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POLSKA AKADEMIA NAUK  
ZAKŁAD ZOOLOGII SYSTEMATYCZNEJ I DOŚWIADCZALNEJ

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# ACTA ZOOLOGICA CRACOVIENSIA

XXVII  
(Pars II)  
12—21

PAŃSTWOWE WYDAWNICTWO NAUKOWE  
WARSZAWA—KRAKÓW 1984

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Adres redakcji: Zakład Zoologii Systematycznej i Doświadczalnej Polskiej Akademii Nauk, ul. Sławkowska 17, 31-016 Kraków  
Address of the Editor: Institute of Systematic and Experimental Zoology, Polish Academy of Sciences, Sławkowska 17, 31-016 Kraków, Poland

Redaktor PWN  
Maria Kaniowa

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ISBN 83-01-05512-X  
ISSN 0065-1710

PAŃSTWOWE WYDAWNICTWO NAUKOWE — ODDZIAŁ W KRAKOWIE

Wydanie I. Nakład 800+80 egz. Ark. wyd. 27. Ark. druk. 23+16 wklejek. Papier druk. mat. kl. III, 70×100, 80 g. Oddano do składania w styczniu 1984 r. Podpisano do druku w listopadzie 1984 r. Druk ukończono w grudniu 1984 r. Zam. nr 816-K-84, R-16 Cena zł 280,—

C I E S Z Y Ń S K A      D R U K A R N I A      W Y D A W N I C Z A



Józef RAZOWSKI

*Polyorthini* (Lepidoptera, Tortricidae) in the collection of the Smithsonian Institution, Washington, D. C.

[With 43 text-figs.]

*Polyorthini* (Lepidoptera, Tortricidae) ze zbiorów Smithsonian Institution w Waszyngtonie

**Abstract.** The data on 23 Neotropical species are provided. Two genera and 15 species are described as new.

ACKNOWLEDGMENTS

I am indebted to Dr. J. F. Gates CLARKE and Dr. Don R. DAVIS, Chairman, Department of Entomology, Smithsonian Institution, for providing this valuable material for study.

The holotypes are deposited in the collection of the Smithsonian Institution, National Museum of Natural History, Washington.

*Histura cuprata* (MEYRICK)

*Peronea cuprata* MEYRICK 1917, Trans. ent. Soc. London, 1917: 14.

This species was described from British Guiana. The five specimens examined were collected in Nova Teutonia (Santa Catarina, Brazil) in May and August. Externally they differ slightly from the holotype mainly in the coloration of the distal half or the forewing, but also show slight individual variation.

Male genitalia (figs. 1, 2): Uncus long, curved, convex in distal portion ventrally; socius fairly long; gnathos with strong terminal process; transtilla complex, broad, rather weakly sclerotized, with short lateral apodemes; juxta small. Valva semiovate with slender, thornlike process situated above end of the angulation of sacculus. Aedeagus long, slender, weakly curved with minute ventral prominence terminally and with vestigial coecum penis; cornuti absent.



Female genitalia (fig. 28): Antrum fairly large, almost uniformly broad throughout, less strongly sclerotized proximally than distally; arms of sterigma delicate, lateral sacs well developed, subtriangular; seven coils of proximal half of ductus bursae present; signum a narrow transverse rod situated in ventral pocket at distal third of corpus bursae.

*Histura bicornigera* sp. nov.

Labial palpus brownish, black-brown terminally; upper part of head brownish grey mixed cream, front pale cream; thorax brownish with cream scales. Forewing 9 mm, expanding terminally with costa uniformly curved outwardly; apex short, acute; termen hardly concave postapically; ground colour cream suffused with brownish and brownish yellow; pattern indistinct except for basal blotch the posterior edge of which extends from  $\frac{1}{3}$  of costa to beyond middle of dorsum; the blotch is brown, suffused with dark grey costally, mixed with cream dorsobasally, marked with some darker transverse strigulae; some brownish spots along costa postmedially, and slender transverse yellowish-brown fascia from before apex to tornus; apical area dark grey; fringes grey, mixed with brownish at middle of termen, cream at tornus. Hindwing brownish grey with termen indistinctly concave beyond apex; fringes paler than wing.

Male genitalia (figs. 3, 4): Uncus long, somewhat broadening apically, terminated in two processes. Socius small; gnathos strong with broad terminal plate and spined, strongly broadening terminal portion of the arm. Transtilla complex, well developed, broad. Valva tapering terminally with short sacculus and strong, subtriangular process of inner surface. Aedeagus slender, long, coecum penis minute.

Holotype USNM 76718, male: „Colombiae, FASSL", G. S. 122-OBR. [AZTSOV].

Comments. Externally this species resembles *H. cuprata* but has much broader forewing and lighter coloration. Genitally distinct by bifid uncus and strong dent of the valva. The female remains unknown.

*Histura boliviana* sp. nov.

Labial palpus missing; head brownish grey; thorax similarly coloured but with olive hue and dark brown spots. Forewing 8 mm, slender, weakly expanding terminally; costa weakly curved outwardly; apex very short; termen oblique, hardly convex; ground colour pale ochreous cream, partially suffused with ochreous and spotted with brownish; pattern brown mixed with black, consisting of large basal blotch distinct posteriorly, pale basally and dorsally and median fascia terminating at dorsum and fusing with dark marking extending from disc; some three spots on costa postmedially; subterminal pattern in form of narrow fascia from costa before apex to end of termen; termen suffused with brown; fringes

brownish cream, mixed with rust at apex, blackish scaled at middle of termen. Hindwing greyish, paler basally, hardly mixed with brownish at apex; fringes concolorous with middle of wing.

Male genitalia (figs. 5, 6): Uncus slender, tapering apically, broad basally. Socius broad in basal half, with well sclerotized, slender distal portion terminating in a minutely spined dilation. Gnathos long, terminating in broad plate; transtilla complex rather short; juxta large. Valva very large, semiovate; sacculus distinctly sclerotized, marked with terminal dent. Aedeagus slender, long, armed with subterminal and terminal spines; cornutus absent.

Holotype USNM 76719, male: "Bolivia, Cochabamba, Incachaca; Tropical cloud area, 27.VIII.—5.IX.56, 2100 m, L. PENA"; G. S. 11234 (USNM).

Comments: The systematic position of this species is uncertain as the female remains unknown. In the male genitalia this species differs from the remaining representatives of *Histura* by the absence of the thornlike process of the internal surface of valva.

#### *Histurodes* gen. nov.

Type species: *Histurodes costaricana* sp. nov.

Labial palpus over 2, shape of forewing and coloration as in *Histura*. Venation: In forewing all veins separate,  $r_5$  reaching apex; in hindwing  $rr-m_1$  stalked to about  $\frac{1}{3}$ ,  $m_3 - cu_1$  on very short stalk.

Male genitalia as in *Histura* but transtilla absent; strong basal apodemes connected with one another by means of strong membrane; subquadrate, scobinate plate in anellus above end of aedeagus present. Valva with fully developed outer split; coremata with groups of long, thin and shorter, thick scales. Two cornuti in vesica.

Female genitalia with ill-defined sterigma, long antrum and sack-shaped bursa copulatrix provided with postmedian sac (c.f. p. 214) and small dorsal fingerlike evagination immediately before antrum; ductus seminalis posterior; signum absent.

Distribution: Central America.

The description is based exclusively on the type species.

#### *Histurodes costaricana* sp. nov.

Labial palpus brownish grey, darker terminally, with two or three dark brown rings; remaining parts of head brownish; thorax dirty cream, spotted indistinctly with brownish grey. Forewing 6—7 mm, somewhat expanding terminally (less so in female than in male); costa distinctly convex; apex acute; termen long, oblique, gently sinuate postapically;

ground colour cream beyond basal blotch, ochreous cream otherwise; basal blotch grey-cream, spotted with brown-grey, dark brown distally, extending from  $\frac{1}{3}$  of costa to before middle of dorsum; median fascia and costal spots almost completely atrophied; terminal pattern in form of brown-grey spots and suffusions; fringes brown-grey; large groups of erect scales mainly across middle of wing and at disc. Hindwing pale grey-brown with elongate apical portion; fringes paler.

Variation: In the paratypes the ground colour is pale, cream to ochreous-white, delicately spotted or suffused with brownish and the pattern indistinct, brownish grey to grey. In one paratype basal blotch reduced to outer fascia and the median fascia absent.

Male genitalia (figs. 7, 8): uncus slender, long, curved; socius long, drooping; arm of gnathos broadening and minutely dentate distally, terminal process hookshaped. Valva elongate-ovate; sacculus thick, hardly convex ventrally. Aedeagus delicate, slender, with small coecum penis and pair of unequally long cornuti.

Female genitalia (fig. 29): papilla analis fairly broad distally; apophyses thin, long; sterigma ill-defined; antrum long, tubular, well sclerotized, broadening postmedially. Otherwise as for the genus. Unfortunately in the old slide some parts of genitalia are difficult to interpret.

Holotype USNM 76720, male: "C. R. 2262, San Pedro de Montes de Oca, Costa Rica; From; *Persea americana* ISS., Jan. 20, 1934, Cos. H. BALLOU", G. S.: A.B. [USCK] Jan. 10, 1924; paratypes, male and female identically labelled, one with genitalia on slide 177-OBR.[AZTSOV], the other 10977.

### *Histurodes taetera* sp. nov.

Labial palpus ca. 3, brown, scaled with black; remaining parts of head and upper side of palpus brownish, concolorous with thorax. Forewing 9 mm, uniformly broad throughout; costa uniformly curved outwards, termen oblique, somewhat sinuate beyond apex; ground colour pale yellowish brown, brownish cream in basal area of wing where marked with yellow-brown spots; basal blotch strongly reduced, **preserved** in from of oblique fascia extending from  $\frac{1}{4}$  of costa to before middle of dorsum, concolorous with basal spots, mixed with dark brown towards dorsum; erect dark brown scales before tornus and smaller groups of erect brown scales in subquadrate suffusion subterminally; costal and terminal markings weak, yellow-brown; fringes pale cream-brown, brown at apex, rather cream at tornus. Hindwing pale brownish, paler basally; fringes concolorous with median area of wing.

Female genitalia (fig. 30): Antrum broad, expanded terminally, rather weakly sclerotized except for ventral edge of ostium bursae; ductus bursae as long as corpus bursae, provided with subterminal sclerite;



signum absent; position of ductus seminalis indistinctly visible in the genitalia slide.

Holotype USNM 76721, female: "Guatemala, Cerro Zunil, 4—5000 ft., CHAMPION"; G. S. 116-OBR.[AZTSOV].

Comments: The systematic position of this species is doubtful. The specimen is labelled as the cotype of *Polyortha hirsuta* WALSINGHAM.

### *Chlorortha* gen. nov.

Type species: *Chlorortha chloromonas* sp. nov.

Labial palpus over 2, broad except for basal portion; all veins of forewing separate,  $r_5$  to before apex; in hindwing  $1r-m_1$  and  $m_3-cu_1$  short stalked.

Male genitalia: Uncus simple, club-shaped; socius broad, scarcely hairy, scaled; gnathos simple; vinculum with large saccus; anellus complicated; juxta deeply incised dorsally, connected with lateral portions of transtilla; the latter well sclerotized dorsally, with distinct submedian processes directed distad and funnel-shaped lateral apodemes; valva semiovalate with fully developed external split; coremata strong.

Female genitalia: Ovipositor short; sterigma large, cupshaped, well sclerotized except for proximal portion (near antrum), fused with setose distal edge of subgenital sternite; antrum with large ventrolateral sclerite; ductus bursae long, distinctly separate from the corpus; ductus seminalis subterminal; signum absent.

Comments: This genus is monotypical. It shares some characters of the group of the genera allied to *Histura* RAZ. and *Ardeutica* MEYR.

### *Chlorortha chloromonas* sp. nov.

Labial palpus dirty cream with olive grey markings laterally and pale ferruginous terminal segment; remaining parts of head grey-green with olive hue; thorax more ochreous with grey-green tegula; abdomen brown. Forewing 10 mm, not expanded terminally; costa curved outwardly; apex rounded; termen not oblique, tolerably straight; ground colour ochreous-green with green-grey hue, densely strigulated and suffused with brown and grey; dense black strigulation along costa, concolorous dots in basal and terminal portions of wing; subterminal markings greenish; small whitish suffusion in apical area; three more or less oblique rows of erect black-brown scales grouped in short strips from dorsum of wing nad near disc; fringes dirty ochreous, marked with grey-black at apex, medially and at tornus. Hindwing brown, paler basally, venation brown; fringes brownish, ochreous-cream just before apex, with brown median line.

Variation distinct. Forewing 8—11 mm; head, thorax and ground colour more or less green, mixed with ochreous especially near termen,

diffusely spotted with dark green or brown-grey; black maculation and strigulation often ill-defined; whitish suffusion before apex occasionally absent but similar white marking present at disc or costa in some specimens. Black or brown-black suffusion or blotch at base of dorsobasal half of wing or in costal area.

Male genitalia (figs. 9, 10): Socius folding laterally; terminal process of gnathos thin; ventral edge of sacculus minutely dentate. Aedeagus broad medially, tapering distally, provided with flattened, somewhat curved terminal prominence; cornuti not found.

Female genitalia (fig. 31): Papilla analis broad; apophyses fairly long, thin. Distal edge of sterigma incised medially, incision of its ventral portion smaller; ductus bursae provided with numerous longitudinal folds and distinct granulation; distal half of corpus bursae with similar granulation, proximal part completely membranous.

Holotype USNM 76722, male: "Venezuela: Ar.[agua], Rancho Grande, 1100 m, 16—29.X.66, S.S. & W.D. DUCKWORTH"; Paratypes: 5 males and 5 females identically labelled as the holotype.

*Ardeutica parmata* sp. nov.

Labial palpus over 4, dark brown-grey, remaining parts of head rather concolorous; thorax yellow-brown with dark brown tegula. Forewing 13 mm, hardly expanded terminally; costa distinctly curved outwardly in basal third, then less so; apex short, pointed; termen indistinctly convex, oblique; large, convex distally blotch in basal third of wing, brown costally and proximally, golden-brown dorsally, with dark brown distal edge to middle breadth of wing; base of wing grey-green; remaining part of wing dark greenish grey except for costa and termen which are mixed with brownish, and pale green suffusion along basal blotch; some indistinct brown-grey spots postmedially and brown suffused venation in distal third of wing; large tufts of erect scales in dorsobasal area (longitudinal group of golden-brown scales on postcubital vein) and submedially (grey-brown, smaller transverse group); some additional but smaller tufts in middle of basal area and postmedially; fringes grey-green, brown-green basally. Hindwing brownish with paler fringes.

Male genitalia (figs. 11, 12): Uncus slender, delicately curved downwards; socius fairly large, rounded apically; gnathos arm slender, its terminal plate extremely small. Transtilla slender, convex in middle dorsally fused with dorsal, scobinate part of anellus; juxta small, broadening ventrally; saccus broad. Valva long; sacculus weakly convex ventrally. Aedeagus small with well developed, sharp tip and small but distinct coecum penis; cornutus with short, rather thick dent.

Holotype USNM 76723, male: "Costa Rica, Ojo de Agua, Rt. 2 km 75, 2 July 1967, O.S. FLINT, Jr."; G.S. 10970.

Superficially similar so *A. eupeplana* (WALS.) differing from it mainly in the shape of the aedeagus and uncus. Female remains unknown.

*Ardeutica melidora* sp. nov.

Labial palpus ca. 3, brownish cream, browner subdorsally; upper part of head brownish cream; thorax somewhat darker, tegula brown basally. Forewing 10 mm, broadest postbasally; costa distinctly convex in basal third, hardly concave medially, bent in subapical part; apex acute; termen strongly oblique, rather straight; ground colour pale brownish cream suffused with olive-grey along costa, with brownish along dorsum and with reddish medially; weak brownish spots along costa, brown dots terminally; large black costal blotch in basal third of wing present; fringes concolorous with median part of wing. Hindwing brownish; fringes brownish cream.

Male genitalia (figs. 13, 14): Uncus slender, broadened terminally; socius very large; gnathos arm slender, terminal process long. Transtilla complex with well sclerotized dorsal band broadened medially and broad, short apodemes. Juxta small. Valva large, broadened distally; **sacculus** distinct. Aedeagus very small, with well developed terminal portion and with atrophied coecum penis; cornutus small. Coremata as in fig. 15.

Holotype USNM 76724, male: "Loma del Gato, Sierra del Cobra, Oriente, Cuba, September 24—30, 1935; J. ACUNA, S. C. BRUNER, L. C. SCARAMUZZA Col. Elevation 2600 ft."; G. S. 10993.

Close to the preceding species, distinct in the coloration and shape of the uncus.

*Ardeutica tonsilis* sp. nov.

Labial palpus ca. 4, cream-ferruginous; front and vertex paler, more cream; thorax brownish cream. Forewing 10 mm, not expanded terminally; costa distinctly curved outwardly in basal part, then weakly so; apex sharp; termen strongly oblique, weakly sinuate beyond apex; ground colour pale brownish ferruginous, marked with some darker diffuse spots along costa and some small groups of erect brown scales before middle of wing; black, trapezoid blotch at  $\frac{1}{4}$  of costa present; fringes paler than ground colour, mixed with brown-grey in tornal third. Hindwing pale brownish grey, mixed with cream in basal portion; fringes paler than median part of wing.

Female genitalia (fig. 32): Papilla analis moderate; apophyses rather short, thin. Sterigma ill-defined, membranous, except for slender lateral arms connected with apophyses anteriores. Antrum sclerite short; distal half of ductus bursae broad, tapering towards antrum, with numerous



longitudinal folds and short, dentate signum (proximal portion of bursa copulatrix damaged).

Holotype USNM 76725, female: "Juan Vinas, C.[osta] R.[ica]; Collection W. SCHAUSS"; G. S. 133-OBR.[AZTSOV].

The systematic position of this species is uncertain as the male remains unknown. It resembles *A. glaucotes* (WLSM.) but is distinct mainly in the shape of the signum.

*Ardeutica eupeplana* (WALSINGHAM), comb. nov.

*Polyortha eupeplana* WALSINGHAM, 1914, *Biologia cent.-am., Lepidopt. Heterocera*, 4: 272, pl. 8 fig. 12.

This species was described from Totonicapam, Guatemala. Two examples from El Salvador, North of Metapan collected at 2300 m. in mid-May in the present collection. They differ in the pattern and coloration from the holotype.

Male: Head, thorax and ground colour of forewing brown-grey, the latter with numerous diffuse darker spots. Large green blotch from costa to before dorsum with proximal edge extending from  $\frac{1}{5}$  of costa and the distal edge from before its middle. Small green markings at base of wing and tegula. Female: Head, thorax and wing edges greyish brown with brown shades; median area of wing from base to before apex whitish cream; green markings at base of wing, tegula and similarly coloured suffusion beyond middle of costa.

Male genitalia (figs. 16, 17): Uncus slender, flattened and strongly broadened in distal half laterally; socius large; gnathos arm slender, terminal plate small. Valva very large; aedeagus proportionately small; cornutus small.

Female genitalia (fig. 33): Sterigma membranous except for slender lateral arms; antrum sclerite short; ductus bursae broadened beyond middle, provided with dorsal plateshaped signum forming a shallow, scobinate concavity in the proximal portion.

*Ardeutica dryocremna* (MEYRICK)

Two specimens: Orizaba (Mexico) and Volcan Santa Maria (Guatemala).

*Ardeutica mezion* sp. nov.

Labial palpus ca. 3, broad, brownish, brown dorso-terminally; remaining parts of head somewhat paler; thorax rather concolorous. Forewing 7 mm, broadest postmedially; costa strongly curved outwardly to middle, hardly concave medially; apex rounded, broad; termen obliquely

convex; ground colour brownish grey with violet-pink hue, suffused with leaden grey subcostally; base of wing marked with brownish spot followed by convexly oblique cream fascia extending from costa to dorsum basally; some dirty cream diffuse spots along costa divided by brown-grey spots; yellowish ochreous spots near disc, in postbasal and subapical areas; fringes paler than ground colour. Hindwing brownish; fringes brownish grey.

Male genitalia (figs. 18, 19): Uncus slender, slightly expanded posteriorly; socius long, slender, somewhat tapering in distal third. Arm of gnathos very thin, terminal plate small. Valva long, somewhat expanding distally; sacculus delicate, convex. Aedeagus with very small coecum penis; cornutus provided with distinct apical thorn. Coremata as in fig. 20.

Holotype USNM 76726, male: "Loma del Gato, Sierra del Cobre, Oriente, Cuba, September 24—30, 1935; J. ACUNA, S. C. BRUNER, L. C. SCARAMUZZA col. Elevation 2600 ft."; G.S. 10922.

This species is probably closest to *A. sphenobathra* MEYRICK, but is distinct by the shape of the forewing and socii.

#### *Ardeutica sphenobathra* (MEYRICK)

The problem of this species may be only solved by bionomic observations. Externally it is extremely variable but does not show significant genital differences. In some specimens the base of the cornutus is longer than usual but this character may be of infrasubspecific importance, and is not correlated with the geographical distribution. Only one specimen (from Venezuela) fits the lectotype in pattern and coloration. The specimens examined come from: Jamaica; Dominica: Pont Casse; Costa Rica: Tuis; Panama: Canal Zone, Chiriqui Valley, Albajuelo; Venezuela: Aragua: Rancho Grande and Brazil: Santa Catarina: Nova Teutonia. It has been collected at altitudes of 500 and 1100 m (Rancho Grande). Several generations occur yearly.

#### *Polyortha nigriguttata* (WALSINGHAM)

36 specimens from Guatemala: Purulha and Volcan Sta Maria; Costa Rica: Sixola River; Venezuela: Rancho Grande in Arague Prov. and Dominican Republic: Prov. La Estrelleta. Extremely variable. In Venezuela dominant pale grey from indistinctly marbled with dark grey occurs. In some specimens a dark grey or brown costal triangle or (and) strong transverse strigulation occur. Some specimens are greyish white with grey-black spots, two examples characterised by broad black-grey fascia extending between basal and postmedian areas of wing. Two other examples pale grey with numerous rust or ochreous rounded spots.

*Polyortha chiriquitana* (ZELLER)

25 specimens from Venezuela: Aragua: Rancho Grande collected at the altitude of 1100 m in January, May, June, August and October.

This is a very variable species. In Venezuela material a dominant pale brownish grey form, in which the ground colour of the forewing is more or less distinctly suffused with ochreous and the pattern is brownish or brown-grey, reduced to a small triangle at middle of the costa occurs. Some specimens are almost unicolorous, often dotted with brown or grey. Occasionally the pattern is darker and larger. A similarly shaped pattern occurs in a whitish grey form in which the distal half of wing is occasionally dark brownish grey. Some ochreous brownish specimens with more or less distinct brown pattern are present.

Male genitalia (figs. 21, 22): Uncus slender basally, gradually expanded terminally; socius moderate; terminal plate of gnathos slender. Aedeagus broad; coecum penis short; cornutus strong, somewhat bent beyond plateshaped base.

Female genitalia (fig. 34): Sterigma rather weakly sclerotized except for a narrow distal edge of the ventral plate; antrum sclerite broad, short; bursa copulatrix without differentiated corpus, marked with variably long, scobinate signum. Distal portion of bursa densely granulate and spined.

*Polyortha myoxa* sp. nov.

Labial palpus ca. 5, whitish grey; remaining parts of head and thorax concolorous. Forewing 10 mm, slender, not expanded terminally; costa curved outwardly at base, then indistinctly so; apex short; termen oblique, tolerably straight; ground colour pale ochreous cream suffused with white-grey basally and terminally, mixed with pale brownish medially; indistinct brownish remainders of median fascia and subapical blotch in costal area, accompanied by costal spots, marked with three black dots near mid-costa; blackish streak postbasally; fringes ochreous cream. Hindwing pale brownish mixed with cream towards base.

Variation: Some specimens more whitish or whitish grey with ochreous shade limited to median area of the forewing or completely obsolete. Two whitish grey specimens occur with black longitudinal strigulation or spots near middle of wing, in basal and terminal areas; in two other examples transverse or oblique brownish grey strigulation is developed. A black blotch at the end of costal curvature accompanied by similarly coloured spot occurs in one specimen.

Male genitalia (figs. 23, 24): Uncus and gnathos moderate; socius fairly broad; saccus long, slightly tapering terminally; valva slender; sacculus distinctly convex terminally. Aedeagus long, dentate before end ventro-laterally; long cornutus with rather distinct apical dent accompanied by small spines in vesica. Coremata as in fig. 25.



Female genitalia (fig. 35—37): Ventral portion of sterigma slightly expanded terminally, well sclerotized on distal edge; antrum sclerite large; distal portion of ductus bursae beyond lateral sclerite somewhat tapering towards antrum; signum a strong, spined plate variable in length.

Holotype USNM 76727, male: "Brazil, Nova Teutonia, Sta. Catarina, XI. 61, F. PLAUMANN"; paratypes 6 males and 5 females similarly labelled as the holotype but dated VIII and XI, collected in 1948, 1961 and 1963.

Rather similar to *chiriquitana* but less variable in coloration. In the genitalia it differs from the preceding species mainly in the shapes of the aedeagus, cornutus and signum.

*Polyortha sagax* sp. nov.

Labial palpus ca. 3, grey, scaled with whitish, remaining parts of head and thorax pale grey, the latter marked with brownish grey at base of tegula and medially. Forewing 12 mm, not expanded terminally; costa curved outwardly, more strongly so at base; apex very short; termen tolerably straight, oblique, ground colour whitish cream, densely dotted with brownish, suffused with brown in basal and part of costal portions of wing; remainder of dark brown-grey median fascia in costal area followed by refractive yellowish shade and brown spot at disc; group of yellowish erect scales at basal portion of anal vein; subtriangular brownish suffusion before termen medially; fringes concolorous with ground colour, with brownish grey divisions. Hindwing pale brownish cream, somewhat darkening on peripheries, with indistinct concavity beyond apex; fringes rather concolorous with wing.

Female genitalia (fig. 38): Ovipositor most probably long (damaged in the genitalia preparation); apophyses long, apophyses anteriores strongly broadened apically. Lateral arm of sterigma distinctly expanded towards middle; lamella antevaginalis ill-defined, with weak distal adge. Antrum sclerite proportionately small; ductus bursae ill-defined, very short; corpus bursae extremely large, densely spined distally, provided with very long signum tapering proximally.

Holotype USNM 76728, female: "Incachaca, Cochabamba, Bolivia, J. STEINBACH"; G. S. 128-OBR.[AZTSOV].

The systematic position of this species is uncertain as the male remains unknown. Most probably it belongs in the group of the species closely related to *chiriquitana*.

*Polyortha evestigana* sp. nov.

Labial palpus ca. 5, dark grey, whitish grey beneath and above, remaining parts of head and thorax whitish grey but base of tegula rust

and black. Forewing ca. 15 mm, not expanded terminally; costa curved outwardly; apex short, delicately rounded; termen oblique, hardly concave postapically; ground colour whitish marbled with grey and brownish grey, marked with some groups of erect dark brown scales accompanied by golden-green markings; brown-grey spots along costa and brownish suffusion in dorsal part of wing; costal triangle grey-black, postmedian, diffuse subcostally; large, concolorous terminal triangle mixed with rust proximally and brown suffused venation in terminal third of wing; fringes darker than ground colour with dark brown divisions. Hindwing pale brownish with undifferentiated apical portion; fringes pale brownish cream.

Female genitalia (fig. 39): Ovipositor fairly long; apophyses posteriores very long, apophyses anteriores about three times shorter; sterigma ill-defined, represented by slender lateral arms not fused medially. Antrum sclerite strong, concave dorsally; ductus seminalis from slender, prominence partially hidden in the mentioned concavity; bursa copulatrix rather short, strongly expanded proximally, with numerous thin longitudinal folds and dense minute dents; large dorsolateral, folded sclerite in distal half of bursa present.

Holotype USNM 76729, female: "El Salvador, Cerro Miramundo, 2300 m, 11-I-69, S. STEINHAUSER"; G. S. 10988.

The systematic position of this species is doubtful; most probably it is closely related to the preceding species. The male is unknown.

*Polyortha symphyla* sp. nov.

Labial palpus ca. 3, whitish, grey beyond middle; front, vertex and thorax ash-grey. Forewing ca. 8 mm, not expanded terminally; costa convex; apex very short, termen weakly oblique, straight; proximal half of wing ash-grey, limited by an indistinct convex brown-grey line; remaining area brownish grey, but costa suffused with ash-grey; weaker grey suffusion terminally; costa and part of basal third of dorsum spotted with dark grey, concolorous strigulation in terminal part of wing; fringes ash-grey with dark grey divisions. Hindwing brownish white, suffused with brownish on peripheries, especially in apical area; fringes pale brownish white.

Female genitalia (fig. 40): Sterigma as in preceding species; antrum sclerite broad, rather short; bursa copulatrix minutely spined distally, provided with very long, thin, spined signum.

Holotype USNM 76730, female: "Inacachaca, Cochabamba, Bolivia, J. STEINBACH; Collection SCHAUS"; G. S. 126-OBR.[AZTSOV].

The position of the ductus seminalis, as in the preceding species, from which *symphyla* differs mainly in the shape of the signum. The ovipositor is damaged.

*Polyortha lyncurion* RAZOWSKI

Two specimenes collected in Rancho Grande (Venezuela, Aragua) in mid-February and mit-August superficially fit the holotype of *Costarican lyncurion*.

Female genitalia (fig. 41): Ovipositor rather long; apophyses posteriores long, curved proximally; sterigma in major part membranous, scobinate, with well developed lateral arms; antrum sclerite strong, elongate; distal portion of bursa copulatrix swollen, embracing proximal half of antrum sclerite; signum long, dentate, followed by weak lateral sclerite.

*Polyortha naevifera* sp. nov.

Labial palpus ca. 3, ash-grey, whitish ventrobasally; remaining parts of head somewhat paler; thorax grey. Forewing 11 mm, slender, not expanded terminally; costa gently curved outwardly, more strongly so in basal third; apex very short, rather rounded; termen fairly oblique, indistinctly concave postapically; ground colour ash-grey, delicately strigulated and sprinkled with grey; costal grey spots postmedially and two convex lines subterminally; postbasal group of erect scales small, transverse, almost black; dark brown-grey, black marbled triangular blotch just beyond middle of costa; fringes concolorous with ground colour, spotted with dark grey basally. Hindwing with uniformly convex outer edge, pale brownish, mixed with cream towards base; fringes concolorous with middle of wing, browner at apex.

Variation: In male paratype costal triangle dark brown, mixed with rust. In the female (forewing 12 mm) ground colour strongly suffused with grey, distinctly strigulated with dark grey. Costal blotch black-grey, weak subtriangular spot beyond base of wing subdorsally.

Male genitalia (figs. 26, 27): As in *lyncurion* but with stronger, longer uncus, shorter aedeagus and much shorter terminal dent of cornutus.

Female genitalia (fig. 42): Ovipositor as in preceding species, but papilla analis longer. Sterigma similar to that in *lyncurion*; sclerite of antrum much smaller and shorter, lateral sclerite of bursa copulatrix and its swollen part much smaller, the latter almost completely reduced.

Holotype USNM 76731, male: "Venezuela: Arag.(ua), Rancho Grande, 10—21.II.69, DUCKWORTH & DIETZ"; G. S. 10986; paratypes: male and female from same locality, the male collected at the altitude of 1100 16—23.X.66 by S.S. & W.D. DUCKWORTH.

This and two former species form together with *P. magnifica* WAL-SINGHAM and *P. clarkeana* sp. nov. a group distinct by the shape of the sacculus. The differences among the males are very small. This spe-



cies differs from *magnifica* and *lyncurion* mainly in a very short terminal dent of the cornutus. The differences between the two latter species are in the proportions between the length of the aedeagus and entire length of the cornutus. In *magnifica* the valva is very long. The male of *clarkeana* remains unknown.

*Polyortha clarkeana* sp. nov.

Labial palpus as in preceding species, grey, front paler; thorax dark grey. Forewing 11 mm, not expanded terminally; costa curved outwardly; termen weakly oblique, straight; wing whitish grey with distinct pink shine, densely spotted with dark brown-grey; fringes concolorous with ground colour with some darker divisions, brown-grey at tornus. Hindwing broader than in *naevifera*, without differentiated apical portion, pale brownish white basally, brownish apically; fringes pale brownish.

Variation: The paratype forewing is much darker than in holotype, densely suffused with grey and dotted with black, with golden-green reflections and brownish suffusion at costa submedially.

Female genitalia (fig. 43) as in *lyncurion* but with somewhat shorter signum and antrum sclerite and with very short base of ductus semina-  
lis.

Holotype USNM 76732, female: "Argentina, 800 m, Tucumán, Ciudad Universitaria, 17.II.59, J.F.G. CLARKE", G. S. 10976; paratype, female, identically labelled.

*Polyortha viridescens* (MEYRICK)

Two specimens collected in Brazil, 2 in Nova Teutonia (Santa Catarina) and one in Pelotas (Rio Grande do Sul).

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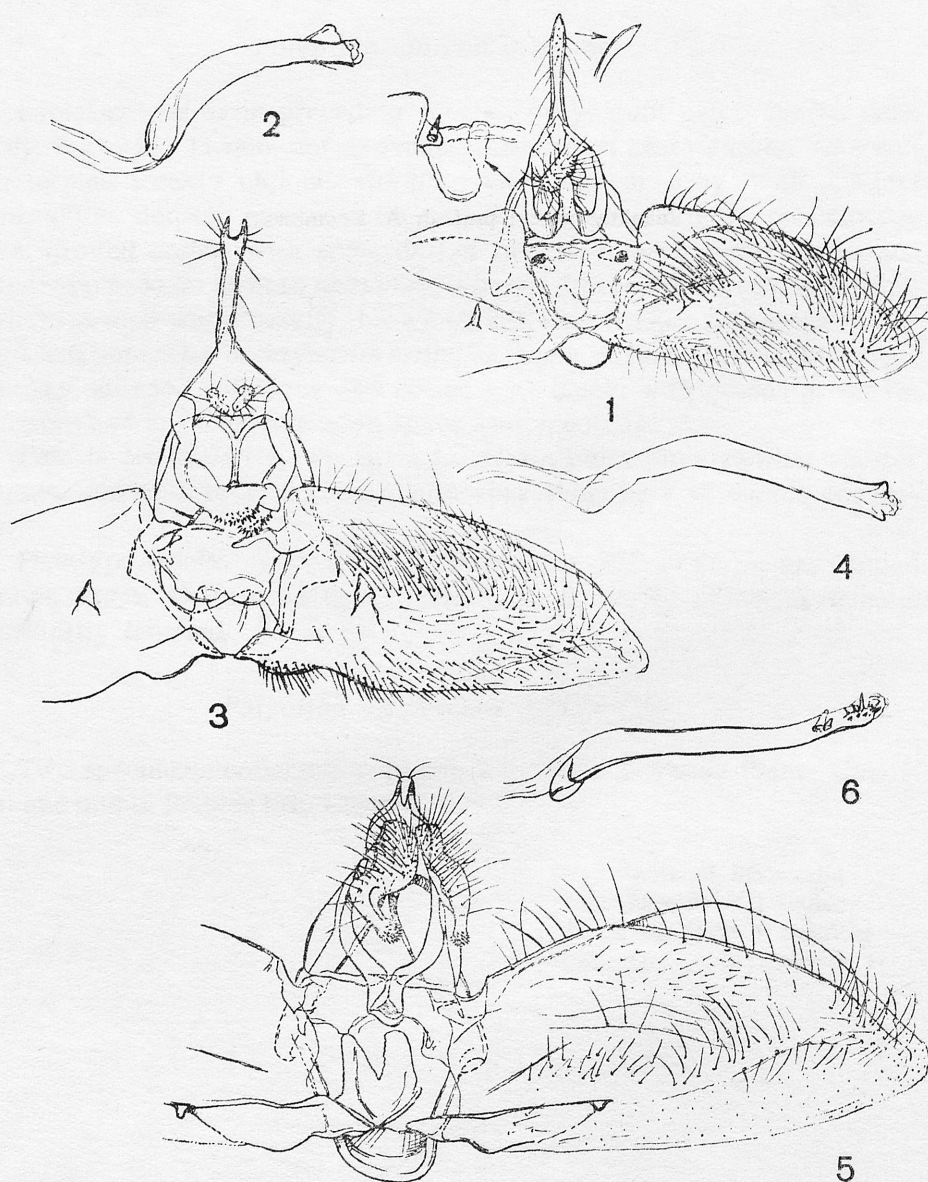
REFERENCE

- CLARKE J. F. G. 1958. Catalogue of the type specimens of *Microlepidoptera* in the British Museum (Natural History) described by Edward MEYRICK. London, 3 (*Tortricidae*, *Olethreutidae*, *Noctuidae*).

## STRESZCZENIE

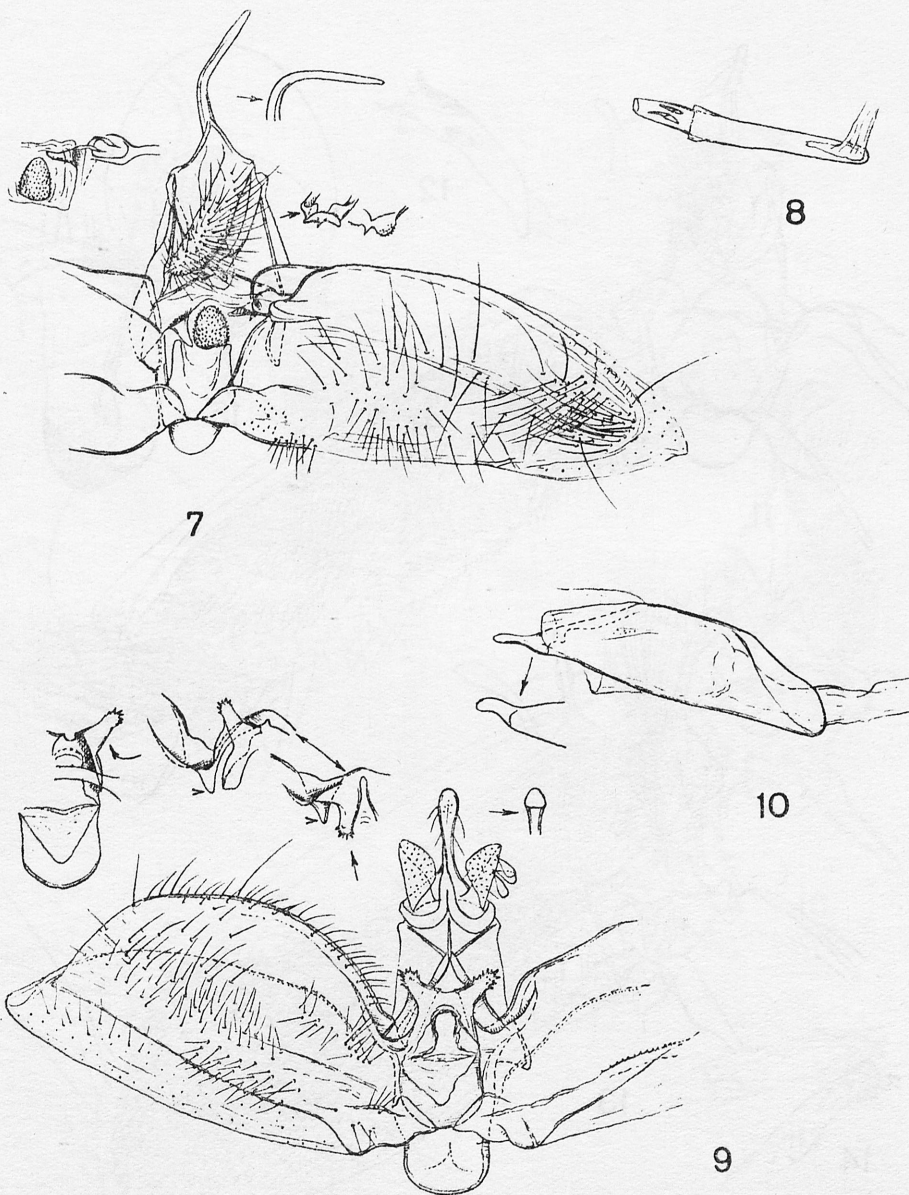
Praca zawiera dane o 23 neotropikalnych gatunkach *Polyorthini*, z których 15 zostało opisanych jako nowe. Ponadto opisano 2 nowe rodzaje.

Redaktor pracy: prof. dr A. Krzanowski

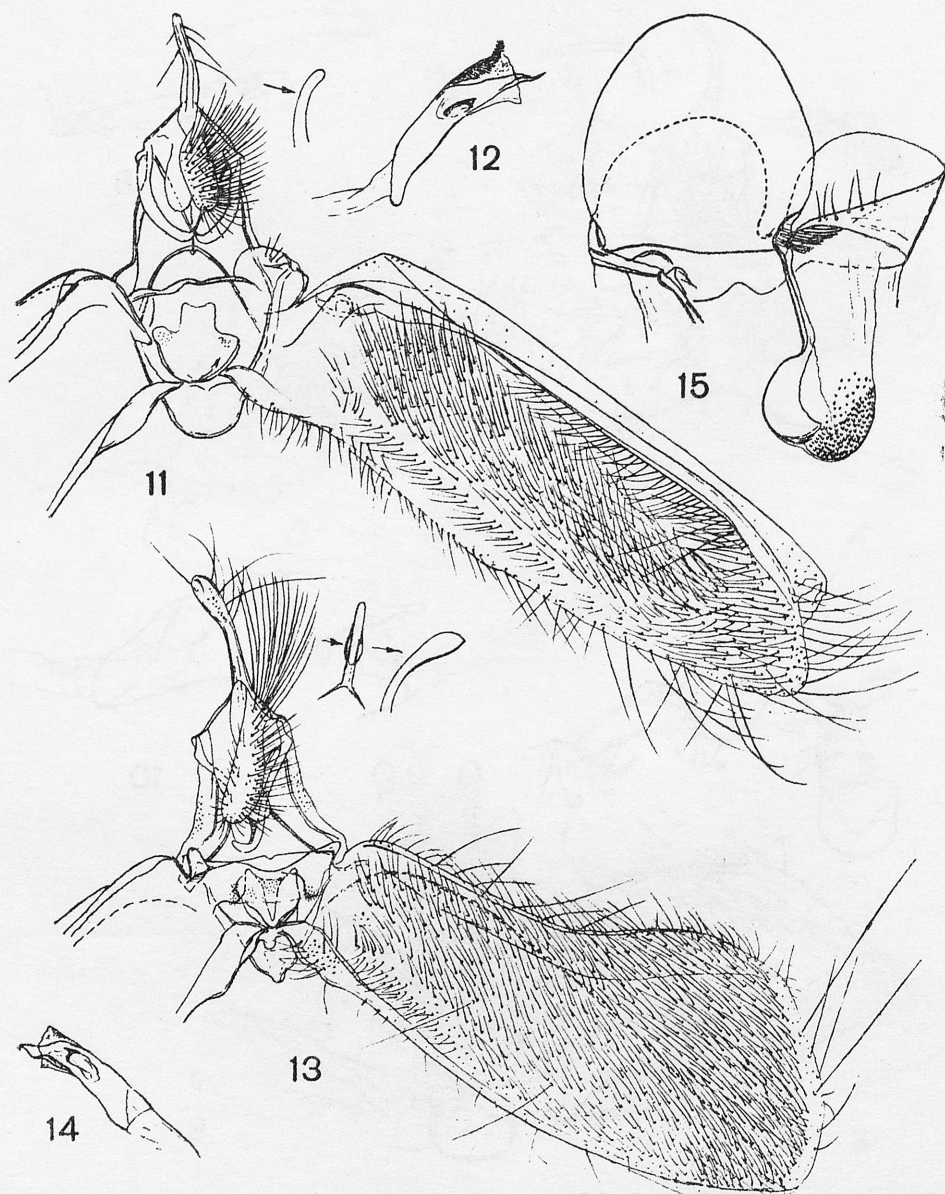


Figs. 1—6. Male genitalia of *Histura* RAZ.: 1 — *H. cuprata* (MEYR.), Nova Teutonia, G. S. 10981, 2 — aedeagus of same specimen, 3 — *H. bicornigera* sp. nov., holotype, 4 — aedeagus of same specimen, 5 — *H. boliviana* sp. nov., holotype, 6 — aedeagus of same specimen

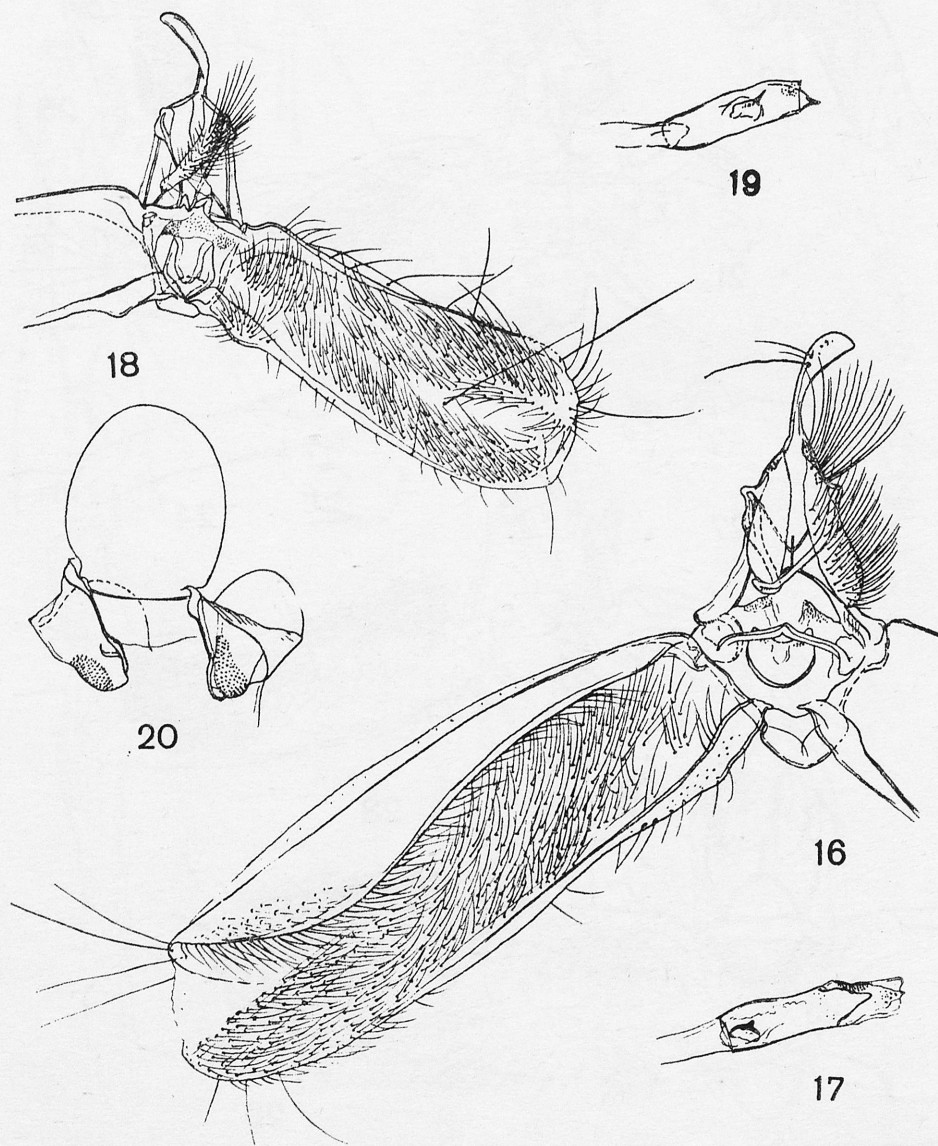




Figs. 7—10. Male genitalia: 7 — *Histurodes costaricana* sp. nov., paratype, G. S. 10977, 8 — aedeagus of same specimen, 9 — *Chlorortha chloromonas* sp. nov., paratype, G. S. 10984, 10 — aedeagus of same specimen

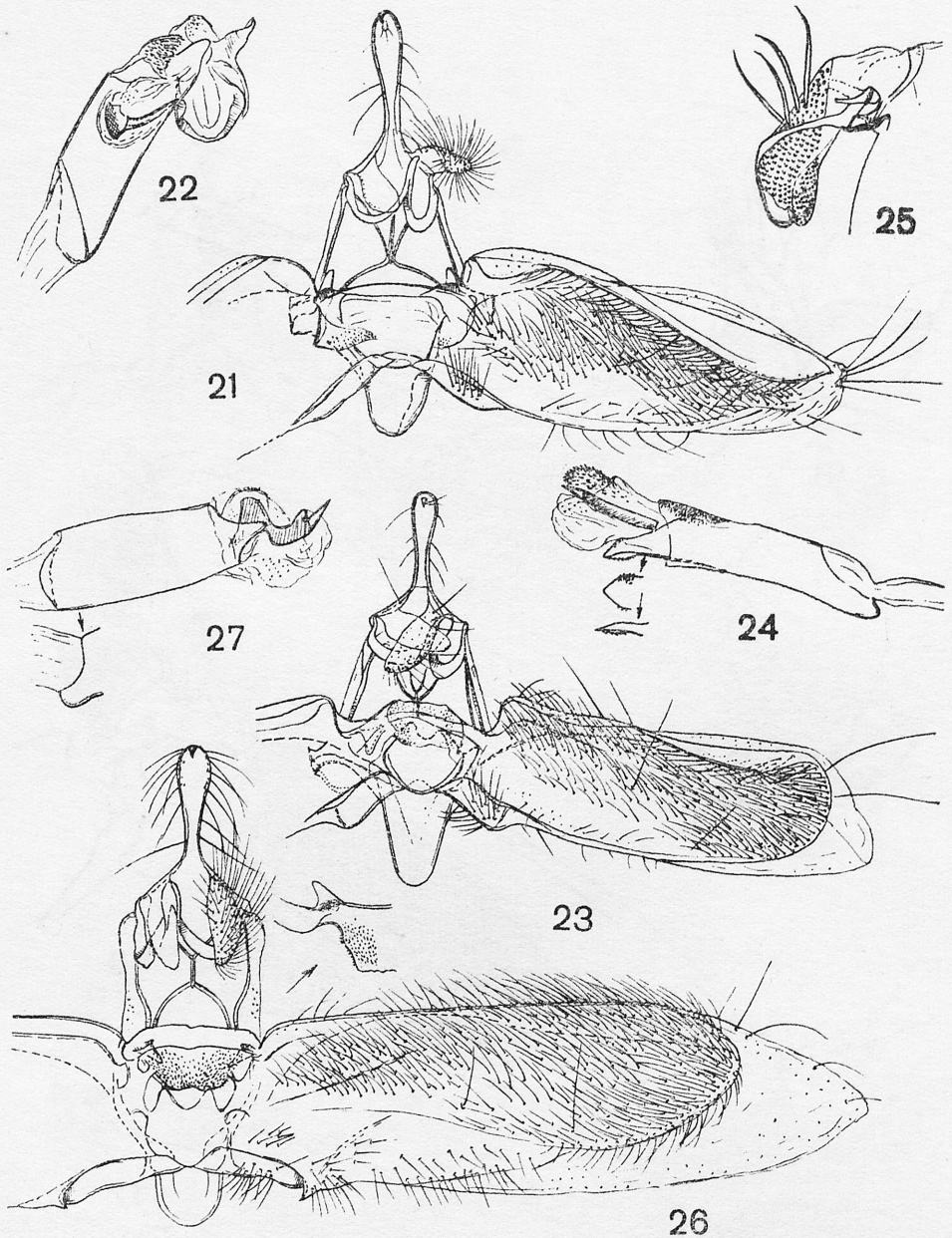


Figs. 11—15. Male genitalia of *Ardeutica* MEYR.: 11 — *A. parmata* sp. nov., holotype, 12 — aedeagus of same specimen, 13 — *A. melidoria* sp. nov., holotype, 14 — aedeagus of same specimen, 15 — coremata of same specimen

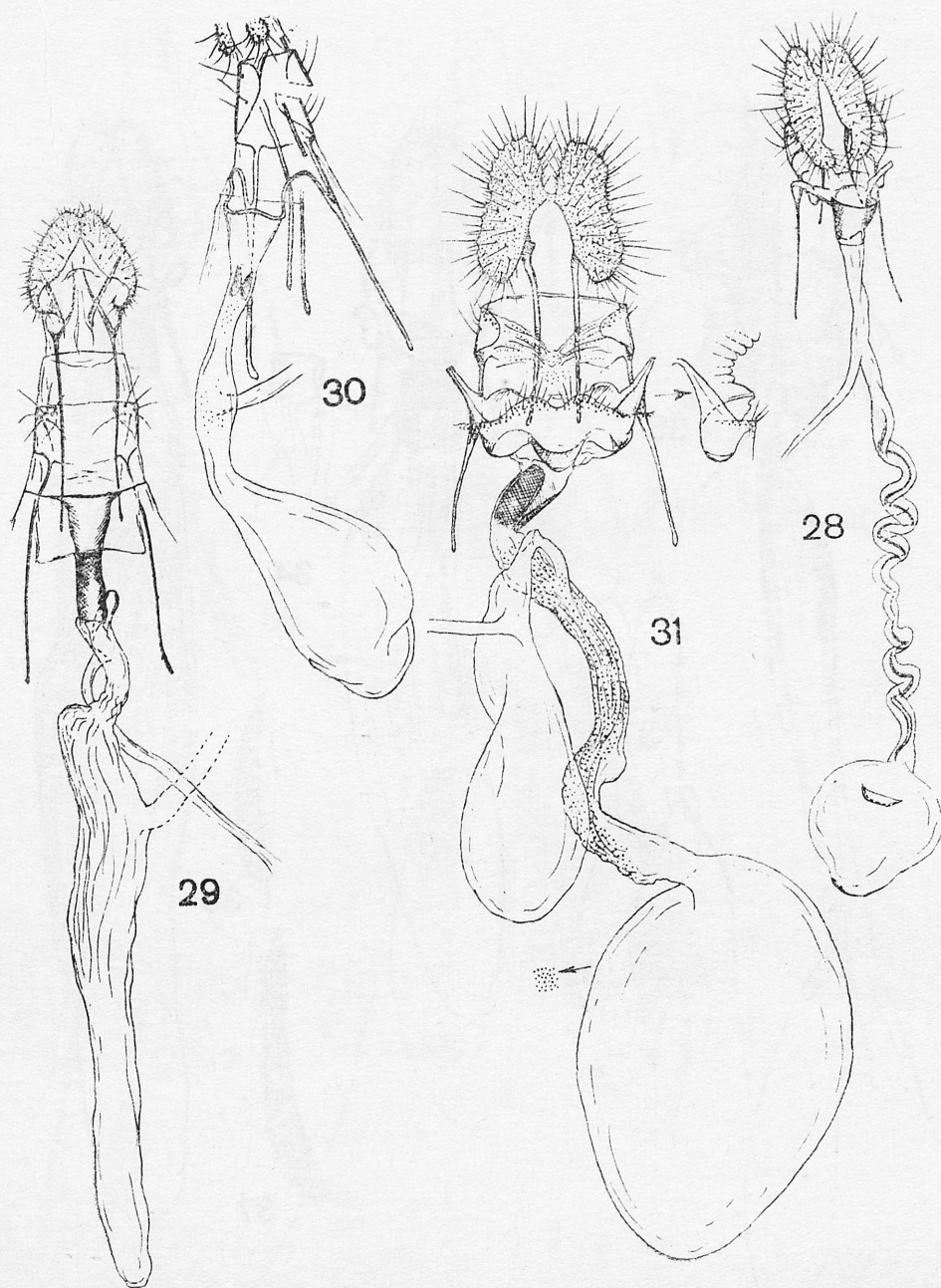


Figs. 16—20. Male genitalia of *Ardeutica* MEYR.: 16 — *A. eupeplana* (WALSM.), El Salvador, 17 — aedeagus of same specimen, 18 — *A. mezion* sp. nov., holotype, 19 — aedeagus of same specimen, 20 — coremata of same specimen

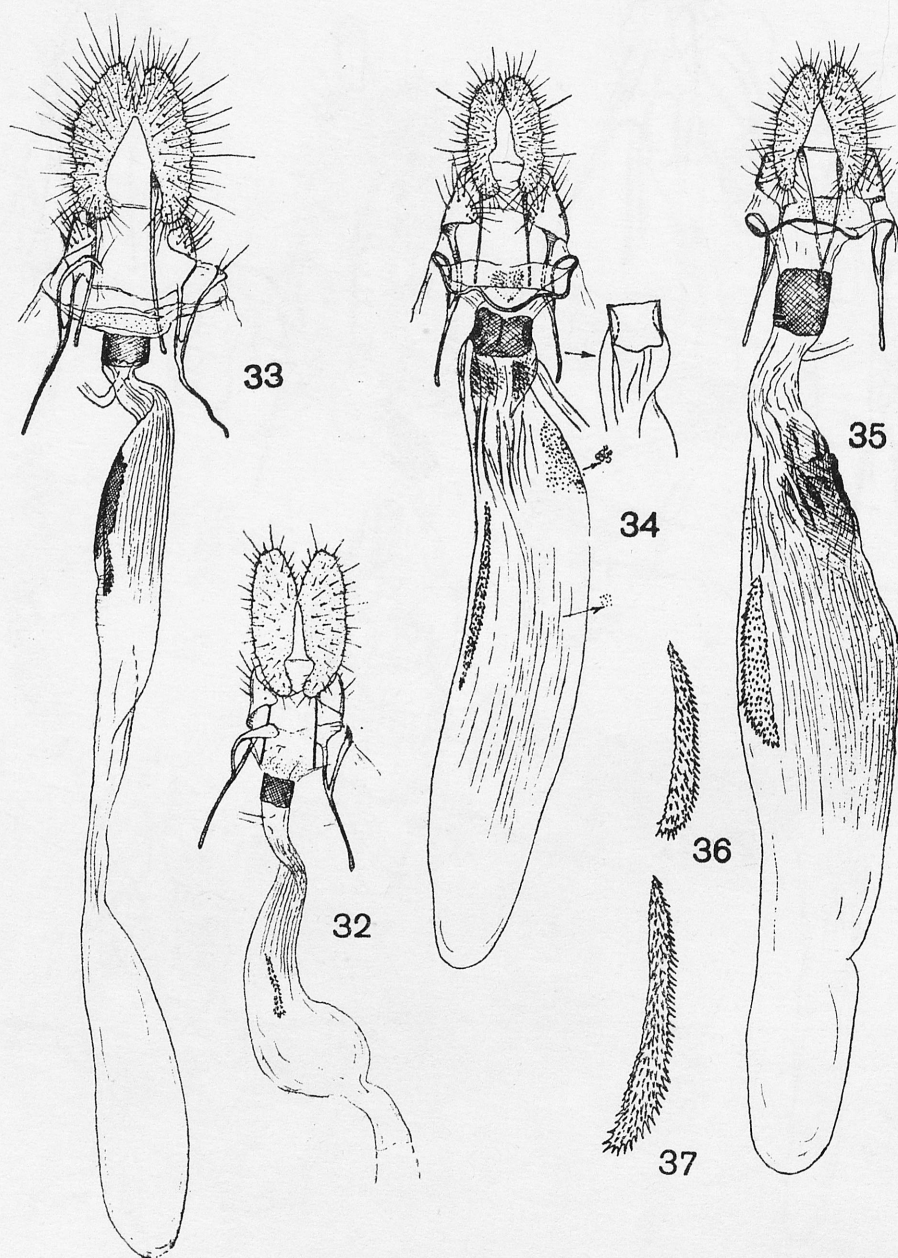




Figs. 21—27. Male genitalia of *Polyortha* DOGN.: 21 — *P. chiriuitana* (ZELL.), Aragua, Venezuela, 22 — aedeagus of same specimen, 23 — *P. myoxa* sp. nov., paratype G. S. 10987, 24 — aedeagus of same specimen, 25 — part of corema of same specimen, 26 — *P. naevifera* sp. nov., holotype, 27 — aedeagus of same specimen

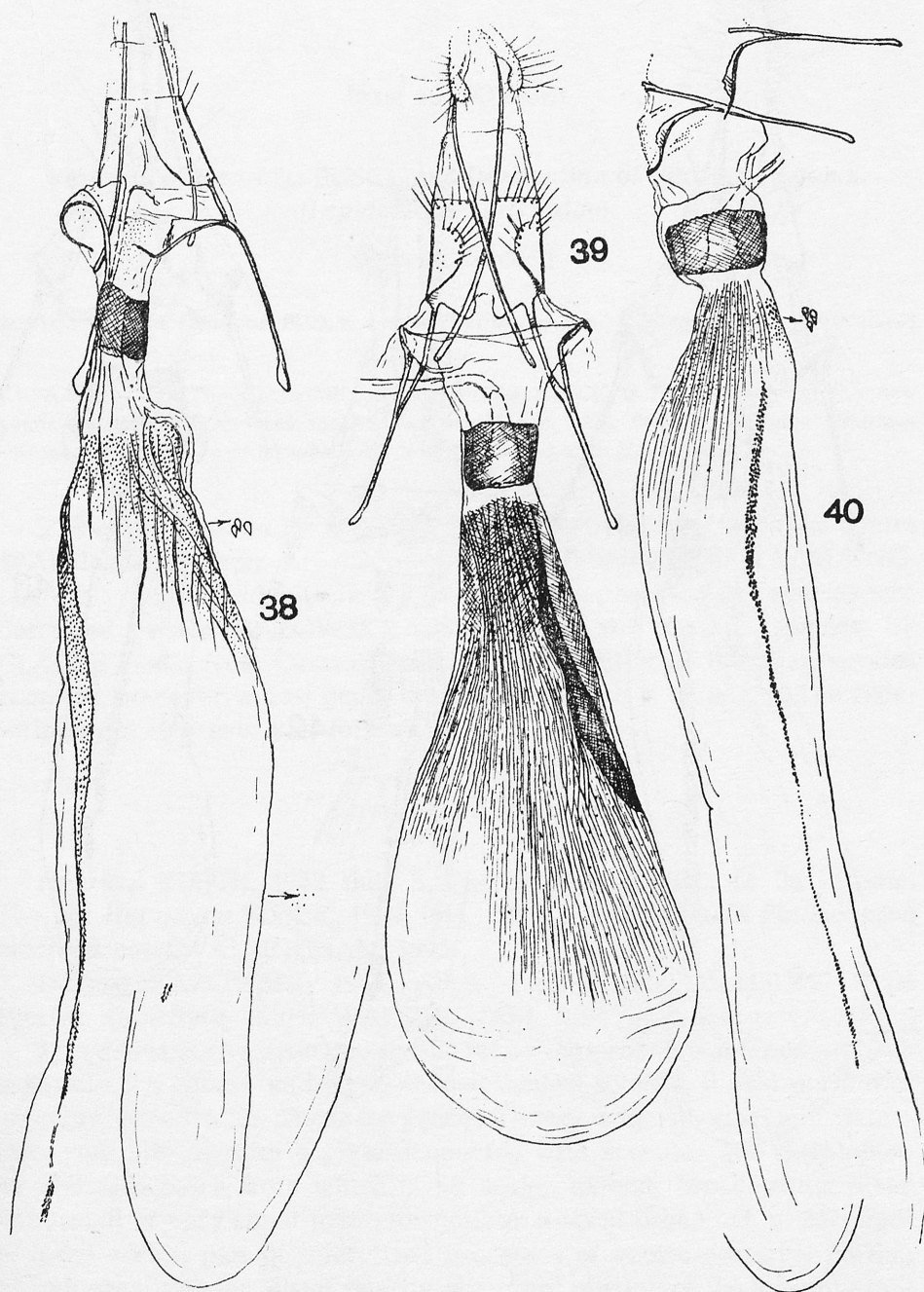


Figs. 28—31. Female genitalia: 28 — *Histura cuprata* (MEYR.), Nova Teutonia, Brazil,  
 29 — *Histurodes costaricana* sp. nov., paratype, 30 — *H. taetera*, sp. nov., holotype,  
 31 — *Chlorortha chloromonas* sp. nov., paratype, G. S. 10985

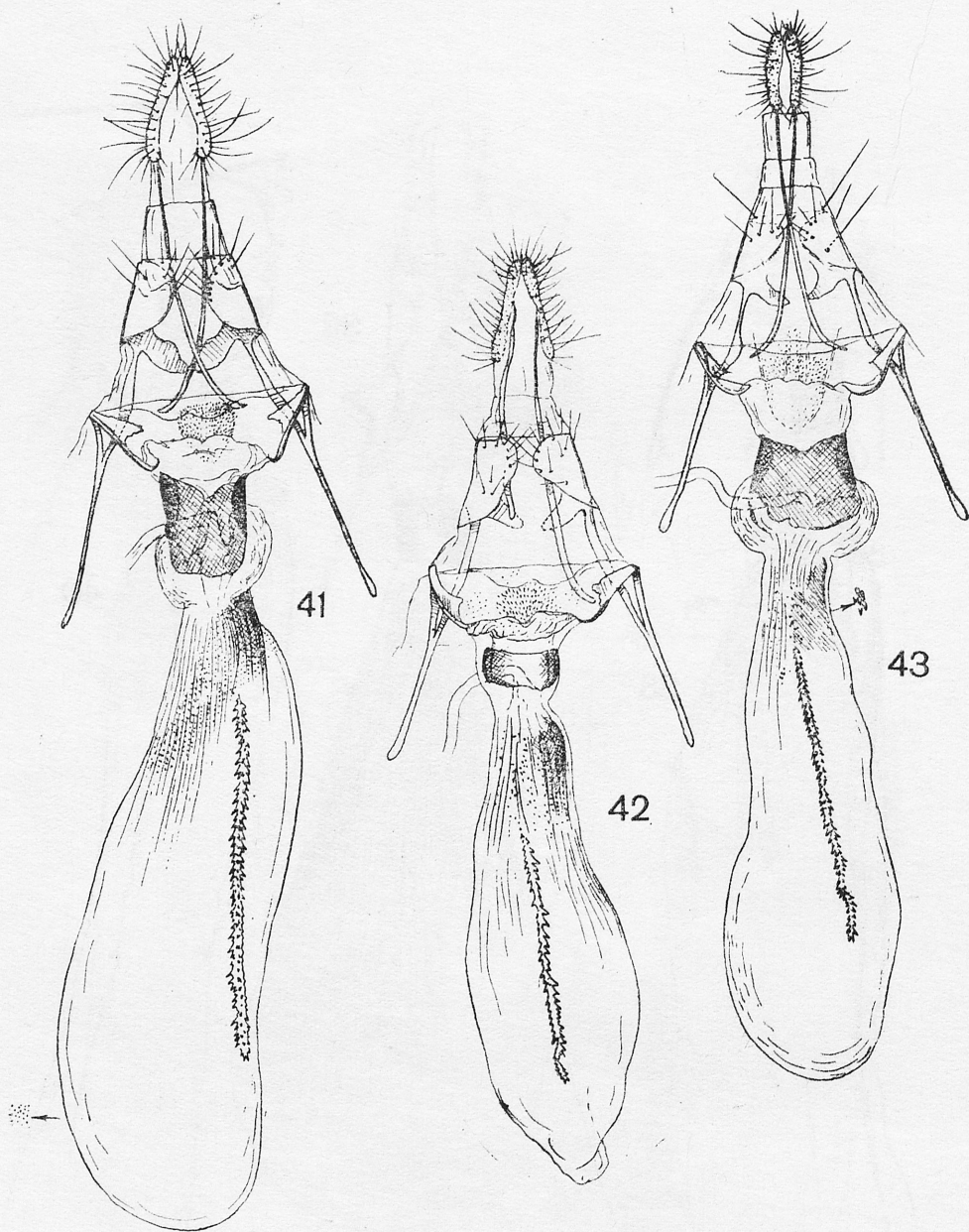


Figs. 32—37. Female genitalia of *Ardeutica* MEYR. and *Polyortha* DOGN.: 32 — *A. tonsilis* sp. nov., holotype, 33 — *A. eupeplana* WALSM., 34 — *Polyortha chiriquitana* (ZELL.), Aragua, Venezuela, G. S. 10975, 35 — *P. myoxa* sp. nov., paratype, G. S. 131-Obr., 36 — signum of paratype of same species, 37 — same, another paratype





Figs. 38—40. Female genitalia of *Polyortha* DOGN.: 38 — *P. sagax* sp. nov., holotype, 39 — *P. evestigata* sp. nov., holotype, 40 — *P. symphyla* sp. nov., holotype



Figs. 41—43. Female genitalia of *Polyortha* DOGN.: 41 — *P. lyncurion* RAZ., Venezuela, Aragua, 42 — *P. naeviëra* sp. nov., paratype, *P. clarkeana* sp. nov., paratype