly, elongate, slender beyond base,

concave costally, gently convex before narrow end ventrally where elongate area covered by strong spine-like hairs; sacculus short, irregularly dentate and protruding postbasally, without any free termination. Transtilla with elongate lateral arms and well developed bifurcate minutely dentate median portion; juxta large. Aedeagus long, tapering posteriorly, protruding and pointed terminally; no cornuti in examined specimen present.

Female genitalia (fig. 72). Papillae anales fairly large; anapophyses posteriores very long, longer than anapophyses anteriores. Sterigma reduced to delicate connections to anapophyses anteriores; antrum very short, well sclerotized posteriorly; ductus bursae short, partially heavily sclerotized; corpus bursae elongate, rather well sclerotized posteriorly, minutely spined and sculptured medially, provided with additional membraneous sack anteriorly.

Type (male): "Castro, Parana, S. Brazil, Jones, 1896, [No]. 67547", G. Sl. 7081; typoid (female) identically labelled except date: 1898 and No.: 67394, G. Sl. 7090.

Since the female differs externally from the male I decided to describe them under the same specific name. Their common features are the grey spot of the median fascia dorsally and the ochreous ground colour.

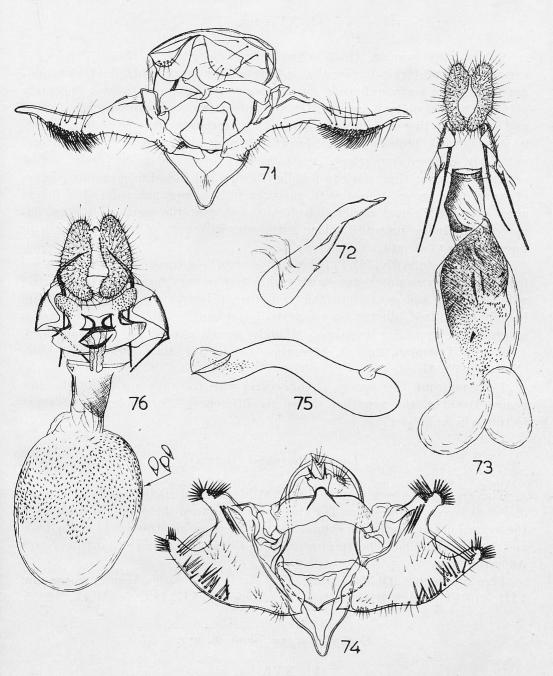
Spinipogon spinifera sp. nov.

[Pl. XVI, fig. 6]

Labial palpus about 1.5, pale ochreous, with median joint broadening terminad. Head, antenna and thorax cream. Forewing rather short, broadening terminally; costa curved outwards; apex rounded; termen convex, rather oblique. Ground colour pale cream tinged and suffused in places with ochreous, sprinkled along costa basally, strigulate delicately posteriorly. Pattern ochreous tinged with orange medially consisting of median fascia which is interrupted subcostally broad dorsally, and subapical stripe more brownish limiting apical triangle. Fringes concolorous with ground colour. Hindwing with elongate, delicately rounded apex, pale brownish cream, with pale cilia. Length of forewing 4 mm.

Male genitalia (figs. 74, 75). Tegumen elongate; socii delicate. Valva very broad, bifurcate posteriorly with costal portion narrow terminally, provided with three groups of spines. Sacculus strong, closely coalescent with valva, protruding posteriorly, arched outwards ventrally, also provided with spines along posterior half of ventral edge and posteriorly. Transtilla very broad with short, armed with thorns median process; juxta broad. Aedeagus very long, slender, curved medially, pointed dorso-posteriorly; opening of vesica dorso-posteriorly; no cornuti in examined specimen.

Type (male): "Santarem, Brazil, Parish, VIII. [19]19", G. Sl. 7139; typoid (?male) without abdomen, same label.



Figs. 71—76. Spinipogon gen. nov.: 71 — male genitalia of S. trivius sp. nov., type, 72 — aedeagus of same specimen, 73 — female genitalia of same species, typoid, 74 — male genitalia of S. spinifera sp. nov., type, 75 — aedeagus of same specimen, 76 — female genitalia of S. signata sp. nov., type

? Spinipogon signata sp. nov.

[Pl. XVI, fig. 7]

Labial palpi missing. Head ochreous brownish, thorax similarly coloured except for its posterior portion that is brown. Forewing broad, slightly expanding terminally; costa uniformly curved outwards throughout; apex delicately pointed; termen oblique, convex. Ground colour brownish ochreous more vivid and somewhat tinged with yellowish brown anteriorly than posteriorly where it is somewhat browner. Costa brownish anteriorly; median fascia distinct anteriorly diffused posteriorly, rusty-brown, brown along delicately arched outwards anterior edge, dark in middle costally and dorsally; posterior portion of wing dark brown tinged with rusty costally, somewhat paler just before apex at costa. Fringes rather concolorous with posterior portion of wing, damaged. Hindwing brownish, paler anteriorly, with similar fringes. Length of forewing about 5 mm.

Female genitalia (fig. 76). Papillae anales large, broad; anapophyses posteriores long; anapophyses anteriores short; eighth tergite very broad; sterigma broad with anterior and posterior (this sculptured) lateral prominences; antrum heavily sclerotized; ductus bursae partially strongly sclerotized, membraneous anteriorly; corpus bursae large, minutely spined except for anterior third.

Type: "Tucuman, Cuidad, Argentina, 445 m, III. 1903, DINELLY RSNBG., [No.] 67906", G. Sl. 7126.

I am not sure this species is congeneric with the type species of the new genus, however, the venation shows no differences. The male genitalia unfortunately unknown.

Lorita abornana (Busck)

This species has been described from California and Mexico, so its occurrence in Brazil is very interesting. The specimens examined differ only a little from the typical ones (description compared) but there are no differences in the male and female genitalia. The specimens from Brazil are smaller than the North American ones.

Five specimens: "Obidos, Brazil, VIII [and] IX. [19]19", 1 spn.: "Santarem, VIII. [19]19" and 2 spns.: "Para, Amazons, 27. XII. 1892 [and] IV. 1892".

Cochylis argentinana sp. nov.

[Pl. XVI, fig. 8]

Labial palpus shorter than 2; median joint rather triangular; terminal joint concealed in scales. Colour of palpi ochreous-grey brown scaled above, whitish posteriorly. Head, scape of antenna and scales of several anterior

joints of flagellum whitish, rest of flagellum pale brownish. Thorax whitish, abdomen brownish grey. Forewing delicately broadening terminad; costa hardly arched outwards; apex delicately rounded; termen slightly convex. Ground colour white to white-cream; costa striped with dark grey especially anteriorly, dorsum less so; basal area sometimes tinged with ochreous, post-median area with pinkish. Median fascia broad, irregularly interrupted in middle or subcostally, more or less distinct, brownish grey, dark spots at costa medially. Posterior third of wing rusty-brown with pink hue marked with some dark spots or stripes medially. Fringes cream-grey anteriorly, brown posteriorly, rusty in apical area. Hindwing with rather short, delicately rounded apex, pale brownish anteriorly; fringes concolorous with wing middle or paler. Length of forewing about 5 mm.

Male genitalia (figs. 77, 78). Tegumen very broad; socii delicate; arms of vinculum broad. Valva elongate posteriorly, rather rounded apically, protruding, rounded and dentate ventro-posteriorly; sacculus broad anteriorly, protruding and pointed posteriorly, minutely dentate along ventral edge. Transtilla with elongate, terminating into a pair of dents median projection; juxta large. Aedeagus strong, slightly bent, strongly protruding and pointed ventro-terminally with short coecum penis; cornuti: some 15 strong and numerous small thorns as well as elongate thorned posteriorly sclerite in vesica present.

Female genitalia (fig. 79). Papillae anales proportionately small; anapophyses long; sterigma delicately sculptured and sclerotized preserved as a lamella postvaginalis only; antrum very broad, well sclerotized; ductus bursae broad, completely sclerotized, delicately thorned anteriorly, provided with elongate wedge-shaped projection medially; corpus bursae as broad as ductus bursae, completely transparent; ductus seminalis anterior.

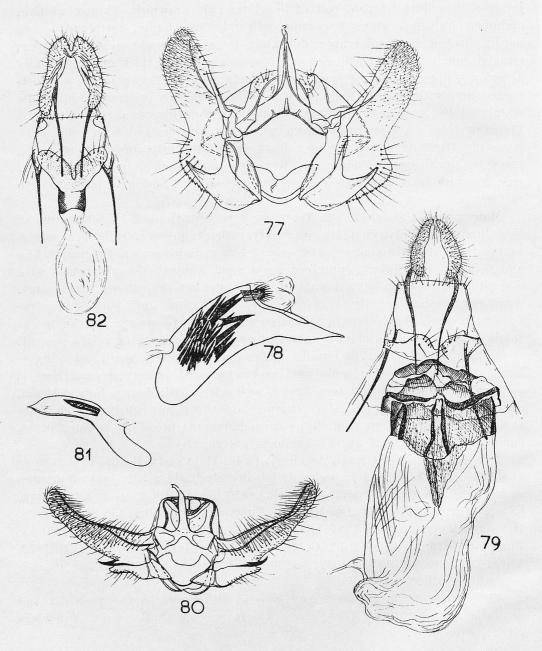
Type (male): "Alto Gracia, Argentina C. B., II. [19]34", G. Sl. 7133; typoids (4 males and 3 females): 3 specimens labelled similarly as the type, four ones as follows: "Tucuman, Cuidad, Argentina, 450 m, III. 1903, DINELLY RSNBG., [No.] 67910", G. Sl. 7127, "Los Vasquez, Tucuman, Argentina, 450 m, III. 1903, DINELLY RSNBG., [No.] 67877", G. Sl. 7128, "Goya, Corrientes, Argentina, PERRENS 1886, [No.] 68316", G. Sl. 7080, "Rio Janeiro, Brazil, XI. 1872, PRESTON, STN. coll. 1893—134, [No.] 401067", without abdomen. Two typoids in author's collection.

The species does not show any generic differences in the venation and genitalia with European *Cochylis*-species. It is very similar to *C. hybridella* (Hbn.) externally.

Cochylis unguifera sp. nov.

[Pl. XVI, figs. 9, 10]

Labial palpus about 1.5 with median joint broadening posteriorly, terminal joint protruding, ochreous orange, whitish posteriorly. Head ochreous; front whitish or cream; scape of antenna ochreous; flagellum rather darker than



Figs. 77—82. Cochylis Treit.: 77 — male genitalia of C. argentinana sp. nov., "Alto Gracia, Argentina, C, B., II. [19]34", G. Sl. 7138, typoid, 78 — aedeagus of same specimen, 79 — female genitalia of same species, "Los Vasquez, Tucuman, Argentina, 445 m, III. 1903, DINELLY RSNBG., [No.] 67877", G. Sl. 7128, 80 — male genitalia of C. unguifera sp. nov., type, 81 — aedeagus of same specimen, 82 — female genitalia of same species, "Castro, Parana, S. Brazil, Jones, 1898, [No.] 67385", G. Sl. 7117

scape; thorax pale rusty-ochreous to ochreous-cream; abdomen brownish. Forewing broadening terminad; costa hardly bent to 3/4, then arched; apex pointed; termen oblique. Ground colour ochreous to ochreous-orange. Delicate, more or less distinct rusty strigulation especially along costa, in two specimens completely atrophied; median fascia indistinct, rather vertical to costa, broadening and diffusing at dorsum, rusty or orange-brown, interrupted medially. In two typoids dark, vivid costal triangle differentiate from fascia costally and broad grey black-spotted suffusion in costal half present. This indistinct in one female, atrophied in males. White or cream-white area beyond median fascia costally, in some specimens tinged with ochreous. Rusty stripe from posterior part of costa to termen postmedially, broadened beyond costa, narrowing terminad. Fringes cream. Hindwing with apex protruding, delicately pointed, variable in colour: cream to brownish; fringes grey-cream to brownish. Length of forewing 3·5 to 5 mm.

Male genitalia (figs. 80, 81). Tegumen delicate; socii indistinct; valva long, slender with costa well developed; sacculus reaching to beyond 1/3 of ventral edge of valva, broad anteriorly, protruding and pointed posteriorly, provided with long claw-shaped directed upwards process dorso-posteriorly. Transtilla with broad but short lateral parts and long, thin median projection; juxta broad. Aedeagus long, slender, bent in middle, pointed terminally, with elongate coecum penis; cornutus strong, proportionately short, pointed.

Female genitalia (fig. 82). Papillae anales proportionately large; anapophyses long; sterigma well developed with broad lateral parts membraneously connected to anapophyses anteriores, concave in middle posteriorly; antrum subsquare, heavily sclerotized; ductus bursae very short, rather broad; corpus bursae ovate, transparent.

Type (male): "Castro, Parana, S. Brazil, Jones, 1896, [No.] 67535", G. Sl. 7118; typoids (2 males and 3 females): "Sao Paulo, S. E. Brazil, E. D. Jones, 1895", G. Sl. 7119, and 3 specimens labelled similarly as the type, one with genitalia on slide No. 7117. Two typoids in author's collection.

The specimens with dark marked median fascia somewhat differ from the pale specimens in the female genitalia, as the corpus bursae is a little more strongly sclerotized and the papillae anales are proportionately smaller.

Cochylis submissana (Zeller), comb. nov.

Conchylis submissana Zeller, 1877, Horae Soc. ent. ross, 13: 131 pl. 2 fig. 45.

Labial palpus 1.5, brownish, dark brown scaled; median joint strongly broadening posteriorly, tinged with greyish above; terminal joint short, brownish, pale greyish apically. Forewing elongate, slightly expanding terminally in posterior part; costa hardly arched outwards; apex delicately pointed; termen strongly oblique, almost straight. Ground colour yellowish grey, strongly sprinkled with dark grey and ochreous, pale in shades only. Wing base and costal spot (in 3/4) dark brown, ill-defined shades across middle of wing and

beyond costal spot towards middle of termen. Apical area ochreous. Fringes brownish grey, dark along middle line. Hindwing with apex distinctly elongate, brownish grey; fringes very long, paler than wing with ill-defined median line. Length of forewing 5.5 mm.

Male genitalia (figs. 83, 84). Tegumen broad; socii delicate, rounded apically. Valva broad anteriorly with protruding broadening beyond of middle costal portion; sacculus strong, protruding posteriorly. Aedeagus very slender, pointed apically; no cornuti in type; vesica sculptured posteriorly.

Type: "[Bogota], Zeller coll., Type", G. Sl. 4086.

Cochylis sublimis (MEYRICK), comb. nov.

Phalonia sublimis MEYRICK, 1917, Trans. ent. Soc. London, 1917: 2.

The species is very characteristic by the shape of the forewing which is slender, thin anteriorly. The female genitalia resemble those of the American group of *Cochylis*-species in the male genitalia where the valva is elongate, the transtilla resembling that of the representatives of the genus *Phalonidia* LE MARCH. and the aedeagus provided with single cornutus. This group could probably be treated as a distinct genus, but a throughout revision is needed.

Conchylis fusifera (MEYRICK), comb nov.

Phalonia fusifera Meyrick, 1928, Exot. Micr., 4: 438.

Five specimens labelled "Castro, Parana, S. Brazil, Jones, 1896" among indetermined material of the *Cochylidae*.

Male genitalia (figs. 85, 86). Tegumen in comparison with valvae delicate; socii weak. Valva large, elongate, with costa expanding submedially; sacculus well sclerotized, convex postbasally, short. Transtilla with broad bifurcate terminally median part; juxta moderate. Aedeagus rather short, strongly protruding ventro-posteriorly, thin apically; coecum penis very short; caulis medially; cornutus not longer than half of ventral edge of aedeagus.

Female unknown. The specimens examined could not be compared with the type genitalically as this lacks the abdomen.

Cochylis assector sp. nov.

[Pl. XVI, fig. 11]

Labial palpus about 1.5, brownish, more or less pale, with median joint subtriangular; terminal joint protruding. Head, antenna and thorax brownish grey to cream-grey. Forewing slightly silated posteriorly; costa hardly concave in middle, slightly bent at base and subapically; apex rather pointed; termen strongly oblique, straight. Ground colour whitish grey in type, whitish grey

with slight cream tint in one typoid, more brownish in another typoid. Delicate brownish or dark cream-grey transverse strigulation especially in anterior and terminal areas of wing. Costa delicately strigulate, termen less so. Dark brown spot obliquely from middle of dorsum terminating in middle portion of wing. Brownish suffusion in posterior portion of wing in one typoid. Fringes darker than ground colour. Hindwing with slightly elongate, delicately pointed apex, pale brownish grey throughout; fringes greyer. Length of forewing about 6 mm.

Male genitalia (figs. 87, 88). Tegumen as in the preceding species, but socii larger. Valva long, bent, curved upwards; sacculus strong y prominent post-basally. Transtilla bifurcate; juxta elliptic. Aedeagus longer than in *C. fusifera* (Meyr.) with proportionately shorter cornutus.

Female genitalia (fig. 89). Papillae anales slender; anapophyses long; sterigma with partially membraneous lateral lobes; antrum heavily sclerotized, rather elongate, delicately concave posteriorly, strongly so anteriorly in middle; ductus bursae short, membraneous posteriorly, strongly sclerotized anteriorly; ductus seminalis medially; corpus bursae elongate provided with hoop-shaped sclerite touching the sclerite of ductus bursae, and delicately dentate areas anteriorly and submedially.

Type (male): "Los Vasquez, Tucuman, Argentina, 445 m, III. 1903, DINELLY RSNBG., [No.] 67876", G. Sl. 7075. Typoids (2 males and 1 female), two labelled as the type (G. Sl. 7073 and 7069 the latter in author's collection), one with label "Goya, Corrientes, Argentina, Perrens, 1886, [No.] 68071", G. Sl. 7079.

Cochylis ? galbanea (MEYRICK), comb. nov.

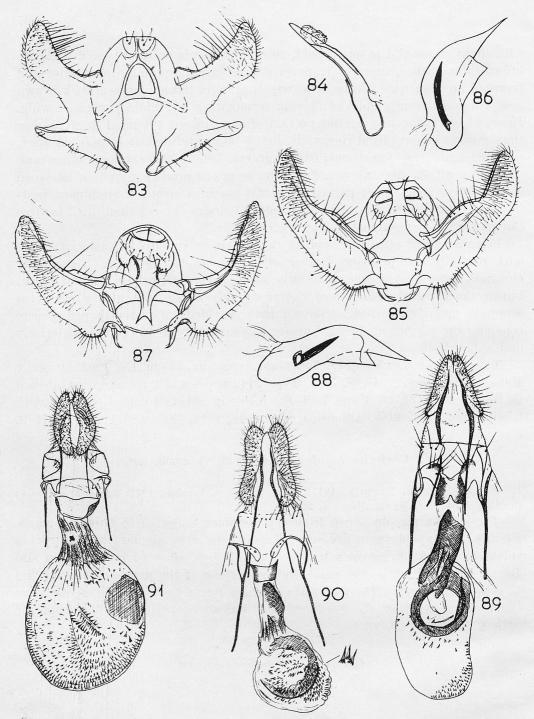
Phalonia galbanea Meyrick, 1917, Trans. ent. Soc. London, 1917: 2; Lorita galbanea; Clarke, 1964, Cat. Meyr. Micr., 4: 20 figs. 1—1b.

The species was described from the specimen collected in British Guiana. Besides the typoid there are several specimens very similar to the type in colouration and almost identical genitalically but collected in Argentina and Brazil. The genitalia of the male similar to those of the preceding species and C. olivacea (Walsm.). The material examined seems to be insufficient to solve the problem whether the Brazilian and Argentina specimens are conspecific with C. galbanea (Meyr.).

Cochylis ochraceana sp. nov.

[Pl. XVI, fig. 12]

Labial palpus longer than 2, slender, with median joint broadening terminad, ochreous-brown, rather pale. Head and antenna ochreous-brown front cream; thorax pale ochreous-brown. Forewing slightly dilated posteriorly costa almost straight apex delicately rounded termen straight, oblique. Ground colour pale ochreous brownish tinged with rusty in posterior portion of wing. Costa



Figs. 83—91. Cochylis Treit.: 83 — male genitalia of C. submissana (Zell.), type, 84 — aedeagus of same specimen, 85 — male genitalia of C. fusifera (Meyr.), "Castro, Parana, S. Brazil, Jones, 1896, [No.] 67546", G. Sl. 7068, 86 — aedeagus of same specimen, 87 — male genitalia of C. assector sp. nov., type, 88 — aedeagus of same specimen, 89 — female genitalia of same species, typoid, 90 — female genitalia of C. ochraceana sp. nov., type, 91 — female genitalia of C. olivana sp. nov., "Castro, Parana, S. Brazil, Jones, 1898", G. Sl. 7052, typoid

suffused with brownish basally, then delicately strigulate; median fascia ill-defined, brown, rusty before dorsum, interrupted before middle of wing; rusty reddish spots and cream brownish dots in apical area among venation and along termen. Fringes brownish. Hindwing narrow, elongate apically, brownish, with fringes slightly paler. Length of forewing 6 mm.

Female genitalia (fig. 90). Papillae anales elongate, rather large; anapophyses long; sterigma consisting of two slender broadening medially arms; antrum short, broad, heavily sclerotized; ductus bursae in comparison with that in remaining species of the genus in question long, provided with large, broadening anteriorly sclerite. Corpus bursae rounded, large semicircular sclerite and numerous small spines present.

Type: "Los Vasquez, Tucuman, Argentina, 445 m, III. 1903, DINELLY RSNBG., [No.] 67882", G. Sl. 7088.

This species is distinct in the coloration, somewhat resembling European Cochylidia subroseana (HAW.).

Cochylis olivana sp. nov.

Labial palpus 1.5, ochreous tinged with brownish laterally median joint subtriangular terminal joint short. Head and antenna ochreous-olive; thorax darker; abdomen brownish. Forewing not dilated posteriorly; costa tolerably straight; apex pointed; termen rather oblique, straight. Ground colour pale glossy olive-cream, more or less dark pattern brownish olive consisting of basal spot (in one typoid diffused, in another one atrophied), median fascia extending from middle of costa vertically to middle of median cell, then obliquely to before middle of dorsum, triangular subtornal spot and curved outwards fascia limiting apical area. Apex and in the type also termen delicately bordered with same colour. Fringes rather concolorous with ground colour. Hindwing as in preceding species, brownish; fringes greyish cream. Length of forewing 7 mm.

Female genitalia (fig. 91). Papillae anales rather small; anapophyses shorter than in the preceding species; antrum broad, well sclerotized, membraneously connected to anapophyses anteriores; ductus bursae short, strongly sclerotized; corpus bursae large, rounded, provided with rounded sclerite and numerous spines.

Type: "Castro, Parana, S. E. Brazil, E. D. Jones, 1892—5", G. Sl. 7051. Two typoids: "Castro, Parana, S. Brazil, Jones, 1896, [No.] 67541", G. Sl. 7052, and [No.] 67542 (not dissected, in author's collection).

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STRESZCZENIE

Praca zawiera opisy 26 nowych gatunków i jednego nowego rodzaju oraz redeskrypcje szeregu mało znanych południowoamerykańskich gatunków znajdujących się w British Museum (Natural History).

РЕЗЮМЕ

Эта работа содержит описания 26 новых видов и одного нового рода и редескрипции некоторых мало знакомых южно-американских видов, находящихся в Британском Музее.

Redaktor zeszytu: doc. dr W. Szymczakowski

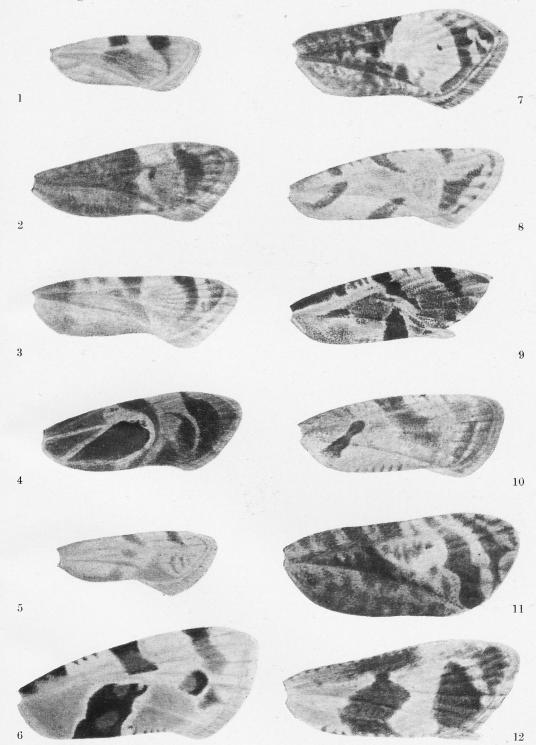
PAŃSTWOWE WYDAWNICTWO NAUKOWE — ODDZIAŁ W KRAKOWIE — 1967 Nakład 700+80 egz. — Ark. wyd. 4 — Ark. druk. 3²/₁₆+2 wkładki — Papier ilustr. kl. III 80 g 70×100 Zam. 138/67. Cena zł 19,—

DRUKARNIA UNIWERSYTETU JAGIELLOŃSKIEGO W KRAKOWIE

PLATES

Plate XV

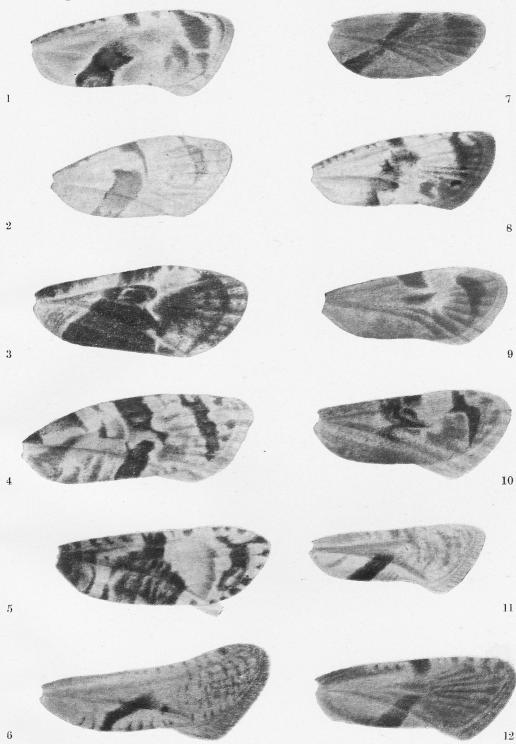
- 1. Phalonidia ochracea sp. nov.
- 2. Phalonidia walkerana sp. nov.
- 3. Phalonidia aetheria sp. nov.
- 4. Phalonidia aeraria sp. nov.
- 5. Phalonidia aculeata sp. nov.
- 6. Phalonidia assensus sp. nov.
- 7. Irazona penthinana sp. nov.
- 8. Aethes jonesi sp. nov.
- 9. Aethes austera sp. nov.
- 10. Aethes dentifera sp. nov.
- 11. Aethes annosa sp. nov.
- 12. Aethes affinis sp. nov.



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Plate XVI

- 1. Aethes agelasta sp. nov.
- 2. Aethesoides columbiana sp. nov.
- 3. Carolella hysterosiana sp. nov.
- 4. Carolella argentinae sp. nov.
- 5. Spinipogon trivius sp. nov.
- 6. Spinipogon spinifera sp. nov.
- 7. Spinipogon signata sp. nov.
- 8. Cochylis argentinana sp. nov.
- 9. Cochylis unguifera sp. nov.
- 10. Cochylis unguifera sp. nov.
- 11. Cochylis assector sp. nov.
- 12. Cochylis ochraceana sp. nov.



J. Razowski