POLSKA AKADEMIA NAUK INSTYTUT ZOOLOGICZNY, ODDZIAŁ W KRAKOWIE

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 V

Kraków, 30 VI 1960

Nr 3

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Studies on the Crambidae. Part XXV. Notes on Some Species of the Genus Argyria HBN.

Материалы к познанию семейства Crambidae (Lepidoptera) Часть XXV. О некоторых видах рода Argyria HBN.

Materiały do znajomości Crambidae. Część XXV. Uwagi o niektórych gatunkach rodzaju Argyria HBN.

[Pl. VIII—XVI]

Argyria opposita Zell.

[Pl. VIII, fig. 1, 2, Pl. XI, fig. 1, pl. XVI, fig. 1]

Argyria opposita Zeller, 1877, Horae Ent. Ross. 13: 64.

Three Zeller's syntypes, one male and two females, before me. They belong to the collection of the Zoological Museum of the Humboldt University in Berlin. I designate the male specimen as the lectotype; it bears the following labels: "Coll. Staudinger", "Origin", "Typus", "Opposita Z.", "Chiriqui". The description of that specimen as given below.

Antenna uniformly grey, serrate. Labial palpus grey brown, lightened from below. Frons rounded, white, smooth. Vertex brown, scales erected. Thorax white. Length of the fore wing

1

6,5 mm., maximal width 3,0 mm. Fore wing silvery white, distinctly glossy. Pattern very indistinct; medial fascia marked only as two ochreous yellow spots: one at costa and the other at the dorsum; a triangular ochreous yellow spot on costa at alar apex with a fine white, oblique line running from it to termen. Alar apex acute. Termen bordered with dark ochreous brown. Fringes of termen white slightly glossy. Under surface of the fore wing a little darkened greyish. Hind wing snow white; fringes concolorous.

The two females are labelled as follows: "Coll. STAUDINGER", "Origin.", "Typus", "Argyria opposita Z.", "Chiriqui, RIBBE". They are somewhat larger than the male. Length of the fore wing 7,5 mm., maximal width 3,3 mm. Pattern of the fore wing in the females a little less distinct than in the male specimen.

Male genital armature. Uncus simple, broad basally, strongly tapering in a sharply acute point. Hairs of uncus of medium length. Gnathos ring-like, a long, narrow process rounded terminally at its end. Valva of a complicated armature, consisting of three lobes: the basal lobe is in the form of a heavily sclerotized, dagger-like, long, straight, slender, rather pointed spine; the second lobe is lightly sclerotized and bifurcated into two parts: the first of them is short, broad and rounded, the second one is long, narrow, somewhat broadened in its terminal half; the third lobe of the valva is lightly sclerotized, narrowed basally, rounded terminally. Several short hairs and several very long ones at the base of the second and third lobe of the valva. The third lobe of the valva poorly haired. Sacculus not differentiated. Two strongly haired projections at the base of the valva. Juxta-plate proportionately narrow, at the end concave with two produced, strongly acute corners. Aedeagus nearly straight, narrow, moderately long. A group of numerous extremely minute cornuti (in the form of granules) in vesica.

Female genitalia. Lamella subgenitalis very broad; gonapopophyses anteriores in the form of small projections; gonapophyses posteriores normally developed; ostium bursae curved backwards, heavily sclerotized, in the form of a cup tapering basalwards. Ductus bursae lightly sclerotized; a lightly marked

longitudinal ribbing at the ostium bursae. Bursa copulatrix elongate. No signum present on the bursa copulatrix.

Hampson in 1895 sank erroneously Argyria insons Feld. as a synonim of the species under consideration. However, after the examination of the genitalia of the type of the former (coll. British Museum (Nat. Hist.), London) I have found that the two species are obviously distinct from one another. The designated type of Argyria opposita Zell. in the collection of the British Museum (Nat. Hist.) is not authentic type, as not published in Zeller's original description. Besides, the mentioned specimen is not conspecific with the species under consideration and belongs obviously to A. insons Feld. as the study of its genital armature has shown.

Argyria insons FELD.

[Pl. VIII, fig. 3, pl. XII, fig. 1, 2, pl. XVI, fig. 2]

 $Argyria\ insons$ Felder, 1879, Reis. Nov. pl. 137, f. 21. $Argyria\ opposita$ auct.

This species comes very near A. opposita Zell. externally, however, it is perfectly distinct from it by its male genital armature, as well as female genitalia.

As mentioned above, I have examined the type (male) of this species existing in the collection of the British Museum (Nat. Hist.) in London.

Antenna glossy, grey brown above, brown below, serrate in the male and setaceous in the female. Labial palpus ochreous yellow, whitish lightened from below. Maxillar palpus ochreous yellow. Patagia snow white, darkened with ochreous in the middle of thorax. Tegulae snow white. Thorax brown ochreous. Length of the fore wing in the male about 7,5 mm., that in the female about 9,2 mm.; the maximal width of it in the male 2,8 mm., that in the female 3,5 mm.; expansion in the male 15,5 mm., that in the female 18 mm. Costa in the male delicately arched, in the female nearly straight. Alar apex rather acute. Termen slightly oblique. The ground colour of the fore wing

snow white, glossy. Pattern rather distinct. Medial fascia distinct, ochreous yellow, triangularly broadened on costa, slightly broken below costa and at the vein M, broadened on dorsum. Costa very narrowly bordered with ochreous. Apical triangle ochreous yellow, very distinct, cut by an oblique fine white line, running from costa to termen. Termen bordered with brown. Several brown scales dispersed on medial fascia. Fringes of the termen glossy, yellowish, darkened brown at their bases. Under surface of the fore wing glossy, not darkened, only costa and medial fascia tinged with a yellow hue; fringes yellow. Hind wing glossy, snow white. Several very indistinct, small terminal dots on the ends of the veins. Fringes concolorous with the ground. Under surface of the hind wing glossy, white.

Male genital armature. Uncus broad, bifurcated terminally into two short, pointed tips. Hair of a usual type. Gnathos shorter than the uncus, slightly curved, thick, narrowed terminally, slightly pointed. Valva: costal process pointed obliquely backwards, it is narrow, heavily sclerotized, tapering and curved slightly hook-like terminally, on either side provided with a transparent, poorly haired membrane. A membraneous. narrowing, long process from the exterior side of the basal process. Cucullus long, lightly sclerotized, not differentiated. hairs not numerous, rather long. Sacculus arched, not differentiated, poorly haired, hairs very short. A fold provided with a group of long hairs dorsally at the base of the valva. Juxtaplate with a basal narrowing, somewhat narrowed terminally. broadely cut; the corners slightly produced, strongly acute. Aedeagus distinctly curved, somewhat broadened basally. Three distinct cornuti, the third one is the largest of them. Coremata consisting of a group of numerous very long and thin hairs and three long, strongly curved scales. Two of them are equally thin throughout and the third one is broader and dilated terminally. In one specimen I have found only two thin scales. In that specimen the costal process of the valva is straight, the lightly sclerotized process shorter than in the typical specimens, juxta-plate without a narrowing, aedeagus is less curved, the third cornutus lacking. I believe, that there is a variability of genitalia.

Female genitalia. Labia similar as in A. opposita Zell., lamella subgenitalis also similar to that in that species, however, its edges are more rolled than in A. opposita Zell. Ostium bursae lightly sclerotized, with a longitudinal fine ribbing. The curved bag occurring in the preceding species, is lacking in A. insons Feld. Ductus bursae lightly sclerotized, longer than in A. opposita Zell. Bursa copulatrix transparent, oval. Signum absent.

Material examined: Type- male (coll. British Museum (Nat. Hist.); a male from Zeller's coll. bearing the label "Type" of Argyria opposita Zell.; 1 male and 4 females from Costa Rica (coll. Institute of Zoology P. A. S., Warszawa); 4 males and 1 female from Guiana (coll. Zoological Museum of the Humboldt University in Berlin).

Argyria hannemanni sp. n. — male

[Pl. VIII, fig. 4, pl. XI, fig. 2]

The new species is closely allied to the two preceding ones however, it is very distinct by its male genital armature.

Ocelli fully developed. Proboscis normally developed. Antenna serrate, greyish glossy from above, brown from below. Labial palpus brown yellowish; medial joint with a dark brown terminal ring. Maxillar palpus dirty whitish yellowish basally, farther on brown, white terminally. Frons rounded, smooth, distinctly convex, white. Vertex covered with erected, ochreous brown scales. Patagia snow white with an ochreous yellow medial stripe. Tegulae snow white. Thorax ochreous brown. Length of the fore wing 7,5 mm., its maximal width 3,3 mm., expansion 16 mm. Costa arcuate, faintly bordered with yellowish. Fore wing silvery white, glossy. Medial fascia marked as ochreous brownish spots situated at costa and dorsum, and a grey brown shadow between these spots. A typical triangular brown ochreous spot on costa at alar apex cut by an oblique, fine white line running from costa to termen. Alar apex acute, apical area white. Termen distinctly bordered with brown. Fringes of the termen pale brown, glossy, darkened at their bases. Under surface of the fore wing distinctly glossy, whitish, tinged with brownish yellowish. Hind wing snow white, glossy. Several dark brown, faint dots on the veins at the termen. Fringes concolorous with the ground of the wing. Under surface of the hind wing glossy, unicolorous white. Several distinct, dark terminal dots present.

Male genital armature. The shape of uncus rather similar to that in A. opposita Zell., distinct from it only by the absence of two haired basal projections occurring in that species. The terminal part of gnathos somewhat shorter than in A. opposita ZELL.; two projections at the base of the terminal part of gnathos. Basal process of the valva of a different shape than in A. opposita Zell.: it is short, broad, faintly curved hooklike ventrad, tapering terminally into a sharply pointed tip. The transparent bifurcated lobe, occurring in A. opposita Zell. is absent in the new species. Cucullus narrow, slightly narrowing posteriorly, lightly sclerotized, provided with several long hairs. The hairs on apex of cucullus distinctly shorter than the basal ones. A haired projection, a fine haired fold and a group of hairs between the projection and the fold at the base of the valva. Juxta-plate broadening terminally, with a medial list. The latter is bifurcated terminally and closes a triangle. Juxta-plate provided with two heavily sclerotized arms, lacking in A. opposita Zell. These arms are distinctly curved basally and tapering terminally into sharply pointed tips. Aedeagus slender, its ventral part concave. One distinct strongly arched cornutus and a group of very numerous, extremely minute granules at the end of the vesica. Coremata in the form of a group of very long and thin hairs appearing on a fold at the base of the vinculum. The broad, long scales occurring in A. insons Feld., absent in the new species.

This species is named for Dr. H. J. HANNEMANN of the Zoological Museum of the Humboldt University in Berlin.

Holotype bears the following labels: "1905. 5. Bolivia, STGR.". One male paratypoid is labelled: "1903. 4. Bolivia, STGR.". Both the holotype and paratypoid belong to the collection of the Zoological Institute of the Polish Academy of Science in Warszawa.

Argyria heringi sp. n. — female [Pl. IX, fig. 1, pl. XVI, fig. 3]

Similarly as the two preceding species, it comes externally rather near to A. opposite Zell., however, perfectly distinct from it by the female genitalia.

Ocelli and proboscis well developed. Antenna setaceous, greyish brownish. Labial palpus yellow, middle joint brown terminally from above. Maxillar palpus dirty creamy basally, farther on dark brown, and ochreous brown terminally. Front rather distinctly protruding before the eye, rounded, smooth, ochreous brown, being white in the preceding new species. Vertex covered with erected ochreous brown scales. Patagia snow white, ochreous brown in the middle of thorax. Tegulae snow white. Thorax brownish. The length of the fore wing 8,5 mm., its maximal width 3,5 mm., expansion 17,5 mm. Costa slightly arcuate, apex acute, termen oblique. The ground colour of the fore wing snow white, glossy. Pattern very slightly marked, being rather distinct in the preceding species. Costa extremely faintly bordered with yellowish. Medial fascia marked as two small ochreous spots: one on costa and the other on dorsum. Between these two spots, the ground of the wing delicately tinged with a greyish hue. Termen narrowly bordered with brown. Apical triangle ochreous brown, cut with an oblique, fine, white line running from costa to termen. Fringes of the termen glossy, greyish. No terminal dots present.

Female genitalia. Labia rather large, a heavily sclerotized, hairless area in the terminal part of them. Lamella subgenitalis in the form of a broad ring opening dorsally. Gonapophyses posteriores very short. Ostium bursae broad, of a complicated armature, consisting of lightly sclerotized folds provided with numerous extremely minute spines. Ductus bursae short, lightly sclerotized, narrowed at bursa copulatrix. The latter lightly sclerotized, strongly elongated, broadening backwards, four times as long as the ductus bursae. No signum present.

Holotype and one paratypoid labelled: "1897, Guyana, Demerasa, WATK.", and "1897, Demerasa, WATK." are in the

96

collection of the Zoological Institute of the Polish Academy of Science in Warszawa.

The new species is named for Prof. Dr. M. E. Hering of the Zoological Museum of the Humboldt University in Berlin.

Argyria pontiella ZELL.

[Pl. IX, fig. 2]

Argyria pontiella Zeller, 1877, Horae Ent. Ross. 13: 61, pl. i, fig. 24. Argyria divisella auct. p. part.

Argyria pontiella Zeller had been described by Zeller from a single female specimen which contains the Zoological Museum of the Humboldt University in Berlin. It bears the following labels: "Coll. STAUDINGER", "Chririqui, RIBBE", "spec. Pontiella Z.", "Origin.", "Divisella WALK.", "Typus". Hampson in 1895 erroneously sank this species as the synonym of A. divisella Walk. The type of Zeller's A. pontiella Zell. unfortunately lacks the abdomen. However, Hampson's opinion has been based on Zeller's male specimen designated erroneously as the type of A. pontiella ZELL. That specimen is not the authentic type, as the true type is, as mentioned, in the collection of the Zoological Museum of the Humboldt University in Berlin. The former has not been mentioned in the Zeller's original description of A. pontiella Zell. and is not conspecific with that species, agreeing rather with Walker's A. divisella WALK.

The description of the Zeller's type as here given. Antenna greyish. Labial palpus brownish. Frons rounded, smooth, snow white. Vertex and patagia ochreous brown. Tegulae snow white. Length of the fore wing 8,3 mm., its maximal width 3,2 mm. Costa very faintly arcuate, nearly straight, apex acute, termen slightly oblique, faintly convex, extremely delicately concave below the apex. The ground colour of the fore wing glossy, snow white. Pattern ochreous, consisting of a distinct medial fascia and an apical triangle cut by an oblique white line running from costa to termen. Termen bordered with ochreous. Fringes light brownish at their bases, white at their

ends. Hind wings slightly glossy, snow white, fringes concolorous. Under surface of the wings glossy, snow white, fringes of the fore wing being yellowish.

Argyria furvicornis Zell. [Pl. IX, fig. 3, pl. XV, fig. 2]

Argyria furvicornis Zeller, 1877, Horae Ent. Ross. 13: 68.

Zeller's type before me. It is a male without a locality, labelled: "Typus", "Coll. Staudinger", "Patria ignota" (coll. Zoological Museum of the Humboldt University in Berlin).

Ocelli well developed. Antenna brown. Frons rounded, very slightly protruding before the eye, smooth, snow white. Vertex snow white, scales erected. Labial palpus brown exteriorly, white interiorly. Maxillar palpus brown basally, white terminally. Patagia white laterally, brownish in the middle. Tegulae white. Thorax white at sides, with a longitudinal brown stripe in its middle. Length of the fore wing 8 mm., its maximal width 3,3 mm. Costa nearly straight, apex rounded, termen gently convex, oblique. Fore wing uniformly snow white, glossy. Several dark terminal streaks on the termen; fringes brown. Hind wing slightly glossy, white, tinged delicately with a grey yellowish hue in the apical area. Fringes light yellowish grey. Under surface of the fore wing distinctly darkened, that of the hind wing whitish.

Male genital armature. Uncus very broad, concave medially, hairs stout. Gnathos in the form of a narrow ring with a terminal process. The last is short, pointed, provided with numerous minute thorns. Valvae unfortunately damaged, the basal part of them not differentiated, strongly haired. At the base of the juxta-plate a pair of short projections covered with fairly long hairs. Juxta-plate very heavily sclerotized in the form of a long, strongly curved, rather pointed hook on a stout base. Aedeagus short, straight, rather broad, delicately tapered posteriorly, broadly cut terminally. Two groups of distinct thin cornuti. The first group not numerous, and the other very numerous appearing at the end of aedeagus.

Judging by the male genital armature, the species under consideration is closely related to the North American Argyria nivalis (Drury). In the latter species uncus is also very broad and juxta-plate has a rather similar structure as in A. furvicornis Zell. However, both species differ greatly from one another, as in A. nivalis (Drury) uncus is terminated with a strong spine, the hook of juxta-plate is broader than in A. furvicornis Zell., the hairs at the base of juxta-plate are very long; aedeagus in A. nivalis (Drury) twice as long as in the species under consideration, several cornuti are distinctly larger than the remaining ones, while in A. furvicornis Zell. all the cornuti are of more or less equal size.

Argyria mesodonta Zell. [Pl. X, fig. 3, pl. XIII, fig. 1]

Argyria mesodonta Zeller, 1877, Horae Ent. Ross. 13: 62.

One of two Zeller's syntypes before me. I designate it as the lectotype. It bears the following labels: "Chanchamayo, Thamm", "Coll. Staudinger" (coll. Zoological Museum of the Humboldt University in Berlin).

Antenna and head of the above mentioned specimen are, unfortunately, rather damaged. Vertex white. Labial palpus at sides brown exteriorly, white interiorly; the joints darkened apically. Length of the fore wing 11 mm., its maximal width 4,3 mm. Costa faintly, but distinctly arched, apex moderately acute, termen oblique, nearly straight. The ground of the fore wing snow white, glossy. Costa widely bordered with a red ochreous stripe. The latter cut obliquely before the apical triangle. Apical area white. A triangular, dark spot in the middle of costa. One distinct dark dot at two-fifths of dorsum. Termen bordered distinctly with red ochreous. This bordering is wavy interiorly, in the narrowings there appear distinct dark marginal dots. Fringes of the termen uniformly brownish. The under surface of the fore wing distinctly darkened. Hind wing slightly glossy, white; several dark marginal dots. Fringes concolorous with the ground of the wing. Under surface concolorous with the upper one. Venation typical for the genus Argyria HBN. Fore legs brown, middle legs and the posterior ones light, tarsus brown with a single terminal, white ring.

Male genital armature. Uncus strongly curved ventrad, tapering into a distinctly pointed tip; hair poor. Gnathos narrow basally, its terminal part being broad, tapering into a rather rounded tip; several dorsal very short setae. Tegumen strongly narrowing ventrad, its ventral edge with a list-like strengthening. Valva with a strong costal process consisting of two lobes. The first of them lightly sclerotized, membraneous, ovate, the other one heavily sclerotized, curved dorsad, tapering into a pointed tip. Cucullus gently rounded, provided with numerous rather short hairs and several very long ones. Costa slightly list-like thickened, provided with several rather short hairs. Sacculus not differentiated. Juxta-plate widely notched basally, strongly tapering into two distinct, heavily sclerotized tips. Two small projections before the tips of juxta-plate. Aedeagus distinctly shorter than the whole genital armature. gently arched, rather narrow. One distinct, straight, tapering cornutus present.

Argyria mesodonta submesodonta ssp. n. — male

[Pl. X, fig. 4, pl. XIII, fig. 2]

The new subspecies comes very near externally to the preceding one, it is, however, rather distinct from it by the male genital armature.

Ocelli and proboscis well developed. Antenna yellowish, ringed creamy, serrate below. Labial palpi three times as long as the diameter of eye; they are slender, middle joint as long as the apical one; the colour of the palpus ochreous with a few dark brown patches at sides exteriorly and white interiorly. The frons is rounded, smooth, distinctly protruding before the eye, white yellowish. Vertex covered with erected ochreous scales, several white ones dispersed among them. Patagia snow white with two lateral longitudinal, dark brown stripes. Tegulae snow white, a single brown, small spot at the base of the wing. Scales on the thorax damaged. Length of the fore wing 9,5 mm.,

its maximal width 4,3 mm., expansion 21,5 mm. Costa arched. apex rather pointed, termen oblique, very gently curved. The ground colour of the fore wing is snow white, glossy. The pattern ochreous brown. Costa widely bordered by a dark stripe bound with the apical triangle. The light line running from costa to termen and cutting the apical triangle in the new species is nearly reduced. The costal stripe midway from base of the wing to apex widened in a spot which is broad basally, narrowing and rounded. Apical area white. Two groups of dark scales on dorsum of the right fore wing: the first group at one third of dorsum and the other one situated just a little before the inner angle. Two single dark brown scales above the dorsum. Termen bordered with an ochreous brown stripe, wavy interiorly. A row of dark terminal dots lying in the narrowings of the above mentioned dark stripe on termen. The fringes of termen glossy. light brown, delicately darkened at their bases. The underside of the fore wing strongly glossy, rather darkened with brown. Hind wing glossy, creamy, a row of dark terminal dots. The underside of the hind wing glossy, rather concolorous with the upperside, the row of terminal dots distinct. Almost all the legs damaged. One of the posterior legs whitish exteriorly, and white interiorly, tarsalia brownish, whitish terminally.

Male genital armature. In general it is of a rather similar structure as in the preceding species. Uncus terminally less curved, the thin tip shorter than in A. mesodonta Zell. Gnathos similar to that in A. mesodonta Zell. The heavily sclerotized hook-like costal process of the valva more widened than in the previous species. A small haired projection between the costal process and the base of the valva. Sacculus not differentiated, only with a small haired projection midway from its base. Sacculus and the ventral portion of the cucullus covered with very short hairs. Cucullus with a longitudinal fold provided with hairs of various length and few very long ones, as in A. mesodonta Zell. Juxta-plate rather similar as in the preceding species, distinct from it by the simple apex. A heavily sclerotized list running from apex on both sides of the terminal part of juxta-plate. Aedeagus curved basally, strongly narrowed terminally. No cornutus present in the aedeagus.

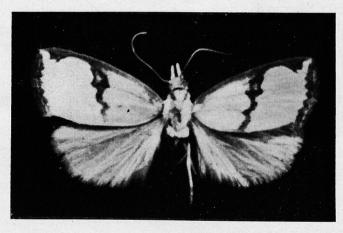
The holotype is labelled: "1903. 4. Bolivia, STGR." (coll. Zoological Institute of the Polish Academy of Science, Warszawa).

Argyria mezozonalis HMPS.

Argyria mezozonalis Hampson, 1919, Ann. Mag. Nat. Hist. ser. ix, 3: 445.

This species is closely related to the two previous ones, being however, easy distinguishable by its pattern of the fore wing which somewhat resembles that of A. croceivittella WALK.

Ocelli and proboscis well developed. Venation typical for the genus Argyria Hbn. R_1 in the fore wing free. Antenna uniformly light brownish, serrate below (in male). Labial



Argyria mezozonalis Hmps. Holotype. Peru, La Orova. Male.

palpus brownish mixed with whitish. The frons is rounded, smooth, protruding before the eye for one quarter of the diameter of the latter. The colour of the frons is white; a medial dividing longitudinal, gentle, yellowish stripe, and a brown ochreous spot lying medially in the upper part of frons. Vertex covered with erected white sclaes. Patagia white, with a longitudinal, brown ochreous stripe in the middle. That stripe runs on thorax. The latter white at sides. Tegulae snow white. Length of the fore wing 9 mm., its maximal width 4 mm., expansion 19,5 mm.

Costa somewhat less curved than in A. mesodonta Zell.. the apex rather acute, termen faintly oblique, more curved than in the former species. The ground colour of the fore wing is glossy snow white. The pattern vellow ochreous tinged with brown ochreous at places. Costa widely bordered with brown ochreous stripe fusing with the apical triangle. Apical area white. The chief difference between this species and the two preceding ones is in the presence of a distinct medial fascia in the species under consideration and the absence of it in A. mesodonta Zell. and A. submesodonta sp. n. Because of that fascia A. mezozonalis HMPS, comes rather near to A. croceivittella Walk. However, in the latter species medial fascia is broadened distinctly on dorsum and runs widely on it, while in the species under consideration the dorsal half of the medial fascia is distinctly narrowed. The colour of the medial fascia is ochreous and brown ochreous. In the two preceding species the medial fascia consisting only of a costal and a dorsal spot. Termen bordered, similarly as in the previous species, with a wavy yellow ochreous stripe, containing a row of dark marginal dots. The costal stripe faintly projected at the base of the wing. The underside of the fore wing glossy golden brownish. Hind wing similar as in the preceding species, glossy creamy; the fringes concolorous. Several distinct dark marginal dots. Underside of the hind wing rather concolorous with the upperside, the row of terminal dots being distinctly marked. The fore leg: femur and tibia pale yellowish creamy, tarsus brown. The middle and hind leg: femur and tibia creamy, tarsus brown with slightly visible ligth ringes at the end of each joint.

Male genital armature. In general similar to that in the two preceding species and A. croceivittella Walk. The terminal part of gnathos narrower than in the former species. Costal process of valva similar as in A. submesodonta sp. n., the lightly sclerotized part of it proportionately somewhat shorter than in that species. Juxta without a small beak characteristic for the preceding species, only with a thickening. The thickening list slightly developed. Aedeagus curved basally, strongly tapering into a pointed tip. No cornutus present in the aedeagus.

Examined material: the type — male — labelled: "Platytes mezozonalis HMPS.", "La Oroya S. E. Peru 3100 ft. Jan. 06,

OCKENDEN", "Type H. T.", Slide Nr 5645 (Blesz.) B. M. (coll. British Museum (Nat. Hist.), London); one male specimen: "1903. 4, Bolivia, Stgr" (coll. Zoological Institute of the Polish Academy of Science, Warszawa).

Argyria sordipes Zell.

[Pl. X, fig. 1, 2, pl. XV, fig. 3, pl. XVI, fig. 4]

Argyria sordipes Zeller, 1877, Horae Ent. Ross. 13: 67.

The species has been described by Zeller from one male and two female specimens taken in Buenos Aires. Two of these, one male and one female, before me. I designate as the lectotype the male bearing the following labels: "Typus", "Origin.", "Coll. Staudinger", "Crambus nivalis Drury", "Argyria sordipes". The female is labelled as follows: "Typus", "Origin.", "Coll. Staudinger", Buenos Aires".

Ocelli present. Proboscium well developed. Antenna uniformly light brownish, distinctly serrate below in the male, setaceous in the female. Labial palpus vellowish; maxillar palpus yellowish, white apically. The frons is smooth, pure white, rounded. Vertex covered with erected white scales. Patagia, thorax and tegulae pure white. Length of the fore wing in the male 9 mm., that in the female 9,5 mm.; the width in the male 9 mm., that in the female 3,8 mm. Costa in the male very slightly arched, in the female being straight, gently curved only at the very base of the wing. The apex rounded in the male, acute in the female. Fore wing in the male distinctly expanding posteriorly, that in the female evenly broad throughout. Termen faintly oblique, somewhat arched in the male, straight in the female. The ground colour of the fore wing is glossy, silvery white without any trace of pattern, only a row of distinct terminal short black streaks present on the termen. The fringes of the termen strongly glossy, uniformly silvery white. The underside of the fore wing darkened with grey. The hind wing slightly glossy, uniformly silvery white, fringes concolorous. The underside of the hind wing white.

Male genital armature. Uncus broad basally with haired edges, terminal part tapering, the tip acuminate. Hairs of

medium length. Gnathos: the basal part ring-shaped, the terminal one in the form of a long, slender rod, rounded apically. Costal process of the valva strongly developed in the form of a long, curved, slender, heavily sclerotized, tapering into a sharply acute point. The costal process reaches nearly to the apex of cucullus. Sacculus not differentiated, a group of hairs of medium length on the inner side of it. Cucullus lightly sclerotized, distinctly tapering into a rather acute tip, hairs rather long. Aedeagus long, straight basally, farther on strongly curved; a group of numerous minute granules at the apex. No cornuti present in the aedeagus.

Female genitalia. Labia wide, gonapophyses posteriores of a size typical for *Argyria Hen.*; lamella subgenitalis wide, gonapophyses anteriores very short; ostium bursae as wide as the ductus bursae, heavily sclerotized, linked with lamella subgenitalis with a lightly sclerotized transparent membrane. Ductus bursae lightly sclerotized, as long as bursa copulatrix. The latter ovate, lightly sclerotized; signum absent.

Argyria simplex Zell. [Pl. IX, fig. 4, pl. XVI, fig. 5]

Argyria simplex Zeller, 1877, Horae Ent. Ross. 13: 70. Crambus inclaralis Walker, Shibuya (non Crambus inclaralis Walker, 1863) p. part., 1928, J. Fac. Agr. Hokk. Imp. Univ., Sapporo, 21: 135.

Zeller's type before me. It is a female labelled: "Argyria simplex", "Typus", "Origin.", "Coll. Staudinger", "Japan" (coll. Zoological Museum of the Humboldt University, Berlin).

Shibuya in 1928 in his paper "On the Japanese Crambidae" writes (p. 123): "1. Argyria simplex Zell. I had an opportunity of examining, through the kindness of Dr. Hering of the Zoological Museum in Berlin, the type of the species, and so far as my observations go, the species seems to be identical with Crambus inclaralis Wlk., therefore, I have in this paper stated A. simplex Zell. as the synonym of Walker's species". However, after the dissection of the genitalia of Zeller's type of A. simplex Zell. and several specimens of Crambus inclaralis Wlk., including the type (coll. British Museum (Nat. Hist.), London), from Japan and Eastern Asia, I stated that considering

A. simplex Zell. as a synonym of Crambus inclaratis Walk. has been quite erroneous. A. simplex Zell. is perfectly distinct from Crambus inclaratis Walk. by its genitalia and venation of the fore wing, and is not congeneric with that species. Unfortunately the male of the species under consideration is not as yet known.

There are two female specimens in the collection of the British Museum (Nat. Hist.) in London identified as A. simplex Zell. One of them bears the label "Type". This "type" is, however, wrongly designated, as it had not been mentioned in Zeller's original description of A. simplex Zell. Those females had been published by Zeller as belonging to A. simplex Zell. in one of his next papers "Columbische Chiloniden, Crambiden und Phyciden" in 1881. However, after the examining of the genitalia of one of those females I have stated they present undoubtedly a perfectly distinct species. That will be described in some future time.

Ocelli present. The antennae unfortunately damaged. Labial palpus white, yellowish laterally. The frons white, rounded, smooth. Vertex covered with erected, white scales. Patagia, thorax and tegulae white. The legs uniformly white. The vein R_5 in the fore wing is free as in other species of the genus Argyria Hbn., being stalked with R_3 and R_4 in Crambus inclaralis Walk. The length of the fore wing 10 mm., its maximal width 4 mm. Costa slightly arched from base of the wing midway to apex, thence straight; apex moderately rounded, termen slightly oblique, rather convex. The ground of the fore wing is glossy, silvery white. The terminal dots absent. No trace of any pattern present. The hind wing slightly glossy, silvery white, cilia concolorous.

Female genitalia. Labia large, with numerous minute spines appearing terminally, heavily sclerotized posteriorly. Gonapophyses posteriores normally developed. Lamella subgenitalis narrow, widened ventrally, gonapophyses anteriores as long as the posteriores. Ostium bursae of a complicated structure, heavily sclerotized. Ductus bursae lightly sclerotized, narrow, long, curved at ostium bursae. Bursa copulatrix lightly sclerotized, signum absent.

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STRESZCZENIE

Autor omówił morfologię kilku gatunków z rodzaju Argyria Hbn., opisanych przez Zellera, Hampsona i Feldera z Ameryki Południowej i Japonii. Gatunki te zostały opracowane na podstawie typów deskrypcyjnych znajdujących się w zbiorach British Museum (Nat. Hist.) w Londynie oraz Zoologicznego Muzeum Uniwersytetu Humboldta w Berlinie. Prócz tego zostały opisane nowe gatunki z rodzaju Argyria Hbn. pochodzące z Ameryki Południowej. Typy tych gatunków znajdują się w zbiorach Instytutu Zoologicznego PAN w Warszawie.

1. Argyria opposita Zell. Autor przebadał trzy syntypy tego gatunku, a mianowicie jednego samca i dwie samice (coll. Zool. Mus. Humb. Univ., Berlin). Samiec został wyznaczony jako lektotyp. W zbiorach British Museum (Nat. Hist.) w Londynie znajduje się okaz samca oznaczony jako A. opposita Zell. z etykietką "Type". Okaz ten nie może być w żadnym wypadku uznany za typ A. opposita Zell., gdyż nie został wymieniony w oryginalnym opisie Zellera. Prócz tego okaz ten odnosi się do zupełnie innego gatunku A. insons Feld. Na podstawie owego okazu Hampson błędnie zsynonimizował A insons Feld. z A. opposita Zell., czego nie można

uznać, gdyż oba gatunki różnią się bardzo wyraźnie pomiędzy sobą.

- 2. Argyria hannemanni sp. n. Gatunek został opisany na podstawie dwóch samców. Mimo zewnętrznego podobieństwa do A. opposita Zell., nowy gatunek różni się odeń bardzo silnie dzięki budowie aparatu kopulacyjnego samca.
- 3. Argyria insons Feld. Gatunek uznawany dotychczas za synonim A. opposita Zell. i powszechnie mylony z nim. Autor przebadał typ A. insons Feld. (coll. Brit. Mus. (Nat. Hist.), Londyn). Jest to samiec. Zewnętrznie oba gatunki są praktycznie nie do odróżnienia, wykazują jednak istotne różnice w budowie ich samczych aparatów kopulacyjnych.
- 4. Argyria heringi sp. n. Gatunek opisany na podstawie dwóch samic. Zewnętrznie nowy gatunek zbliża się silnie do A. opposita ZELL., różniąc się odeń silnie w budowie samiczych genitalii.
- 5. Argyria pontiella Zell. Został zbadany typ (samica), znajdujący się w zbiorach Zoologicznego Muzeum Uniwersytetu Humboldta w Berlinie. Jest to jedyny dotychczas znany okaz tego gatunku i niestety nie posiada odwłoka. Hampson zsynonimizował A. pontiella Zell. z A. divisella Walk. na podstawie okazu samca oznaczonego jako A. pontiella Zell. i posiadającego etykietkę "Type". Po zbadaniu owego okazu okażało się, iż Hampson był w błędzie synonimizując oba gatunki, które różnią się bardzo wyraźnie zewnętrznie. Prócz tego Zeller nie wymienił owego okazu samca w oryginalnym opisie dla A. pontiella Zell., tak iż okaz ten nie mógłby być w żadnym wypadku uznany za typ tego gatunku.
- 6. Argyria furvicornis ZELL. Autor przebadał typ tego gatunku (coll. Zool. Mus. Humb. Univ., Berlin). Jest to samiec bez miejsca połowu, prawdopodobnie pochodzący z Ameryki Południowej. Gatunek ten jest blisko spokrewniony z północno-amerykańskim A. nivalis (DRURY).
- 7. Argyria mesodonta Zell. Antor przebadał jeden z dwóch syntypów (samiec) i wyznaczył go jako lektotyp. Gatunek ten różni się silnie od poprzednich i należy do grupy gatunków spokrewnionych z A. croceivittella Walk.
- 8. Argyria mesodonta submesodonta ssp. n. Opisany na podstawie jednego samca. Zbliża się on zewnętrznie do poprzedniego

gatunku, różniąc się odeń w budowie aparatu kopulacyjnego samca.

- 9. Argyria mezozonalis Hamps. Autor przebadał typ tego gatunku (samiec) (coll. Brit. Mus. (Nat. Hist.) Londyn). A. mezozonalis Hamps. należy podobnie jak dwa poprzednie gatunki do grupy A. croceivittella Walk.
- 10. A. sordipes Zell. Gatunek ten został opisany przez Zellera na podstawie dwóch samców i jednej samicy (coll. Zool. Mus. Humb. Univ., Berlin). Autor wyznaczył jednego z samców jako lektotyp. A. sordipes Zell. zbliża się zewnętrznie do A. furvicornis Zell. i A. simplex Zell.
- 11. A. simplex Zell. Autor przebadał typ (samica) tego gatunku (Zool. Mus. Humb. Univ., Berlin). Okaz ten pochodzi z Japonii. A. simplex Zell. został błędnie zsynonimizowany w r. 1928 przez japońskiego badacza Shibuya'e z odrębnym tak gatunkowo jak i rodzajowo Crambus inclaralis Walk. Okaz samicy łowionej w Ameryce Południowej znajdujący się w zbiorach British Museum (Nat. Hist.) w Londynie, a wyznaczony jako typ A. simplex Zell. nie może być uznany za takowy, gdyż nie został on wymieniony w opisie oryginalnym Zellera dla A. simplex Zell. Prócz tego przedstawia on gatunek zupełnie odrębny od A. simplex Zell.

PESIOME

Автор в настоящей статье оговорил морфологию некоторых южноамериканских и японских видов Argyria Нвп. описанных Целлером, Гемпсоном и Фелдером. Автор обработал эти виды на основании типов, находящихся в коллекциях Вританского Музея (British Museum [Natural History]) в Лондоне и в Зоологическом Музее Университета им. Гумбольдта (Zoologisches Museum der Humboldt-Universität) в Берлине; кроме того автор описал новые южноамериканские виды рода Argyria Нвп. Типы этих видов находятся в коллекциях Зоологического Института П. А. Нъв Варшаве.

1. Argyria opposita Zell. Автор исследовал три синтина этого вида, а именно: одного самца и две самки (колл. Зоол. Муз. Унив.

им. Гумб., Берлин). Самец назначен был лектотипом. В коллекциях Британского Музея в Лондоне хранится экземпляр самца, обозанченный этикеткой $A.\ opposita\ Zell.$, «Тип». Этот экземпляр не может лыть признан типом $A.\ opposita\ Zell.$, так как не был упомянут Целлером в описании этого вида. Сверх того, экземпляр этот относится к совершенно другому виду — $A.\ insons\ Feld$. На основании этого экземпляра, Гемпсон опибочно синонимизировал виды $A.\ opposita\ Zell.$ и $A.\ insons\ Feld$. С этим нельзя согласиться, так как оба вида резко отличаются.

- 2. Argyria hannemanni sp. n. Вид этот описан автором на основании двух самцов. Поверхностно вид этот похож на A. opposita Zell., но очень значительно отличается от него строением генитального аппарата самца.
- 3. Argyria insons Feld. Вид этот долго счутался синонимом A. opposita Zell. и был постоянно с ним смешиваем. Автир исследовал тип A. insons Feld. (колл. Брит. Муз. в Лондоне). Он оказался самцом. Практически оба эти вида невосможно отличить. Характеризуются они только различным строением генитального аппарата самца.
- 4. Argyria heringi sp. n. Вид этот описан на основании двух самок. Поверхностно этот новый вид очень похож на A. opposita Zell. В строении генитального аппарата самок есть однако значительная разница.
- 5. Argyria pontiella Zell. Автор исследовал тип (самеп), находящийся в коллекциях Зоологического Музея Упиверситета им. Гумбольдта в Берлине. Это единственный доныне известный экземпляр этохо вида, к сожалению не имеет брюшка. Гемпсон синонимизировал A. pontiella Zell. с A. divisella Walk. на оснавании экземпляра самца, обозначенного этикеткой A. pontiella Zell. «Тип». Автор исследовал этот экземпляр. Оказалось, что Гемпсон ошибся, синонимизируя эти два вида, которые разнятся очень отчетливо по внешнему виду. Сверх того, Целлер не пометил этот экземпляр, описывая A. pontiella Zell., так что экземпляр этот ни в коем случае не может считаться типом этого вида.
- 6. Argyria furvicornis Zell. Автор исследовал тип этого вида (колл. Зоол. Муз. им. Гумб. в Берлине). это самец без обозначения местонахождения, вероятно найден был в Южной Америке. Вид этот сродственный североамериканскому виду A. nivalis (Drury).
 - 7. Argyria mesodonta ZELL. Автор исследовал одного из двух

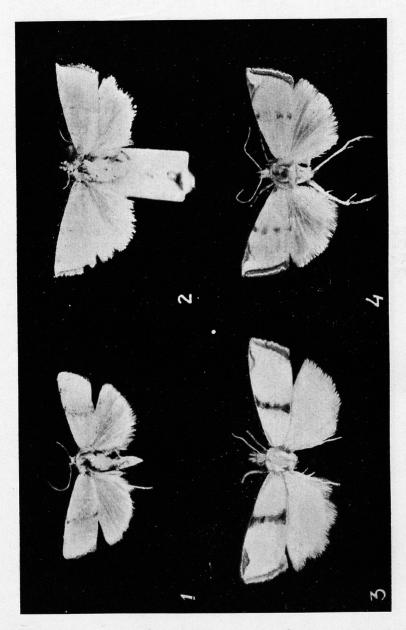
самцов-синтипов и обозначил его лектотипом. Вид этот значительно отличается от предидущих и принадлежит к группе видов сродственных *A. croceivittella* Walk.

- 8. Argyria mesodonta submesodonta ssp. n. Описан на основании одного самца. Поверхностно он похож на предидущий вид, отличается однако строением генитального аппарата самца.
- 9. Argyria mezozonalis Намря. Автор исследовал тип этого вида (самес) (колл. Брит. Муз. в Лондоне). А. mezozonalis Намря. принадлежит, как и оба предидущих вида, к групе A. croceivittella Walk.
- 10. Argyria sordipes Zell. Вид этот описан Целлером на основании двух самцов и одной самки (колл. Зоол. Муз. Унив. им. Гумб. в Берлине). Автор назначил одного самца лектотипом. A. sordipes Zell. по внешнему виду похож на A. furvicornis Zell. и A. simplex Zell.
- 11. Argyria simplex Zell. Автор исследовал тип семца этого вида (Зоол. Муз. Универс им. Гумб. в Берлине). Экземпляр этот найден был в Японии. А. simplex Zell. в 1928 году был синонимизирован япопским исследователем Шибуя ошибочно с Crambus inclaralis Walk. отличающимся от него не только в видовом, но и в родовом отношении. Экземпляр самки, найденный в Южной Америке и хронящийся в коллекциях Британского Музея в Лондоне, обозначен этикеткой Argyria simplex Zell., «Тип». Экземпляр этот не может быть признан тиром вида A. simplex Zell., так как пе был отмечен Целлером в его описании вида A. simplex Zell. Сверх того, экземпляр этот принадлежит к другому виду, не к A. simplex Zell.

PLATES

Plate VIII

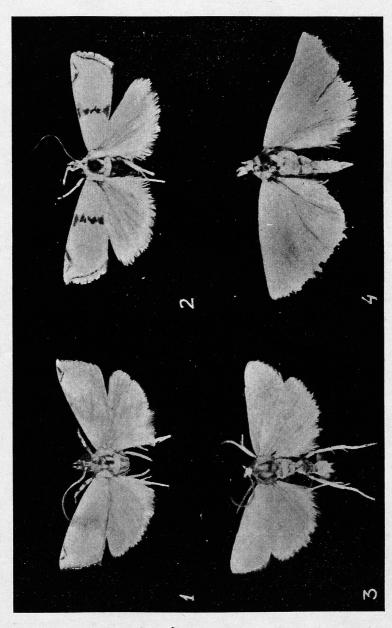
- Fig. 1. Argyria opposita Zell. Male. Lectotype. Panama, Chiriqui.
- Fig. 2. Argyria opposita Zell. Female. Paratypoid. Panama, Chiriqui.
- Fig. 3. Argyria insons Feld. Female. Costa Rica.
- Fig. 4. Argyria hannemanni sp. n. male. Holotype. Bolivia.



Auctor phot. St. Bleszyński

Plate IX

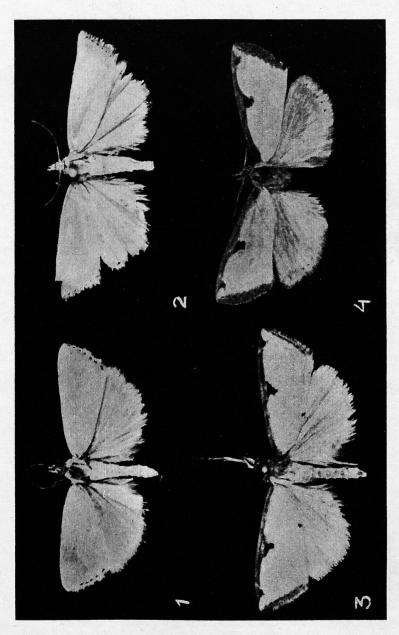
- Fig. 1. Argyria heringi sp. n. Female. Holotype. Guyana, Demerasa.
- Fig. 2. Argyria pontiella Zell. Female. Holotype. Panama, Chiriqui.
- Fig. 3. Argyria furvicornis Zell. Male. Holotype. Patria ignota.
- Fig. 4. Argyria simplex Zell. Female. Holotype. Japan.



Auctor phot. St. Bleszyński

Plate X

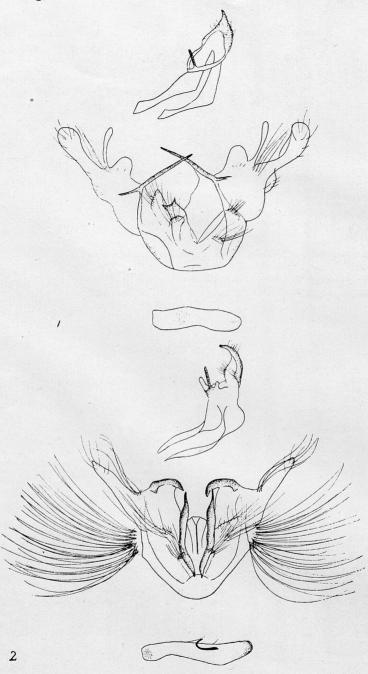
- Fig. 1. Argyria sordipes. Zell. Male. Lectotype. Argentine, Buenos Aires.
- Fig. 2. Argyria sordipes. Zell. Female. Paratypoid. Argentine, Buenos Aires.
- Fig. 3. Argyria mesodonta Zell. Male. Lectotype. Chanchamayo.
- Fig. 4. Argyria mesodonta submesodonta ssp. n. Male. Holotype. Bolivia.



Auctor phot. St. Bleszyński

Plate XI

Fig. 1. Argyria opposita Zell. Lectotype. Slide Nr. 706/BŁ. Fig. 2. Argyria hannemanni sp. n. Holotype. Slide Nr. 697/BŁ.

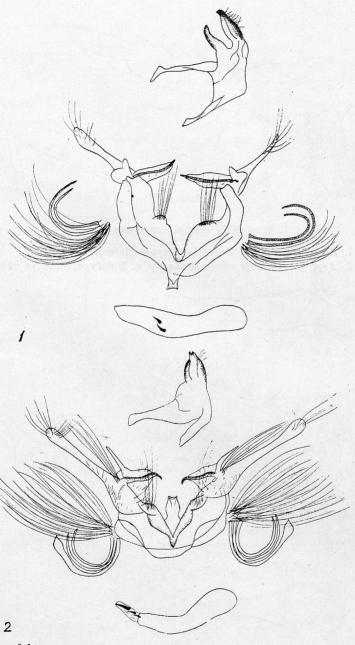


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Plate XII

Male genital armatures

Fig. 1. Argyria insons Feld. Slide Nr. 703/BL. Guyana. Fig. 2. Argyria insons Feld. Slide Nr. 731/BL. Costa Rica



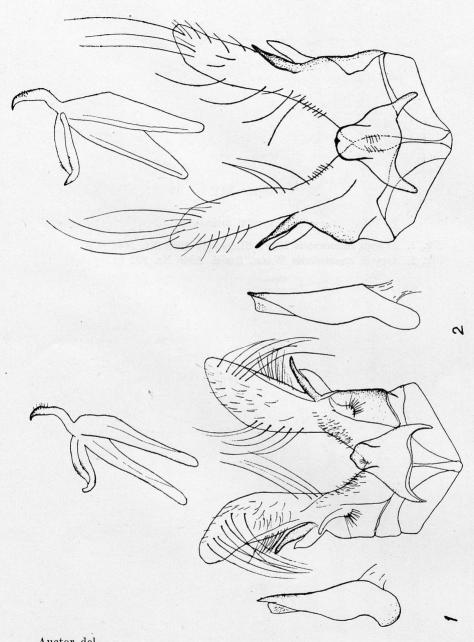
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Acta Zoologica nr 3

Plate XIII

Male genital armatures

- Fig. 1. Argyria mesodonta Zell. Lectotype. Slide Nr. 589/BŁ.
- Fig. 2. Argyria mesodonta submesodonta ssp. n. Holotype. Slide Nr. 818/BŁ.

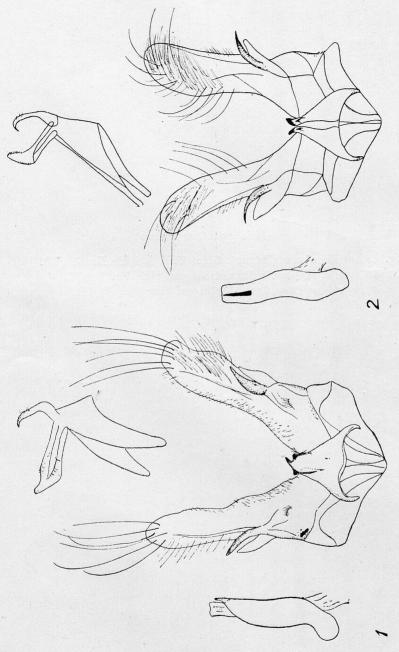


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Plate XIV

Male genital armatures

Fig. 1. Argyria mezozonalis Hmps. Holotype. Slide Nr. 5645/B.M. Fig. 2. Argyria croceivittella Walk. Brasil. Slide Nr. 823/BŁ.

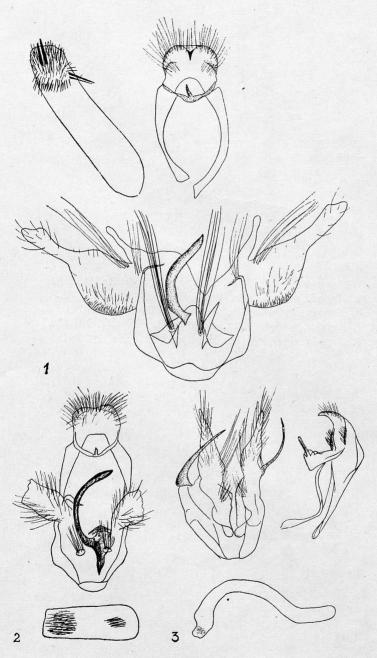


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Plate XV

Male genital armatures

- Fig. 1. Argyria nivalis (DRURY). Ohio, U. S. A. Slide Nr. 730/BŁ.
- Fig. 2. Argyria furvicornis Zell. Holotype. Slide Nr. 588/BŁ.
- Fig. 3. Argyria sordipes Zell. Lectotype. Slide Nr. 705/BL.



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Plate XVI

Female genitalia

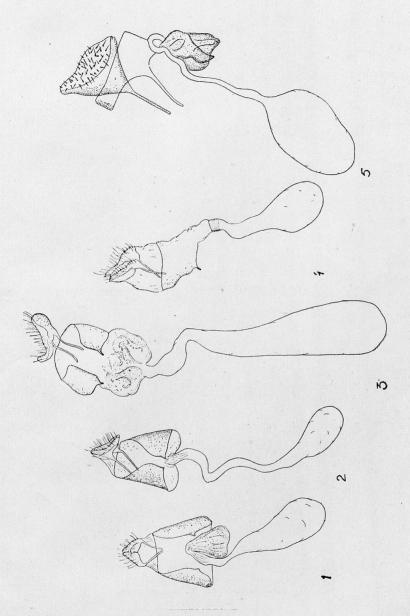
Fig. 1. Argyria opposita Zell. Paratypoid. Slide Nr. 707/BŁ.

Fig. 2. Argyria insons Feld. Costa Rica. Slide Nr. 732/BL.

Fig. 3. Argyria heringi sp. n. Holotype. Slide Nr. 828/BŁ.

Fig. 4. Argyria sordipes Zell. Paratypoid. Slide Nr. 704/BŁ.

Fig. 5. Argyria simplex Zell. Holotype. Slide Nr. 702/BL.



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Redaktor pracy: mgr W. Szymczakowski

Państwowe Wydawnictwo Naukowe — Oddział w Krakowie 1960

Nakład 800+150 egz. — Ark. wyd. 2. — Ark. druk. 25/8. — Papier ilustr. kl. III 70×100 80 g Zam. 94/60 — Cena zł 10,—