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**Materiały do znajomości *Crambidae* (Lepidoptera). Część XXIX.
O niektórych gatunkach z rodzaju *Euchromius* GN.**

**Материалы к познанию *Crambidae* (Lepidoptera). Часть XXIX.
О некоторых видах рода *Euchromius* GN.**

**Studies on the *Crambidae* (Lepidoptera). Part XXIX. On Some
Species of the Genus *Euchromius* GN.**

[Pl. XXII—XXXIV]

In my recent article on the genus *Euchromius* GN. I discussed the status of the name *Euchromius* GN. and several species of this genus. In the present paper I will explain some questions concerning several further species of *Euchromius* GN.

Group: *Euchromius ramburiellus* (DUP.)

I place three species in this group, namely, *E. ramburiellus* (DUP.), *E. islamellus* (AMS.) and *E. cambridgei* (ZELL.). They characterize externally by the presence of nine black dots at the termen of the fore wing. In male genitalia sacculus with a long free arm. The terminal part of gnathos rather short, club-shaped. In the female genitalia the bursa copulatrix shows two very distinct signa. *E. ramburiellus* (DUP.), *E. islamellus* (AMS.) and *E. cambridgei* (ZELL.) are spread throughout the

Mediterranean Region and range to Near and Middle East. The types of these species have not as yet been examined. Consequently several synonyms have been made. Especially the identifying of *E. cambridgei* (ZELL.) has been very confused; this species has five or even perhaps six synonyms.

***Euchromius ramburiellus* (DUP.)**

[Pl. XXII, fig. 1, 3, 4, pl. XXIII, fig. 5, pl. XXIX, fig. 30, pl. XXXII, fig. 39]

Crambus ramburiellus DUPONCHEL, 1836, Hist. Nat. Lép. France 10: 83, pl. 170, f. 8.

Eromene gratiosella CARADJA, 1910, Dtsch. Ent. Zeit. „Iris“ 24: 116. Syn. n.

Crambus zonellus ZELLER, 1847, Isis 1847: 760. Syn. n.

This species appears to be very variable externally, as well as genitally. I am unable to distinguish it externally from the very close *E. islamellus* (AMS.). The two are variable on their coloration and pattern.

Crambus ramburiellus DUP. had been described from a unique female example that comes from Ajaccio. This type specimen is in the collection of the National Museum of Natural History in Paris (Gen. Slide No 3778, praep. P. VIETTE). The genitalia shown in figure 39 agree with those in the type.

Crambus zonellus ZELL. had also been described from a single female specimen taken probably in the environs of Palermo. According to the kind information of DR. H. J. HANNEMANN this type specimen is most probably lost. I have not found it also in the collection of the British Museum (Nat. Hist.) in London which contains second part of ZELLER's collection. Probably that the type of *Crambus zonellus* ZELL. was conspecific with the DUPONCHEL's species. Consequently it is proposed to regard the two as synonyms.

Some authors mention a species under the name „*Eromene gratiosella* BANG-HAAS“, however, BANG-HAAS has never described that species. A valid description of „*gratiosella*“ given in 1910 by CARADJA who writes under *E. ramburiellus* (DUP.): „*Gratiosella* B.-H. i. l. von Lob-Noor ist vielleicht nur eine sehr grosse mattgefärbte Lokalrasse (Frühlingsform)“. Conse-

quently, CARADJA should be regarded as the author of the mentioned name. I have examined two male examples bearing the labels „*gratiosella*“, one of them being taken in Lob-Noor and the other from Uralsk. The genitalia of these specimens agree with those in other males associated by me with the type of *E. ramburiellus* (DUP.). However, this species and the next one so confused me, that I am not certain whether such an association of the males and females is correct. I have had not to my disposal a greater number of male and female examples of *E. ramburiellus* (DUP.) coming from the same locality. Maybe both *E. ramburiellus* (DUP.) and *E. islamellus* (AMS.) are one species. This question is in need of further thorough investigation.

E. ramburiellus (DUP.) characterizes externally by the presence of nine black marginal dots in the fore wing. The face is distinctly produced forward, rather rounded, most often with a distinct corneous point. The ground colour of the fore wing very variable, from white to dirty yellowish, more or less densely suffused with dark scales. A yellow roundish spot beyond the medial fascia, in some instances slightly marked. Medial fascia of a very variable run; it is straight, oblique, or, in some cases, gently arched; it is evenly wide throughout or, somewhat broadened at the dorsum.

CARADJA in 1910 described 16 male and female examples from Biskra under the name „var. *luteella* CAR.“. These specimens differ from the typical ones by their ochreous yellow colour of the fore wing. This form most probably should be regarded as a subspecies. I have examined one female paratypoid of this form (coll. Hungarian National Museum in Budapest).

Male genitalia. Uncus slender, tapering terminally to a rather curved, pointed spine. Gnathos with a triangular terminal widening. Valva narrow, curved. Pars basalis is rather broad basally and suddenly narrowed in its terminal portion. The free arm of sacculus is nearly straight, rather parallel to the ventral edge of valva. Juxta-plate deeply notched; its shape in the preparation depends on the pressure of the cover glass. Aedeagus somewhat variable in its length and width. Four cornuti present. In the terminal part of vesica occur two plate-shaped strongly spined cornuti; the third cornutus situated

beyond half length of the aedeagus is long, spined; the fourth cornutus is small, slightly visible, situated near the third cornutus.

Female genitalia. Labia broad, coalescent with one another. Lamella subgenitalis broad. Ostium bursae provided with a heavily sclerotized, tapering posteriorly elongate flap. The terminal part of the ductus bursae shows a bag with a distinct membranous projection. The bag contains numerous small spines. The shape and size of both the bag and its projection is very variable. Bursa copulatrix more or less elongate, in some instances rounded. Two distinct signa present. They have shape of narrow cones on their broad bases attached to the wall of bursa copulatrix.

Material examined: The holotype of *Crambus ramburiellus* DUP.; one female paratypoid of *E. ramburiellus* ssp. *luteellus* (CAR.); 2 males from Spain; 2 spec. from Algeria; 4 spec. from Sucurac, Dalmatia; 3 spec. from South-Eastern Russia; 2 spec. from Uralsk; 1 spec. from Lob-Noor. The mentioned material belongs to the collections of the National Museum of Natural History in Paris, the British Museum (Nat. Hist.) in London, Hungarian National Museum in Budapest, Institute of Zoology of the Polish Academy of Science in Warszawa, DR. H. G. AMSEL of Karlsruhe, DR. F. GROSS of Bonn, DR. S. TOLL of Katowice and author's coll.

***Euchromius islamellus* (AMSEL)**

[Pl. XXII, fig. 2, pl. XXIX, fig. 28, 29, pl. XXXII, fig. 38]

Fromene islamella AMSEL, 1949, Bull. Soc. Fouad 1^{er} Ent., Caire 33: 235, pl. i, f. 3.

This species is described from Tchourum, Bagdad, Ahwaz and Qaraghan. Two paratypoids from Bagdad and one from Tchourum (all males) before me. They are strikingly similar on their external characters to the preceding species. Besides, I have identified as belonging to this species a series of examples coming from Spain, Egypt, South-Eastern Russia and Afghanistan. The specimens from Afghanistan appear to be a rather distinct geographical race.

Male genitalia. Uncus and gnathos similar to those in the preceding species. Pars basalis in the form of a rather short, heavily sclerotized spine; it is strongly curved laterad, gradually tapering to a sharply pointed tip. Sacculus with a strong short free arm; it is distinctly curved dorsad, tapering to a sharply pointed tip. The specimens from Afghanistan show distinctly shorter arm of sacculus than in typical specimens. Juxta appears to be more elongated than in the preceding species. Aedeagus variable in its length and width. Four cornuti in number present, they are somewhat variable and rather similar to those in *E. ramburiellus* (DUP.).

Female genitalia. Very similar to those in the preceding species, distinct by the shape of flap of ostium bursae that is much shorter and broader than in *E. ramburiellus* (DUP.).

Material examined. 2 spec. from Bagdad (paratypoids); 1 spec. from Tchourum, Iran (paratypoid); 1 spec. from Spain; 2 spec. from Egypt; 1 spec. from Kara-Kala; 1 spec. from South-Eastern Russia; 15 spec. from Afghanistan (coll. British Museum (Nat. Hist.) in London, DR. H. G. AMSEL of Karlsruhe and DR. F. GROSS of Bonn).

Euchromius cambridgei (ZELL.)

[Pl. XXIII, fig. 6—8, pl. XXIV fig. 9—12, pl. XXVIII, fig. 25, pl. XXXII, fig. 36]

Eromene cambridgei ZELLER, 1867, Ent. Zeit., Stettin 28: 370.

Eromene luciella CHRÉTIEN, 1907, Naturaliste 29: 178. Syn. n.

Argyria prototypa MEYRICK, 1935, Exot. Micr. 5: 571. Syn. n.

Ommatopteryx congruentella AMSEL, 1958, Beitr. zur naturkundl. Forsch. Südwestdeutschl. 17: 64, pl. v, f. 2. Syn. n.

Ommatopteryx Szijjártói GOZMÁNY, 1959, Ann. Hist. Nat. Mus. Nat. Hung. 51: 364, fig. 3 A & 3 B. Syn. n.

Ommatopteryx Ilkui GOZMÁNY, 1959, Ann. Hist. Nat. Mus. Nat. Hung. 51: 366, fig. 3 C. Syn. n.

This species had been described from Egypt. The type is a male labelled: „Egypt P. P.-C. 1864“, „Type“, (Slide No 5653-B. M.) (coll. British Museum (Nat. Hist.) in London). *Eromene luciella* CHRÉT. had been described from a male taken in Languedoc. *Argyria prototypa* MEYR. is described also from

a male specimen from Morocco. AMSEL had described his *Ommatopteryx xcongruentella* AMS. from a single male taken Dhahran, in Nord-East Arabia. I have examined the types of the mentioned four species. They are obviously identical, consequently I sink *Eromene luciella* CHRÉT., *Argyria prototypa* MEYR. and *Ommatopteryx congruentella* AMS. to the synonyms of *Euchromius cambridgei* (ZELL.). I have also examined the female paratypes of recently described *Eromene ilkui* GOZMÁNY and *E. szijjártói* GOZMÁNY. They should be also regarded as the synonyms of the species under consideration, as the external and genital characters of the mentioned paratypes had shown. The two had been described from Egypt.

The face rather produced forward with a corneous point. Ground colour of the fore wing creamy, pattern yellowish to dark brown. Medial fascia always with a yellow or ochreous tint; it is more or less distinctly angled below the costa running from half of costa to about half of dorsum. The black marginal dots 9 in number, however, the first and the second dot, as well as the eighth and ninth one are in some instances amalgamated with one another.

Male genitalia. Uncus slender, tapering terminally to a sharply pointed tip. Gnathos with a triangular widening terminally. Valva broad basally, cucullus narrow. Pars basalis developed as a narrow, more or less curved, heavily sclerotized spine. A haired small projection near the base of pars basalis present. Sacculus with a long, thin, pointed terminally, free arm that reaches almost the end of cucullus. Aedeagus slender, rather straight, somewhat broadened in its middle. A single slightly visible elongate cornutus that, in some instances, may be lost.

Material examined. The holotype of *Eromene cambridgei* ZELL. Egypt (coll. British Museum (Nat. Hist.) in London); the holotype of *Eromene luciella* CHRÉT. Languedoc (coll. National Museum of Natural History in Paris); the holotype of *Argyria prototypa* MEYR. Morocco (coll. British Museum (Nat. Hist.) in London); the holotype of *Ommatopteryx congruentella* AMS. Nord-Eastern Arabia (coll. DR. H. G. AMSEL, Karlsruhe); a female paratype of *Ommatopteryx ilkui* GOZMÁNY. Egypt. (coll. Hungarian National Museum in Budapest); two female paratypes of *Ommatopteryx szijjártói* GOZMÁNY. Egypt (coll. Hungarian National Mu-

seum in Budapest); 21 spec. from Arabia; 2 spec. from Egypt; 2 spec. from Sudan; 2 spec. from Algeria; 2 spec. from Tunisia; 2 spec. from Dalmatia; 1 spec. from Spain; 2 spec. from Tenerife (coll. British Museum (Nat. Hist.) in London, Hungarian National Museum in Budapest, DR. H. G. AMSEL of Karlsruhe and DR. F. GROSS of Bonn).

Group: *Euchromius bellus* (HBN.)

This group includes two species, namely, *E. bellus* (HBN.) and *E. anapiellus* (ZELL.); they are very closely related to one another. In the fore wing occur 9 black terminal dots. Saccus with two or three tips. A single large cornutus in the aedeagus present. No signa in the bursa copulatrix present. Both *E. bellus* (HBN.) and *E. anapiellus* (ZELL.) are spread over the Mediterranean Region. *E. bellus* (HBN.) ranges to South Ukraine, Syria and Iran, its occurrence in North Africa is rather doubtful. *E. anapiellus* (ZELL.) occurs in North Africa, Asia Minor and Southern Europe.

Euchromius bellus (HBN.)

[Pl. XXVII, fig. 21, pl. XXVIII, fig. 27, pl. XXXIV, fig. 44]

Tinea bella HÜBNER, 1796, Samml. Eur. Schmett. Tineae pl. IX, f. 60.

This species is rather similar to *E. anapiellus* (ZELL.), however, it is easily distinguishable by the following characters. In *E. bellus* (HBN.) the face is evenly rounded and smooth, in the second species having a small but distinct corneous point. In the fore wing of *E. bellus* (HBN.) the medial fascia is bordered interiorly with a narrow silvery line and somewhat broader yellow stripe. The latter in *E. anapiellus* (ZELL.) is only very slightly visible. Besides, in *E. bellus* (HBN.) medial fascia in the fore wing in nearly always distinctly arched, being straight in *E. anapiellus* (ZELL.).

Male genitalia. Uncus of a basic *Euchromius*-type. Gnathos distinctly longer than the uncus; its terminal part strongly

elongated, straight. Valva fairly straight. Pars basalis long, heavily sclerotized, in the form of a process parallel to the dorsal edge of the valva; it is curved basally, rounded terminally. Juxta-plate notched. Saccus large. Sacculus provided terminally with three tips. The ventral tip is in the form of a wide rounded projection, the second and the third tip is narrower. Vinculum rather broadly rounded. Aedeagus straight, rather broad, shorter than the length of valva. Cornutus very large, strongly curved basally.

Female genitalia. Labia coalescent with one another. Lamella subgenitalis broad; gonapophyses anteriores very short. The posterior half of ductus bursae with a broad, tapering anteriorly, heavily sclerotized stripe. Bursa copulatrix elongate; signum lacking.

Material examined. 4 spec. from Bologna, Italy; 4 spec. from Hungary; 1 spec. from Madrid; 1 spec. from Digne; 2 spec. from Roumania; 2 spec. from Croatia; 5 spec. from Syria; 3 spec. from Iran (coll. Hungarian National Museum in Budapest; British Museum (Nat. Hist.) in London, DR. H. G. AMSEL of Karlsruhe and author's coll.).

Euchromius anapiellus (ZELL.)

[Pl. XXVIII, fig. 26, pl. XXXIV, fig. 43]

Crambus anapiellus ZELLER, 1847, Isis 1847: 757.

A small-sized species. The face with a small corneous point lacking in preceding species. Medial fascia in the fore wing straight, in some instances gently wavy below the costa; it runs from about middle of costa to three-sevenths of dorsum. Nine black terminal dots present.

Male genitalia. Uncus rather similar to that in *E. bellus* (HBN.). Gnathos strongly curved ventrad, its terminal part more slender and curved than in the former species. Pars basalis distinctly shorter than in *E. bellus* (HBN.). A rather slightly visible, long haired fold near the base of pars basalis. Sacculus only with two tips, one rounded and the other conical. Juxta-plate unnotched. Saccus considerably smaller than in the prece-

ding species. Aedeagus proportionately shorter than in *E. bellus* (HBN.); cornutus much smaller than in that species, being only arched and not strongly curved basally.

Female genitalia nearly twice shorter than in *E. bellus* (HBN.). The strongly sclerotized stripe of the ductus bursae indistinct anteriorly; it is truncate posteriorly, being triangular there in the preceding species. Bursa copulatrix ovate; no signum present.

Examined material. The lectotype, female: „*Eromene anapiella* ZELL.“, „Syracus“, „ZELL. Coll. 1884“, Slide No 5654-B. M. (coll. British Museum (Nat. Hist.) in London); 6 spec. from Sicily; 2 spec. from Tunisia; 1 spec. from Spain; 1 spec. from Sultan Suyu, Asia Minor (coll. British Museum (Nat. Hist.) in London, Hungarian National Museum in Budapest, Dr. H. G. AMSEL of Karlsruhe and author's coll.).

Euchromius vinculellus (ZELL.)

[Pl. XXV, fig. 13—16, pl. XXX, fig. 31, 32, pl. XXXIII, fig. 40, 41]

Crambus vinculellus ZELLER, 1847, Isis 1847: 760.

Ommatopteryx corsicalis HAMPSON, 1919, Ann. Mag. Nat. Hist. (9) 3: 534. Syn. n.

Ommatopteryx asbenicola ROTHSCILD, 1921, Novit. Zool., Tring, 28: 220. Syn. n.

Eromene joiceyella SCHMIDT, 1934, Ann. Mag. Nat. Hist. (10) 14: 538. Syn. n.

Eromene bahrlutella AMSEL, 1949, Bull. Soc. Fouad 1^{er} Ent., Caire, 33: 236. Syn. n.

This species had been described by ZELLER from specimens taken on Sicily. According to the kind information of Dr. H. J. HANNEMANN the types had most probably been lost. There is no ZELLER's specimen of this species in the collections of the Zoological Museum of the Humboldt Universität in Berlin and at the British Museum (Nat. Hist.) in London. The collection in Berlin includes two males from Sicily taken by KALCHBERG and determined as „*Eromene vinculella* Z.“. I designate one of these males (Slide No 628-BL.) as the neotype of *Crambus vinculellus* ZELLER, 1847.

Ommatopteryx corsicalis HMPS. had been described from a single male specimen bearing the label: „Vizzavona Corsica, 11 VI 1899 WLSM. 1910—166“ (coll. British Museum (Nat. Hist.) in London). After the examining of the genitalia of this specimen (Slide No 5647-B. M.) I have stated that it is obviously conspecific with *Euchromius vinculellus* (ZELL.). Consequently I sink *Ommatopteryx corsicalis* HMPS. as the synonym of *Euchromius vinculellus* (ZELL.).

The holotype of *Ommatopteryx asbenicola* ROTHSC. is a female labelled: „Aouderas Asben, 26 July 20, C. A. BUCHANAN“ (coll. British Museum (Nat. Hist.) in London). I have found another female in the mentioned collection, determined as „*Eromene asbenicola* RTHSCH.“, however, that specimen belongs undoubtedly to an other species *Euchromius hampsoni* (ROTHSCH.). The latter had been described from one male and one female and in the collection of the British Museum (Nat. Hist.) there is only a single specimen (male, holotype) determined as „*Eromene hampsoni* ROTHSC.“. ROTHSCCHILD in his original description mentions only one specimen of *Ommatopteryx asbenicola* ROTHSC. The female of *Euchromius hampsoni* (ROTHSCH.) had most probably been misidentified by a subsequent worker. *Ommatopteryx asbenicola* ROTHSC. apparently is a synonym of the species under consideration as the study of its genitalia shows (Slide No 5675-B. M.).

Eromene joiceyella SCHMIDT is also an obvious synonym of *Euchromius vinculellus* (ZELL.). I have examined two male syntypes of the former from Tinnel, Great Atlas, Morocco (coll. British Museum (Nat. Hist.) in London and Hungarian National Museum in Budapest).

Eromene bahrlutella AMS. is described from three specimens. I have examined the holo- and allotype labelled: „Südende des Toten Meeres 15-27 iii [19] 33, AIGNER leg., H. AMSEL“ (coll. DR. H. G. AMSEL, Karlsruhe). Slides Nos: male-GU 320, female — 1089-BL. The male paratypoid is taken in Ahwaz, Iraq. The genitalia of the female are strikingly similar to those in the typical specimens of the species discussed. Male genital armature shows pars basalis rounded, not pointed as in typical *E. vinculellus* (ZELL.). However, genitalia of the species of *Euchromius* GN. are frequently variable and I do not consider

the above mentioned difference as a specific character. Consequently I regard *Eromene bahrlutella* AMS. as a synonym of the species under consideration.

Besides above mentioned type-specimens I have examined a male from Iran determined as „*Eromene bahrlutella* AMS.“. The pars basalis of this specimen agrees with that in typical *E. vinculellus* (ZELL.) being sharply pointed terminally.

E. vinculellus (ZELL.) characterizes by the presence of 7 black terminal dots in the fore wing. The fore wing is brown. Medial fascia is straight, in some instances oblique, frequently gently curved; it runs from about middle of costa to three-sevenths of dorsum. Face produced forward, conical with a distinct corneous point.

Male genitalia. Uncus gently arched, terminated in a sharply pointed spine. Gnathos rather slightly sclerotized, curved terminally ventrad; it is not widened terminally as in other species of *Euchromius* GN. Pars basalis in the form of a short, heavily sclerotized lobe being most often produced posteriorly to a sharply pointed tip. Cucullus rather small, rounded, clothed with stout hairs. Sacculus long, tipped with a pointed free spine; hairs of sacculus stout. Saccus proportionately large. Juxta-plate wide, with two produced tips, which are frequently damaged while preparing. Aedeagus more or less arched, long, slender. Two cornuti present, one of them is situated terminally, it is rather large curved, dentate; the other cornutus is very small, in some instances slightly visible; it is situated in about two-fifths of aedeagus length. The shape of larger cornutus is somewhat variable.

Female genitalia. Labia wide, coalescent with one another. Lamella subgenitalis wide, gonapophyses anteriores rather short. Ostium bursae rather heavily sclerotized with lateral pointed projections. Ductus bursae lightly sclerotized with a bag-like distinct projection before the ostium bursae. Bursa copulatrix more or less elongate, signum lacking.

Besides of the above mentioned types I have examined 6 male and female specimens from Morocco, Sardinia and Iran (coll. National Museum of Natural History in Paris and DR. H. G. AMSEL of Karlsruhe).

***Euchromius ocellus* (HAW.)**

[Pl. XXVI, fig. 17—20, pl. XXX, fig. 33, pl. XXXII, fig. 37]

Palparia ocella HAWORTH, 1811, Lep. Brit. 2: 486.*Phycis funiculella* TREITSCHKE, 1832, Schmett. Eur. 9: 200.*Eromene texana* ROBINSON, 1870, Ann. Lyc. N. H. of N. Y. 9: 155.*Eromene californicalis* PACKARD, 1873, Ann. Lyc. N. H. of N. Y. 10: 264.*Eromene gigantea* TURATI, 1925, Atti Soc. ital. Sci. nat. 63: 129.

An extremely variable and widely spread species. Ground colour of the fore wing from light yellowish to grey brown. 9 black terminal dots in the fore wing. Medial fascia double, divided by a silvery line; it runs distinctly from beyond middle of costa to about one-fourth of dorsum. *Eromene gigantea* TRTI. had been described from large dark specimens taken in Tripolitania. However, I do not consider it as a subspecies, as such specimens occur among the typical ones from various localities. There are no differences in male or female genitalia between large specimens from Tripolitania and other localities. I have also not found any difference in the genitalia of the specimens from California and Texas, those being strikingly similar to the specimens from the Old World.

Male genitalia. Uncus rather similar to that in other species of the genus *Euchromius* GN. Gnathos similar to that in *E. bellus* (HBN.) having, however, a more elongated terminal part. Pars basalis large, projected basally, provided with a curved dorsad strong terminal spine. The dorsal edge of cucullus delicately dentate in its basal half. Two haired folds at the base of pars basalis. Saccus without a free arm, not differentiated, clothed with numerous stout, long bristles. Saccus large. Vinculum large and stout, does not allow to spread the genitalia. Juxta-plate distinctly notched terminally. Aedeagus very long, slender, distinctly arched; a row of numerous small cornuti present.

Female genitalia. Labia coalescent with one another. Lamella subgenitalis wide, gonapophyses anteriores very short. Ostium bursae rather heavily sclerotized with lip-like folded edges. Ductus bursae longitudinally ribbed, twice looped. Bursa copulatrix with two elongate distinct signa.

Material examined. The holotype of *Palparia ocella* HAW.:

a male labelled „*Ocellea*“ (coll. British Museum (Nat. Hist.) in London). A lot of 67 specimens from Digne; Aswan, Egypt; Tripolitania; Arabia; Buchara; Aden; Transcaucasia; Afghanistan, Tura, Asia c.; Port Said; Dharmasála, India; Simla, 7000 ft., India; South Africa; Texas, U. S. A.; Dom. Range Sta., Manyberries, Alta, U. S. A.; Western U. S. A (coll. British Museum (Nat. Hist.) in London, Hungarian National Museum in Budapest, Institute of Zoology of the Polish Academy of Science in Warszawa, DR. H. G. AMSEL and author's coll.).

***Euchromius latus* (STGR.)**

[Pl. XXVII, fig. 22, pl. XXXIII, fig. 42]

Eromene lata STAUDINGER, Horae Ent. Ross. 7: 204, pl. ii, f. 7.

The holotype of this species before me. It is a female labeled: „Graecia KR.“, „Origin. *Lata*, Hor.“, Slide No 1147-BL. (coll. Zoological Museum of the Humboldt University in Berlin). It is a large-sized species characterized by 9 terminal dots in the fore wing. Ground of the fore wing creamy, densely suffused with dark scales. Medial fascia double, yellow exteriorly, and white interiorly, it runs from distinctly before middle of costa to about half of dorsum. The face not produced, rounded, without a corneous point. Antenna of female flatly serrate.

Female genitalia of a very peculiar armature. Gonapophyses anteriores and posteriores extremely long, a feature hitherto not met with in any other species of *Euchromius* Gn. Ostium bursae rather lightly sclerotized, not differentiated, as wide as terminal part of ductus bursae. The latter lightly sclerotized with a delicate ribbing consisting of slight twisted folds. Bursa copulatrix large, nearly as long as the ductus bursae; no signum present.

The male of this species is not as yet known.

Genus *Miyakea* MAR.

A Japanese worker MARUMO in 1933 erected a new genus *Miyakea* MAR. for a single species *Eromene expansa* BUTLER (Trans. Ent. Soc. London 1881: 590). Judging from the genitalia of both sexes of this species, the establishing of a distinct genus for

this species was quite right. Externally, *M. expansa* (BUTL.) does not differ from other species of *Euchromius* GN. The shape of the wing, venation and pattern is rather similar to those in other members of that genus. 7 terminal dots in the fore wing present. Medial fascia rather similar to that in *Euchromius ocellus* (HAW.) being double and divided by a silvery line; it is distinctly arched, running from about middle of costa to about three-sevenths of dorsum (pl. XXVII, fig. 23). Face similar to that in *Euchromius latus* (STGR.), it is not produced, rounded, without a corneous point.

Male genitalia of *M. expansa* (BUTL.) (pl. XXXI, fig. 35) have a peculiar, diametrically different armature from those in the members of *Euchromius* GN. Uncus slender, long, tapering terminally to a sharply pointed tip. Gnathos nearly as long as uncus, its terminal part being not differentiated as in the representatives of *Euchromius* GN., it is gradually tapering to a rather pointed tip. A flap-like jointure linking tegumen with valva, characteristic for the species of the genus *Euchromius* GN., in *M. expansa* (BUTL.) is lacking. Pars basalis huge, heavily sclerotized, consisting of two strong spines on a common base. Dorsal spine is distinctly shorter than the ventral one. The latter reaching beyond the end of cucullus, minutely serrated terminally. Cucullus rectangular. Saccus not differentiated. Juxta-plate rather ovate, Vinculum large, long. Aedeagus nearly straight, somewhat longer than the valva, rather evenly wide throughout; five cornuti in number.

Female genitalia (pl. XXXIV, fig. 46). 8 sternite with a triangular heavily sclerotized plate. Ostium bursae with a large plate clothed with numerous minute spikes situated along the margins; terminal part of ductus bursae heavily sclerotized, wide; the anterior half lightly sclerotized, distinctly narrower than the terminal one. Bursa copulatrix very large, transparent; signum absent.

This species is reported from Japan and China. The type is from Japan. I have examined three males and one female from Hikosan (Japan), Chang-Yang, Foochau and Rieng Pieng (China) (coll. British Museum (Nat. Hist.) in London, National Museum of Natural History in Paris and DR. H. G. AMSEL of Karlsruhe).

Genus *Metaeuchromius* g. n.

Typus generis *Eromene yuennannensis* CARADJA & MEYRICK

I establish this new genus for a single species *Eromene yuennannensis* CAR. & MEYR. (Dtsch. Ent. Zeit. „Iris“, Dresden, 51: 151) described in 1937 from Yuennan, China.

Venation in the wings similar to that in the members of *Euchromius* GN. The shape of the wings resembles that of *Miyakea expansa* (BUTL.). 7 dark marginal dots in the fore wing present. Medial fascia yellowish externally, whitish interiorly (pl. XXVII, fig. 24). The face not produced forward, rounded, without a corneous point. Ocelli fully developed. The chief difference between the new genus and *Euchromius* GN. being in the armature of the genitalia. In male genitalia (pl. XXXI, fig. 34) of the former uncus and gnathos of an armature similar to that in the members of the genus *Chilo* HBN.; gnathos fairly broad, curved dorsad, tapering to a sharply pointed tip; valvae assymmetrical, either tipped in a long, heavily sclerotized pointed spine. The right valva is distinctly longer than the left one, its terminal spine very long, rather distinctly curved ventrad; the terminal spine of the left valva is much shorter, straight. Pars basalis in the form of a small rounded projection. Juxta-plate very large. Saccus proportionately rather large. Sacculus not differentiated, unarmed. Vinculum rather long. Aedeagus moderately long, rather narrow, slightly curved; several very long and thin cornuti present.

Female genitalia (pl. XXXIV, fig. 45). Gonapophyses anteriores long, lamella subgenitalis narrow; in the members of the genus *Euchromius* GN. the former being very short and the latter being wide. Ostium bursae in the form of a heavily sclerotized thickening. Ductus bursae lightly sclerotized, bag-like, very short. Bursa copulatrix strongly elongated; no signum is present.

Material examined. A male paratypoid labelled: „Li-kiang. (China). Provinz Nord-Yuennan. 10 VIII 1934. H. HÖNE“, Slide No 1192-BL. (coll. DR. H. G. AMSEL, Karlsruhe); 2 males and one female from Chang-Yang, China (coll. British Museum (Nat. Hist.) in London).

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STRESZCZENIE

Autor omawia stanowisko systematyczne, morfologię i synonimikę 10 gatunków z rodzaju *Euchromius* GN. s. l. *E. ram-buriellus* (DUP.) i *E. cambridgei* (ZELL.) są bardzo blisko spokrewnione ze sobą. Z powodu dużej zmienności w ubarwieniu i deseniu oraz budowie aparatów kopulacyjnych były one szeregiem razy opisywane. Charakteryzują się one obecnością 9 marginalnych czarnych plamek na skrzydle przednim. Dalszy gatunek *E. vinculellus* (ZELL.) ma tylko 7 marginalnych plamek na skrzydle przednim. Był on również opisany kilkakrotnie. Dalszą grupę tworzą podobne zewnętrznie i genitaliowo *E. bellus* (HBN.) i *E. anapiellus* (ZELL.). Zupełnie odrębnym gatunkiem jest *E. latus* (STGR.), u którego aparat kopulacyjny samicy jest wydłużony teleskopowo, co jest cechą niespotykaną dotychczas u innych gatunków z rodzaju *Euchromius* GN. *E. ocellus* (HAW.), jest jedynym gatunkiem rodzaju *Euchromius* GN. znanym z Ameryki Północnej (prócz obszaru śródziemnomorskiego, Indii i Afryki). Gatunek ten był opisany dwukrotnie z Texasu i Californii jako *Eromene texana* ROB. i *E. californicalis* PACK., jednak okazy tych gatunków nie różnią się od okazów pochodzących ze Starego Świata i należy je uznać za synonimy *E. ocellus* (HAW.). Autor wykazuje słuszność wydzielenia przez

японского badacza MARUMO chińsko-japońskiego gatunku *Eromene expansa* BUTL. w osobny rodzaj *Miyakea* MAR. Gatunek ten różni się wielce od innych gatunków rodzaju *Euchromius* GN. w budowie swego aparatu kopulacyjnego. Z powodu bardzo poważnych różnic w aparatach kopulacyjnych między chińskim gatunkiem *E. yuennannensis* (CAR. & MEYR.) i pozostałymi gatunkami rodzaju *Euchromius* GN., gatunek ten został wydzielony przez autora w samodzielny rodzaj *Metaeuchromius* gen. n.

РЕЗЮМЕ

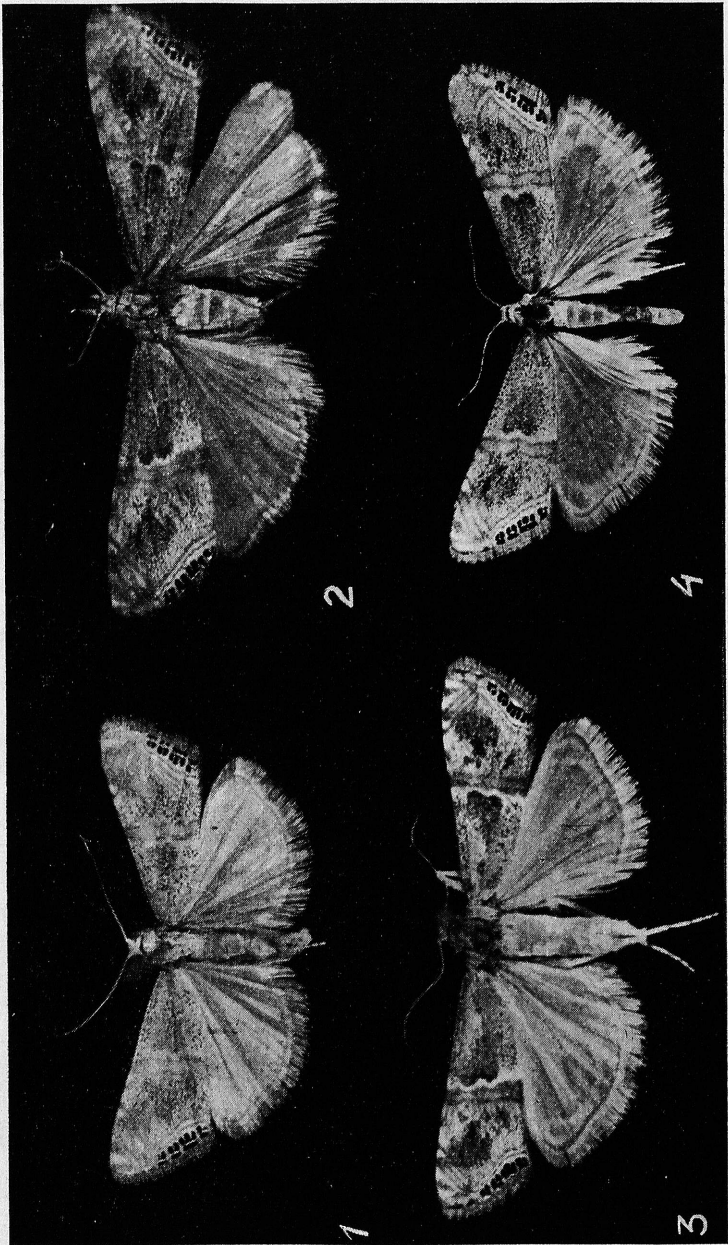
Автор оговаривает систематическое положение, морфологию и синонимику 10 видов рода *Euchromius* GN. s. l.

E. ramburiellus (DUP.) и *E. cambridgei* (ZELL.) находятся в очень близком родстве. Вследствие большой изменчивости окраски и рисунка, а также генитальных аппаратов, виды эти были многократно описаны. Характеризует их присутствие 9 черных маргинальных пятнышек на передних крыльях. Иной вид — *E. vinculellus* (ZELL.) имеет только 7 маргинальных пятнышек на передних крыльях. И этот вид был описан несколько раз. Более отдаленную группу составляют поверхностно похожие и сходные в строении генитального аппарата виды: *E. bellus* (HBN.) и *E. anapiellus* (ZELL.). Совсем обособленным видом является *E. latus* (STGR.), у которого генитальный аппарат самки вытянут наподобие телескопа. Похожее строение генитального аппарата не встречается у видов, принадлежащих к роду *Euchromius* GN. *E. ocelleus* (HAW.) является единственным видом рода *Euchromius* GN. встречающимся в Северной Америке (не считая средиземноморского ареала Индии и Африки). Вид этот был дважды описан из Техаса и из Калифорнии под названием *Eromene texana* RACK. и *E. californicalis* ROV. Экземпляры этих видов не отличаются однако от экземпляров, происходящих из Старого Света. Поэтому названия эти следует считать синонимами *E. ocelleus* (HAW.). Автор доказывает правильность выделения японским исследователем Марумо китайско-японского вида *Eromene expansa* BUTL. в особый род —

Miyakea MAR. Вид этот значительно отличается от остальных видов рода *Euchromius* Gn. строением генитального аппарата. Вследствие очень значительных разниц в строении генитального аппарата у китайского вида *E. yuennanensis* (CAR. & MEYR.) по отношению к остальным видам рода *Euchromius* Gn. автор выделил его в самостоятельный род *Metaeuchromius* gen. n.

Plate XXII

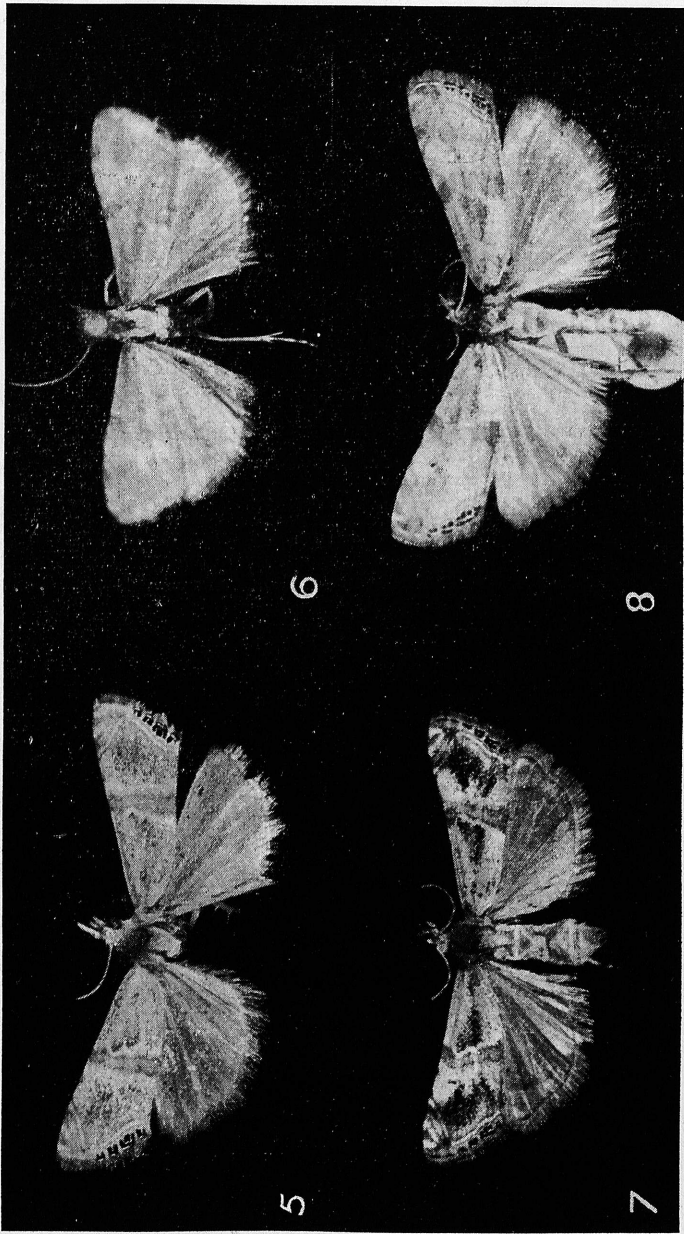
- Fig. 1. *Euchromius ramburiellus* (DUP.). ♂. Uralsk.
Fig. 2. *Euchromius islamellus* (AMS.). ♂. Fars, Iran. Paratypoid.
Fig. 3. *Euchromius ramburiellus* (DUP.). ♀. Beyruth.
Fig. 4. *Euchromius ramburiellus* (DUP.). ♂. Uralsk. Specimen labelled;
„gratiosella“.



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Plate XXIII

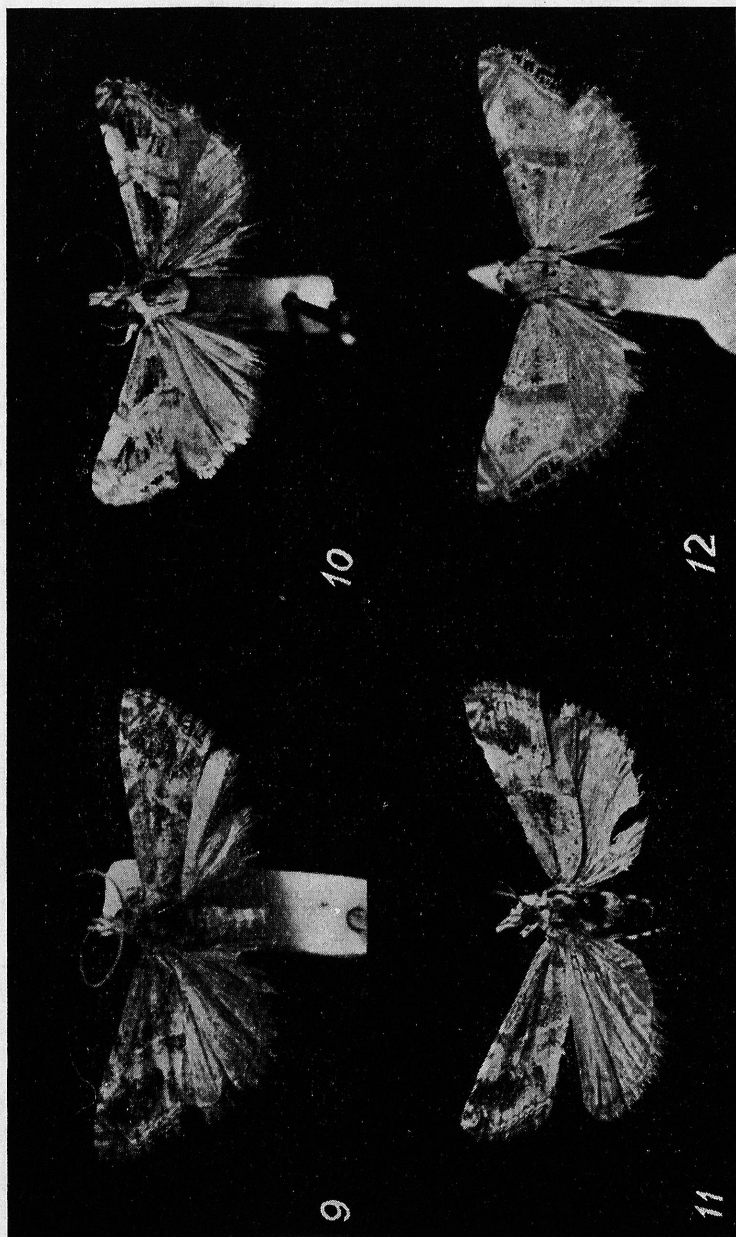
- Fig. 5. *Euchromius ramburiellus* ssp. *luteellus* (CAR.). ♀. Biskra. Paratypoid.
Fig. 6. *Euchromius cambridgei* (ZELL.). ♀. Egypt. Paratypoid of *Ommato-
pteryx ilkui* GOZMÁNY.
Fig. 7. *Euchromius cambridgei* (ZELL.) ♀. Egypt. Paratypoid of *Ommato-
pteryx szijjártói* GOZMÁNY.
Fig. 8. *Euchromius cambridgei* (ZELL.). ♂. Arabia.



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Plate XXIV

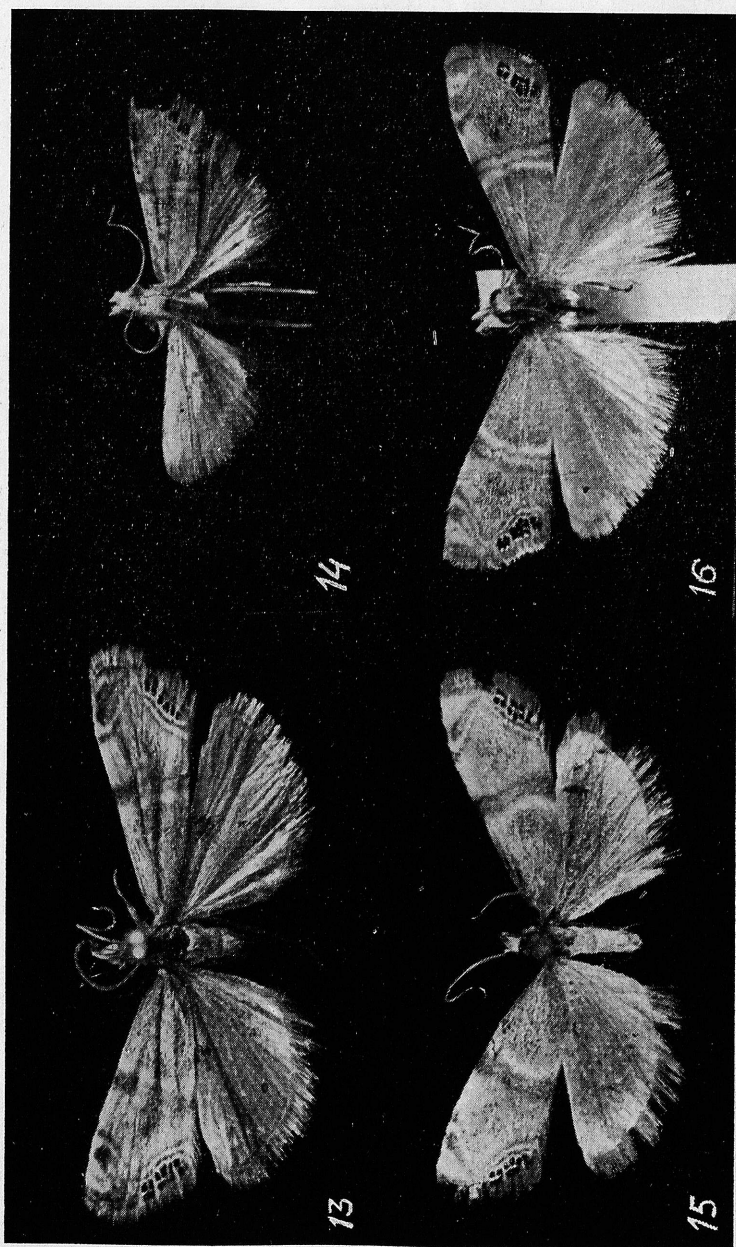
- Fig. 9. *Euchromius cambridgei* (ZELL.). ♂. Egypt. Holotype.
Fig. 10. *Euchromius cambridgei* (ZELL.). ♂. Languedoc. Type of *Eromene luciella* CHRÉT.
Fig. 11. *Euchromius cambridgei* (ZELL.). ♂. Morocco. Type of *Argyria prototypa* MEYR.
Fig. 12. *Euchromius cambridgei* (ZELL.). ♂. Arabia. Holotype of *Ommatopteryx congruentella* AMS.



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Plate XXV

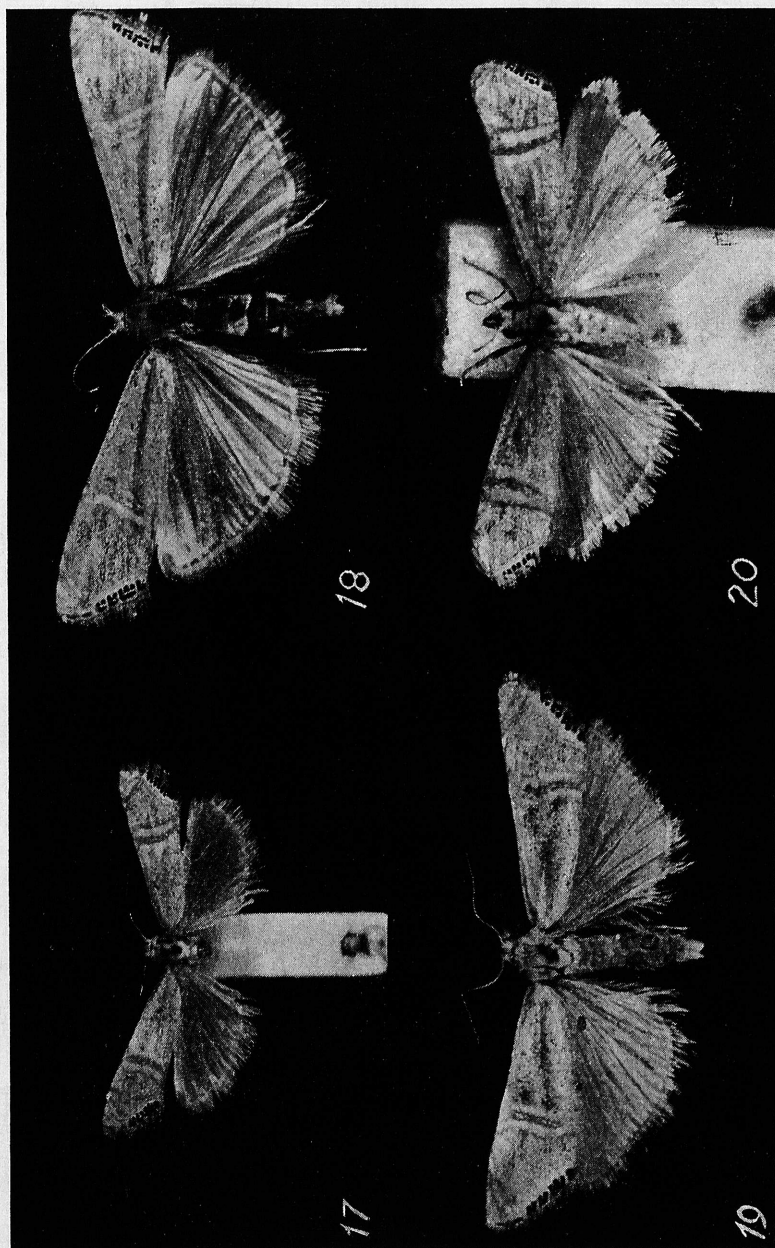
- Fig. 13. *Euchromius vinculellus* (ZELL.). ♂. Corsica. Holotype of *Ommatopteryx corsicalis* HMPS.
- Fig. 14. *Euchromius vinculellus* (ZELL.). ♀. Asben. Holotype of *Ommatopteryx asbenicola* ROTHSC.
- Fig. 15. *Euchromius vinculellus* (ZELL.). ♂. Great Atlas. Paratypoid of *Eromene joiceyella* SCHMIDT.
- Fig. 16. *Euchromius vinculellus* (ZELL.). ♀. Dead Sea. Allotype of *Eromene bahrlutella* AMS.



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Plate XXVI

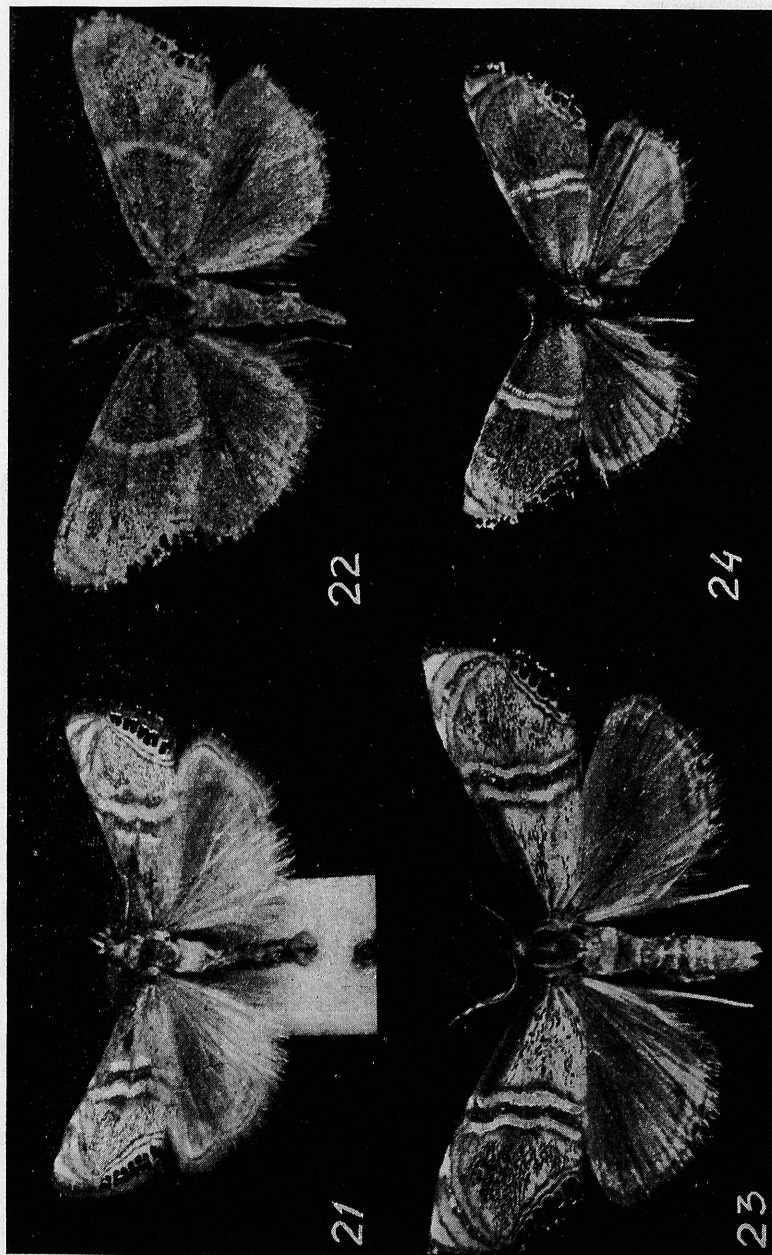
- Fig. 17. *Euchromius ocellus* (HAW.). ♀. Arabia.
Fig. 18. *Euchromius ocellus* (HAW.). ♀. Tripolitania.
Fig. 19. *Euchromius ocellus* (HAW.). ♀. Dom. Range Sta., Manyberries,
Alta, U. S. A. Specimen determined as „*Eromene californicalis*
PACK.“
Fig. 20. *Euchromius ocellus* (HAW.). ♂. Texas. Specimen determined as
„*Eromene texana* ROB.“.



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Plate XXVII

- Fig. 21. *Euchromius bellus* (HBN.). ♂. Hungary.
Fig. 22. *Euchromius latus* (STGR.). ♀. Greece. Holotype.
Fig. 23. *Miyakea expansa* (BUTL.). ♂. Japan.
Fig. 24. *Metaeuchromius yuennannensis* (CAR. & MEYR.). ♂. Li-kiang,
China. Paratypoid.



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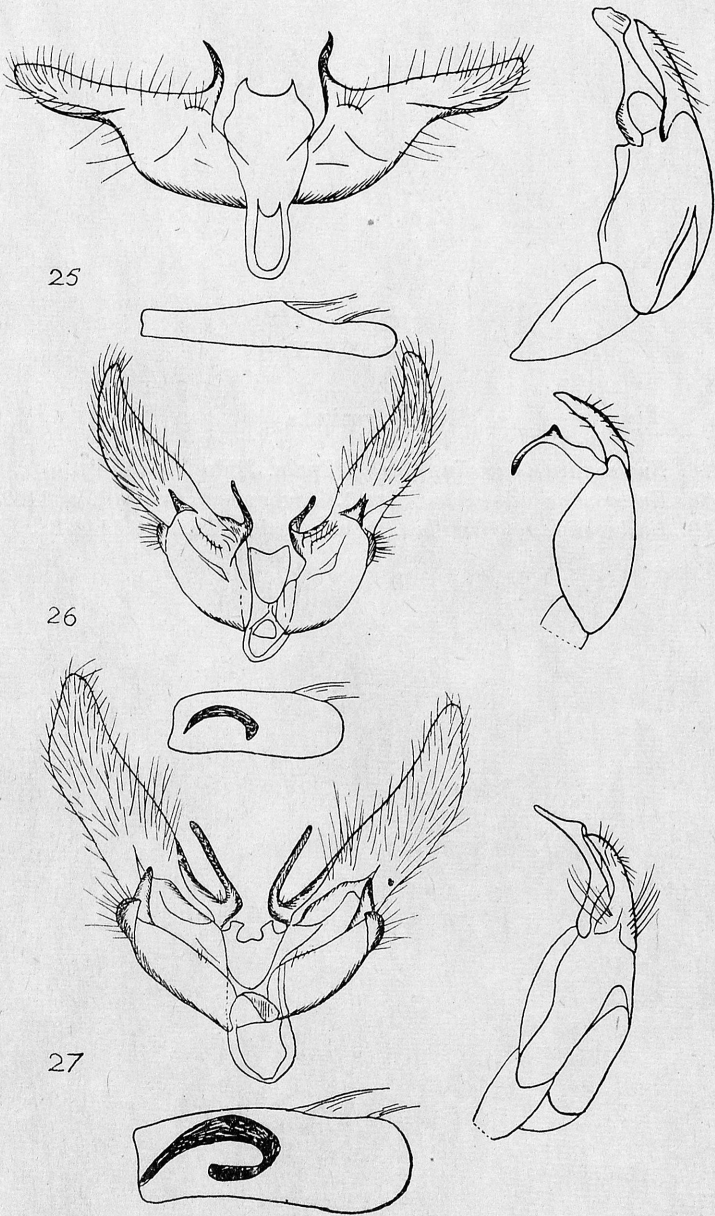
Plate XXVIII

Male genitalia

Fig. 25. *Euchromius cambridgei* (ZELL.). Egypt. Type. Slide No 5653-B.M.

Fig. 26. *Euchromius anapiellus* (ZELL.). Sicily. Slide No 1002-BL.

Fig. 27. *Euchromius bellus* (HBN.). Hungary. Slide No 1150-BL.

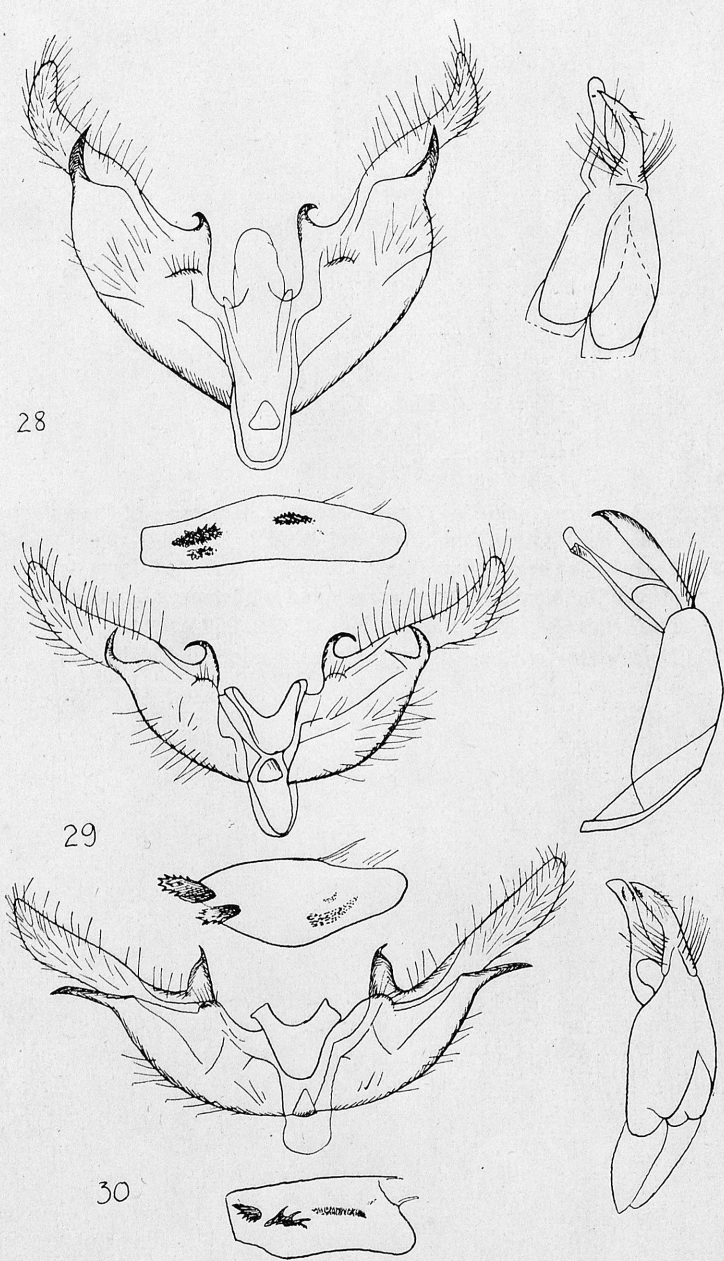


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Plate XXIX

Male genitalia

- Fig. 28. *Euchromius islamellus* (AMS.). Spain. Slide No 785-BL.
Fig. 29. *Euchromius islamellus* (AMS.). Afghanistan. Slide No 1159-BL.
Fig. 30. *Euchromius ramburiellus* (DUP.). Spain. Slide No 1146-BL.

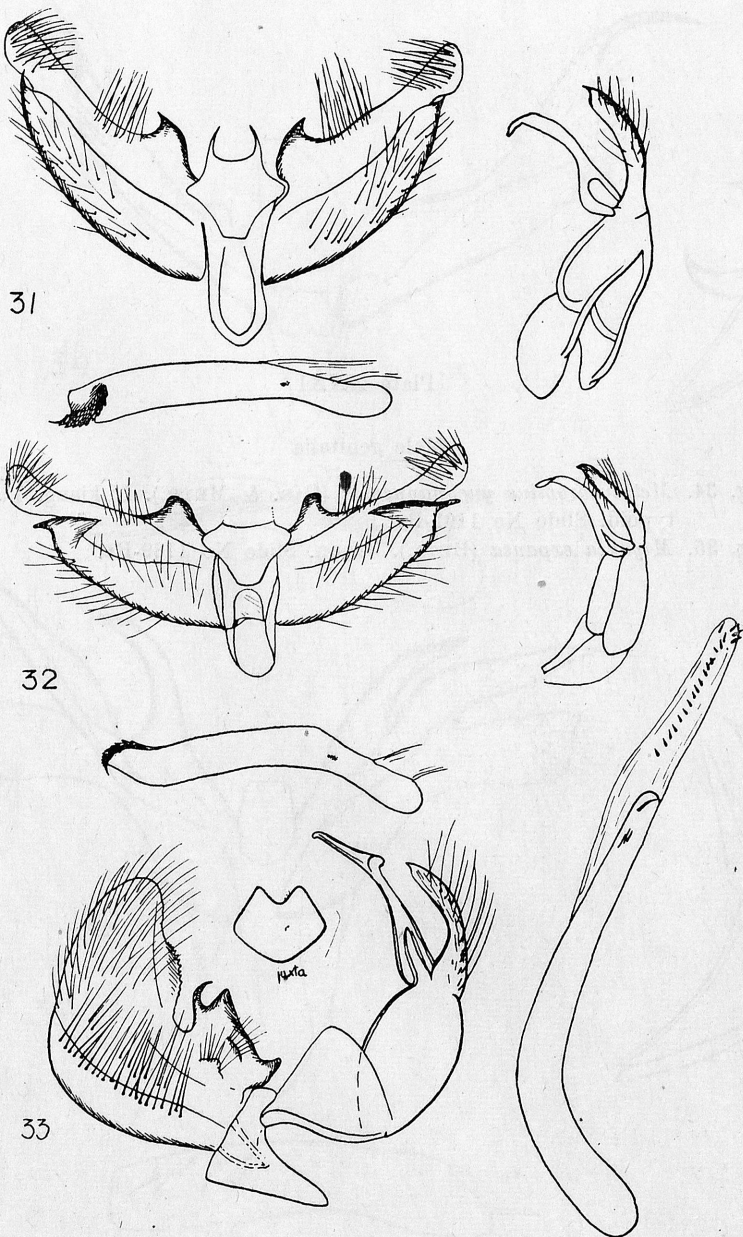


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Plate XXX

Male genitalia

- Fig. 31. *Euchromius vinculellus* (ZELL.). Corsica. Holotype of *Ommatopteryx corsicalis* HAMPS. Slide No 5647-B. M.
- Fig. 32. *Euchromius vinculellus* (ZELL.). Figure combined from two slides of the holotype and the paratypoid of *Eromene bahrlutella* AMS. Dead Sea & Ahwaz. Slides Nos 326 & 320-AMSEL.
- Fig. 33. *Euchromius ocellus* (HAW.). Texas. Slide No 815-BL.



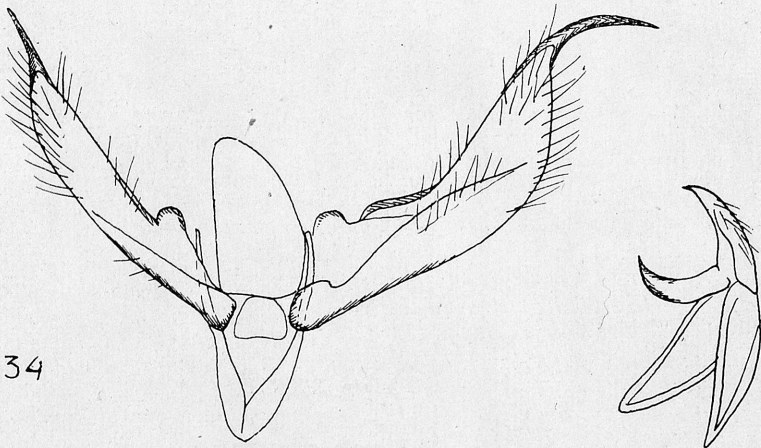
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Plate XXXI

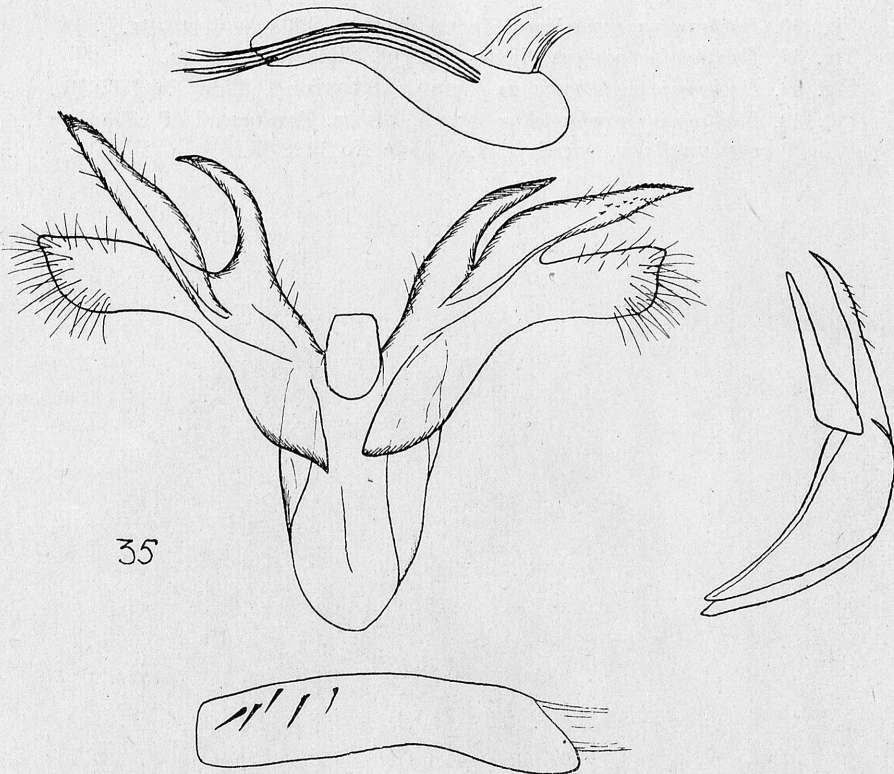
Male genitalia

Fig. 34. *Metaeuchromius yuennannensis* (CAR. & MEYR.). Li-kiang. Paratypoid. Slide No 1192-BL.

Fig. 35. *Miyakea expansa* (BUTL.). Japan. Slide No 1189-BL.



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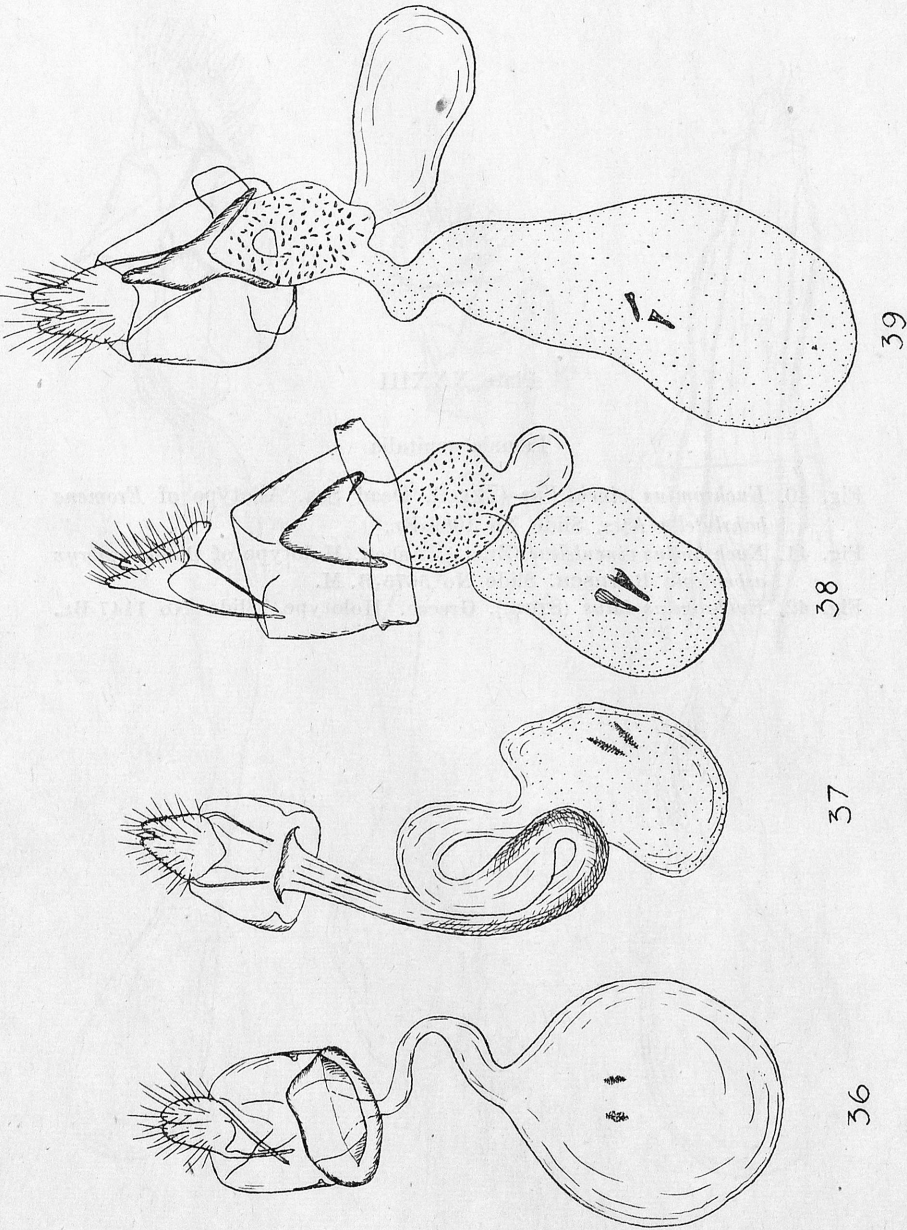
35

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Plate XXXII

Female genitalia

- Fig. 36. *Euchromius cambridgei* (ZELL.). Arabia. Slide No 1157-BŁ.
Fig. 37. *Euchromius ocelleus* (HAW.). Egypt. Slide No 1006-BŁ.
Fig. 38. *Euchromius ramburiellus* (DUP.). Afghanistan. Slide No 1169-BŁ.
Fig. 39. *Euchromius ramburiellus* (DUP.). Biskra. Paratypoid of „*Eromene ramburiella* v. *luteella* CAR.“. Slide No 1128-BŁ.

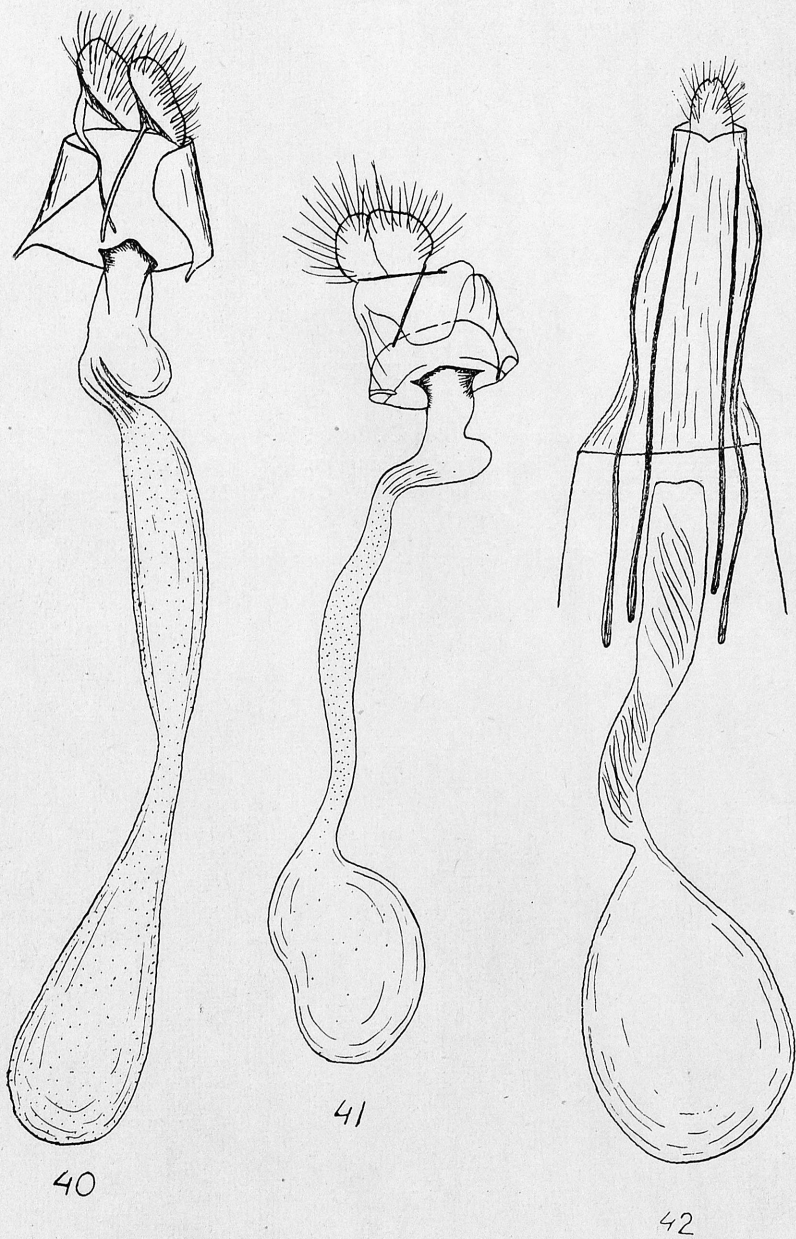


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Plate XXXIII

Female genitalia

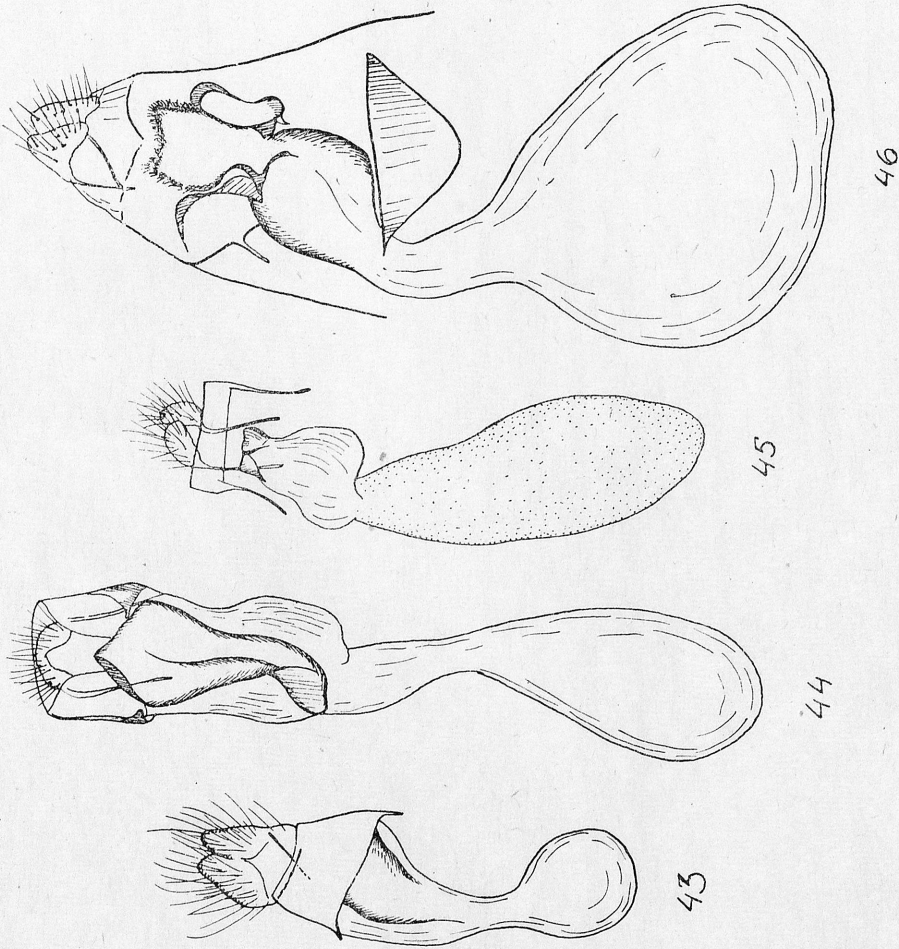
- Fig. 40. *Euchromius vinculellus* (ZELL.). Dead Sea. Allotype of *Eromene bahrlutella* AMS. Slide No 1089-BL.
- Fig. 41. *Euchromius vinculellus* (ZELL.). Asben. Holotype of *Ommatopteryx asbenicola* ROTHSC. Slide No 5675-B. M.
- Fig. 42. *Euchromius latus* (STGR.). Greece. Holotype. Slide No 1147-BL.



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Plate XXXIV

- Fig. 43. *Euchromius anapiellus* (ZELL.). Sicily. Lectotype. Slide No 5655-B. M.
Fig. 44. *Euchromius bellus* (HBN.). Hungary. Slide No 1195-BL.
Fig. 45. *Metaeuchromius yuennannensis* (CAR. & MEYR.). Chang-Yang,
China. Slide No 1191-BL.
Fig. 46. *Miyakea expansa* (BUTL.). Japan. Slide No 1190-BL.



Auctor del.
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