#### POLSKA AKADEMIA NAUK ZAKŁAD ZOOLOGII SYSTEMATYCZNEJ

# 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

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Nr 7

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Studies on the Crambidae (Lepidoptera). Part XXXVI. On Some Species of the Genus Chilo ZINCKEN

(33 text-figs., pl. XIII)

Materiały do znajomości Crambidae (Lepidoptera). Część XXXVI. O niektórych gatunkach rodzaju Chilo ZINCKEN

Материалы к познанию Crambidae (Lepidoptera). Часть XXXVI. О некоторых видах из рода Chilo Zincken

The genus Chilo ZCK. is still in a great chaos. Many species described in Chilo Zck. are apparently referable to other genera and, on the other hand, numerous species erected in such genera as Diatraea Guild. or Argyria Hbn. are typical representatives of the genus under consideration. Most species of the genus Chilo Zck. are distributed in the Old World, and in the New World there are probably few representatives of that genus. So far as I know, there is only one species of this genus, viz. Chilo chiriquitensis (ZELL.) known from South America. Other species of this genus described from South America are referable to such genera as Cephis RAG., Haimbachia DYAR, or are in need to be placed in genera of their own. Unfortunately, I have had no opportunity to examine some species of Chilo ZCK. described by SCHAUS from the Neotropical Region and I am unable to give their proper generic position. In the present paper there are discussed some species of the genus Chilo ZCK. needing clarification of their synonymy as being in a great confusion; in addition, I list several species which are to be transferred to the genus in question from other genera. The genus Silveria Dyar is sunk under Chilo Zck. The name Chilo truncatellus Schaus is replaced by Chilo xingu n. name as being praeoccupied by another Chilo truncatellus Zett. (actually in Pediasia Hbn.).

#### Chilo ZCK.

1817. Chilo ZINCKEN, GERMAR Mg. Ent., 2: 34.

1882. Diphryx GROTE, 1882, Bull. Z. S. geol. Surv., 6: 273.

1925. Silveria DYAR, Insect. inscit. menstr., 13: 10. N. syn.

1950. Chilotraea Kapur, Trans. roy. ent. Soc. Lond., 101: 402.

### Chilo luteellus (Motsch.)

[Text figs. 1, 17—19, pl. XIII, figs. 1, 2]

1860. Crambus lutellus [sic!] W. V., Motschulsky (nec Denis & Schiffermüller). Et. ent., 1860: 38.

1866. Schoenobius luteellus Motschulsky, Bull. Mosc., 39: 199.

1885. Chilo concolorellus Снязторн, Mém. Lép. Rom., 2: 149, pl. VIII, f. 15 a, b (in part). N. syn.

1889. Chilo gensanellus Leech, Entomologist, 22: 108, pl. V, f. 9.

1894. Chilo dubia Bethune-Baker, Trans. ent. Soc. London, 1894: 48, pl. I, ff. 18 & 19.

1903. Chilo boxanus E. Hering, Ent. Ztg. Stett., 64: 111 (2). N. syn.

1910. Chilo plumbosellus CHRÉTIEN, Bull. Soc. ent. France, 1910: 366. N. syn.

1932. Chilo pseudoplumbellus Caradja, Bull. Acad. Roum., 15: 117. N. syn.

1935. Chilo molydellus [sic!] ZERNY (in OSTHELDER), Mitt. münch. ent. Ges., 24: 79. N. syn.

1941. Chilo molybdellus ZERNY, OSTHELDER, Mitt. münch. ent. Ges., 31, pl. XV, f. 9.

Chilo luteellus (Motsch.) was described from Japan. However, the type material of this species does not exist as I stated in the Zoological Institute of the University in Moscow where is the Motschulsky collection of insects. Kapur (1950: 397) sank Chilo gensanellus Leech under C. luteellus (Motsch.) This may be incorrect, however, I agree with the Kapur opinion in this matter. Motschulsky, in his original description of his Schoenobius luteellus, writes: "Statura et color Crambi lutelli [sic!] sed alis anticis supra infuscatis. Exp. al. 9 l.". This definition agrees with the facies of Chilo gensanellus Leech, so there is only a little doubt that the two species are not identical with each other.

Chilo luteellus (Motsch.) is one of the best known and most widely distributed members of the genus Chilo Zck. It was several times described. This is rather understandable, as this species is rather variable and, in some instances, a correct identification of the specimens is possible only after a dissection of their genitalia.

Chilo concolorellus Christ. was described from one specimen of each sex from Askhabad and one female from Baranovka. I designate the male from Askhabad (GS-4738-LM) as the lectotype of Chilo concolorellus Christ. The female from Askhabad is designated as the lectotypoid. The other female (from Baranovka) belongs to a distinct, undescribed species, which will be studied at some future time.

Chilo boxanus E. Hering was described from China from one male and one female specimen. Both specimens are in the collection of the Institute of Zoology of the Polish Academy of Sciences in Warsaw. I designate as the

lectotype the female specimen which is obviously conspecific with the species under consideration. The male syntype of *Chilo boxanus* E. Hering apparently belongs to *Chilo suppressalis* (Walk.).

Chilo plumbosellus CHRÉT. was described from several specimens (males and females) from Biskra (North Africa). All these specimens are obviously identical with the species in question being only slightly paler in the forewing colour.

Chilo pseudoplumbellus Car. was described in 1927: 424, however, the name was given by Caradja only in 1932: 117. In 1927, Caradja cites: "Ch [ilo] bei plumbosellus Chret. 55 79...". The syntypes are from Tientsin. A study of this material, at the Muzeul Gr. Antipa in Bucharest, has shown that both C. luteellus (Motsch.) and C. pseudoplumbellus Car. are identical with each other.

Chilo molydellus Zerny was described from Marasch, Syria. A study of the type material at the Naturhistorisches Museum in Vienna has shown, that the Zerny species is identical with C. luteellus (Motsch.). Osthelder, in 1941, in his paper on the moths of Kreta, in the explanation of the plate XV, changed the name, mentioning molybdellus instead of molydellus. However, this correction is invalid.

Genitalically, C. luteellus (Motsch.) comes very near C. phragmitella (Hbn.), [text-fig. 2], however, both species are perfectly distinct from each other. In C. luteellus (Motsch.), the arms of the juxta-plate are of nearly identical length, and in C. phragmitella (Hbn.) the right arm is much longer than the left one. In the female genitalia, the ductus bursae in C. luteellus (Motsch.) shows a distinct, bulbose swelling, which is lacking in the second species; in addition, the bursa copulatrix in the former has a slightly indicated signum, consisting of a group of minute granules. The bursa copulatrix in C. phragmitella (Hbn.) shows no trace of a signum. In facies, the two species are rather similar to each other, however, the specimens of the species under consideration (especially males) normally show an irroration of metalically shining scales in the forewing; that irroration does not occur in the second species.

The ranges of the two secies overlap as I have found a male of C. phragmitella (Hbn.) from China poll. Caradja).

# Chilo pulverosellus RAGONOT [Text figs. 3, 21; pl. XIII, f. 4]

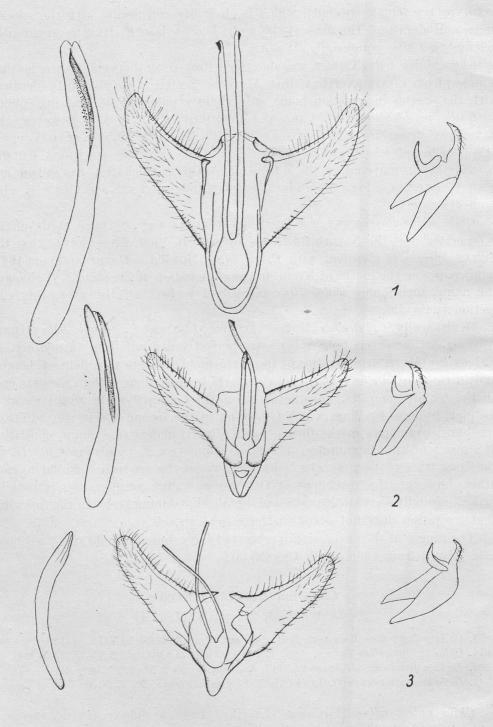
1895. Chilo pulverosellus RAGONOT, Bull. Soc. ent. France, 1895: XCVIII.

1914. Chilo brevipalpellus ZERNY, Ann. Hofmus. Wien, 28: 303, pl. XXV, f. 6. N. syn.

1932. Eschata fernandezi J. Joannis, Bull. Soc. ent. France, 37: 92. N. syn.

1945. Chilo lemarchandellus D. Lucas, Bull. Soc. ent. France, 50, 7. N. syn.

Chilo pulverosellus RAG. was described from a unique female specimen taken in Syria (GS—3648—MP). The type is in the collection of the Museum National d'Histoire Naturelle in Paris. In the same collection there are the types of Eschata fernandezi J. Joannis and of Chilo lemarchandellus D. Lucas;



Figs. 1—3. Male genitalia: 1—Chilo luteellus (Motsch.). GS-761-Bl. Holotype of Chilo molydellus Zerny. Syria. 2—Chilo phragmitella (Hbn.). GS-1853-Bl. Poland. 3—Chilo pulverosellus Rag. GS-759-Bl. Holotype of Chilo brevipalpellus Zerny. Jordan.

the types of these species are also single females, which are from the south of France. Obviously, they are identical with the species consideration. The ostium bursae in the female genitalia of *Chilo lemarchandellus* D. Lucas (GS-3649-MP) is slightly shorter than that in *Eschata fernandezi* J. Joannis (GS-3648-MP), however, some variability in the genitalia of the species under consideration has been observed.

Chilo brevipalpellus Zerny was described from several male and female specimens from Syria. This species is also obviously identical with *C. pulverosellus* Rag., as a study of the Zerny types has shown.

C. pulverosellus RAG. is distributed in south of France, Anatolia, Syria and in Central Asia. So far, I have not seen any specimen from North Africa.

### Chilo infuscatellus SNELL.

[Text figs. 4, 20]

- 1891. Chilo infuscatellus Snellen, Tijd. Ent., 34: 347.
- 1919. Argyria stricticraspis Hampson, Ann. Mag. nat. Hist., (9) 3: 449.
- 1919. Argyria coniorta Hampson, Ann. Mag. nat. Hist., (9) 3: 449.
- 1919. Diatraea calamina Hampson, Ann. Mag. nat. Hist., (9) 3: 644.
- 1933. Diatraea shariinensis Eguchi, J. agric. Exp. Sta. Gort. Chosen, 19: 3.
- 1949. Chilo tadzhikiellus Gerasimov, Trudy zool. Inst. Akad. Nauk SSSR, 8: 704. N. syn.

After a study of the genitalia of the types of *Chilo tadzhikiellus* Ger., I stated that it is identical with *Chilo infuscatellus* Snell. The types of *Chilo tadzhikiellus* Ger. are in the collection of the Zoological Institute of the Academy of Sciences of USSR in Leningrad.

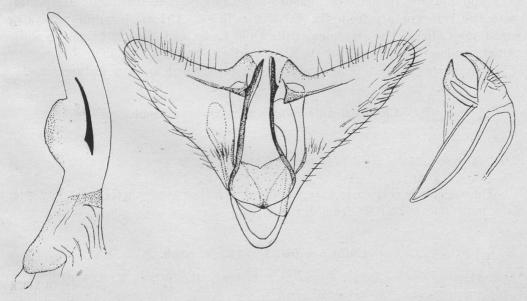


Fig. 4. Male genitalia of *Chilo infuscatellus* Snell. GS-412-LM. Lectotype of *Chilo tadzhikiellus* Ger. Tadzhikistan.

C. infuscatellus Snell, was placed by Kapur in the genus Chilotraea Kapur, however, Chilotraea Kapur is an obvious synonym of Chilo Zck. This species is very variable in the coloration of the forewing, which is brownish-yellow to chocolate-brown. The male genitalia are very characteristic by a very distinct cornutus and the ventral swelling of the aedeagus. In the female genitalia very characteristic are the trapezoidal, incised terminally ostium pouch and a trapezoidal, very distinct signum situated just beyond the ductus bursae. The species is widely distributed from Tadzhikistan through India to Java and the Philippines.

### Chilo aleniella (STRAND), n. comb.

[Text fig. 15]

1913. Diatraea aleniella STRAND, Arch. Naturg, 78 A: 77.

This species is a typical member of *Chilo* ZCK. as a study of the genitalia of the type has shown. It is close to *C. orichalcociliella* (STRAND) and *C. argyrolepia* (HMPS.). The type, male (GS-7177-BM), is from West Africa.

### Chilo argyrolepia (HMPS.), n. comb.

[Text figs. 14, 26]

1919. Diatraea argyrolepia Hampson, Ann. Mag. nat. Hist., (9) 4: 54 (in part).

This is also a typical member of *Chilo* ZCK. It was described from several male and female specimens from Africa. The holotype comes from Mt. Mlanje, Nyasaland. The type material includes three species. The specimens conspecific with the holotype are from Br. E. Africa, Br. C. Africa, Mozambique, Natal and Cape Colony. The specimens from Gold Coast and Nigeria belong to a distinct, undescribed species, or to *C. aleniella* (STRAND). One male belongs to *C. argyropasta* (HMPS.). This problem will be studied at some future time.

# Chilo orichalcociliella (STRAND), n. comb. [Text fig. 16]

1911. Diatraea orichalcociliella STRAND, Soc. Entomol., 25: 91.

This species is very close, to or identical with *C. argyrolepia* (HMPS.). The type is a male (GS-2672-BM) from East Africa.

### Chilo bandra (KAPUR), n. comb.

1950. Chilotraea bandra Kapur, Trans. ent. Soc. Lond., 101: 407, pl. V. ff. 6-10.

Described from India in the genus *Chilotraea* Kapur, however, the Kapur genus falls to the synonyms of *Chilo* Zck.

### Chilo batri (FLETCHER), n. comb.

1928. Diatraea batri Fletcher, Sci. Rep. agric. Res. Inst. Pusa, 27: 59.

Obviously a member of *Chilo* Zck., however, very difficult to recognize from the very obscure description, which does not include any figure of the genitalia. The type material, most probably does not exist. Described from India, where the genus *Diatraea* Guild does not occur. Quite a similar situation is with regard to *Diatraea kanra* Fletcher and *D. ikri* Fletcher.

### Chilo kanra (FLETCHER), n. comb.

1928. Diatraea kanra Fletcher, Sci. Rep. agric. Res. Inst. Pusa, 27: 59.

A member of Chilo ZCK. Comments see above.

### Chilo ikri (FLETCHER), n. comb.

1928. Diatraea ikri Fletcher, Sci. Rep. agric. Res. Inst. Pusa, 27: 60.

A member of Chilo ZCK. Comments see above.

## Chilo costifusalis (HMPS.), n. comb. [Text figs. 10, 22]

1919. Diatraea costifusalis Hampson, Ann. Mag. nat. Hist., (9) 4: 55.

Described from Nyasaland. A typical member of Chilo Zck. Two signa on bursa copulatrix are very characteristic.

### Chilo diffusilinea (J. JOANNIS), n. comb.

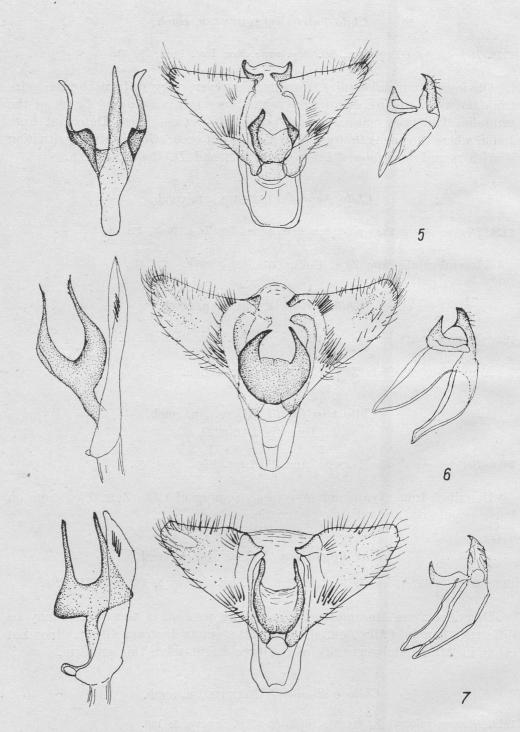
1922. Diatraea diffusilinea J. Joannis, Bull. Soc. lép. Genève, 5; 194, pl. VIII, f. 5.

Described from Mozambique. The generic position of this species may be different than in *Chilo* Zck., however, the genus *Diatraea* Guild does not occur in Africa. Only a study of the type might solve this problem.

#### Chilo williami (J. JOANNIS), n. comb.

1922. Diatraea williami J. Joannis, Bull. Soc. lép. Genève, 5: 195.

Described also from Mozambique. The position of this species should be considered as only provisional.



Figs. 5—7. Male genitaila: 5— Chilo polychrysa (Meyr.). GS-7000-BM. Typoid. Malaya. 6— Chilo louisiadalis (Hmps.). GS-2403-BM. Louisiade Arch. 7— Chilo terrenellus Pag. GS-7006-BM. Vulcan Island.

### Chilo virgosa (E. HERING), n. comb.

1903. Diatraea virgosa E. Hering, Ent. Ztg. Stett., 64: 79, pl. I, f. 32.

A member of Chilo Zck. Described from a unique male specimen from Sumatra.

### Chilo subbivittalis (GAEDE), n. comb.

1917. Diatraea subbivittalis GAEDE, Mitt. zool. Mus. Berlin, 8: 388.

Described from East Africa. The new combination should be considered as only provisional. Most species from Africa described in *Diatraea* Guild. belong to *Chilo* Zck. *Diatraea* does not occur in Africa, however, some African species described in *Diatraea* Guild. are referable to *Haimbachia* Dyar.

### Chilo pulverata (WILEMAN & SOUTH), n. comb.

1917. Diatraea pulverata Wileman & South, Entomologist, 50: 147.

Described from a few specimens coming from Formosa. Judging by the genitalia of the type-material, this species is a typical representative of *Chilo* Zck.

# Chilo polychrysa (MEYR.), n. comb. [Text fig. 5]

1932. Diatraea polychrysa Meyrick, Exot. Micr., 4.: 321

Described from Malaya. MARTIN (1954: 120) transferred this species to Chilotraea Kapur, which is identical with Chilo Zck. The genitalia are typical of Chilo Zck.

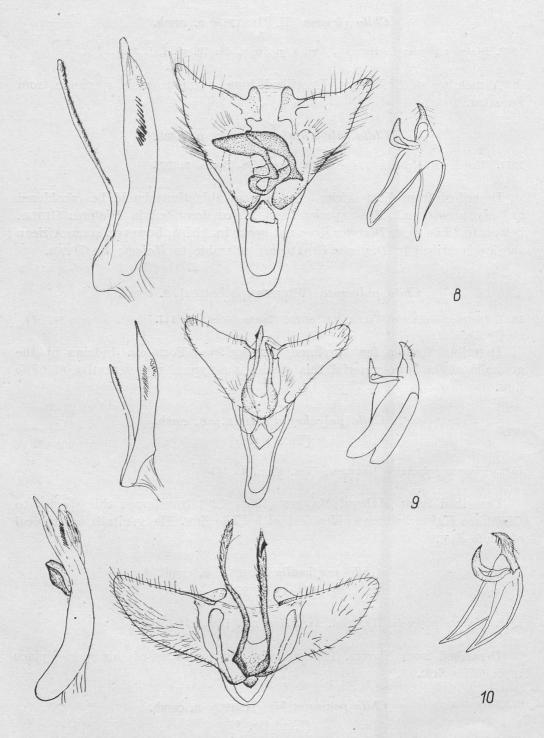
# Chilo perfusalis (HMPS.), n. comb. [Text fig. 25]

1919. Diatraea perfusalis Hampson, Ann. Mag. nat. Hist., (9) 4: 55.

Described from Nigeria. The genitalia and the facies of this species place it in Chilo ZCK.

# Chilo psammathis (HMPS.), n. comb. [Text fig. 8]

1919. Argyria psammathis Hampson, Ann. Mag. nat. Hist., (9) 3: 450. 1919. Diatraea perpulverea Hampson, Ann. Mag. nat. Hist., (9) 4: 53.



Figs. 8—10. Male genitalia. 8— Chilo psammathis (HMPS.). GS-7014-BM. Typoid of Diatraea perpulverea HMPS. Nigeria. 9— Chilo argyropasta ssp. fuscata (JANSE). GS-7002-BM. Natal. 10— Chilo costifusalis (HMPS.). GS-7059-BM. Holotype. Nyasaland.

Described from Nigeria and Gold Coast. Martin (1954: 120) sank *Diatraea perpulverea* Hmps. under *Argyria psammathis* Hmps. and transferred this species to *Chilotraea* Kapur. However, *Chilotraea* Kapur is identical with *Chilo* Zck. The genitalia of this species are perfectly typical od *Chilo* Zck.

# Chilo chiriquitensis (ZELL.), n. comb. [Pl. XIII, fig. 5]

1877. Eromene chiriquitensis Zeller, Horae Soc. ent. ross., 13, 70, pl. I, f. 25. 1925. Silveria adelphilia Dyar, Insec. inscit. menstr., 13: 11.

The type of Zeller's species comes from Chiriqui Panama. It is a female in the collection of the Zoological Museum of the Humboldt University in Berlin. Dyar and Heinrich (1927: 32), place Silveria adelphilia Dyar in the synonymy of the Zeller species. The latter was placed in the genus Silveria Dyar, the generic type of which is Silveria hexhex Dyar, described from Mexico. Dyar and Heinrich figured the male genitalia of C. chiriquitensis (Zell.) from the type of Silveria adelphilia Dyar (Mexico); and the female genitalia from a specimen from Mexico. The figure of the male genitalia are obviously typical of Chilo Zck. and that of the female genitalia rather agree with the genitalia of the Zeller type. The male genitalia resemble those of Chilo luteellus (Motsch.), in having very long arms of the juxta-plate. Dyar and Heinrich cite also Guatemala as the locality of C. chiriquitensis (Zell.). This is the most southern locality of the genus Chilo Zck. s. str. in America. The other species of Silveria Dyar, namely, S. hexhex Dyar is very close to the species under consideration. Accordingly, I hereby sink Silveria Dyar under Chilo Zck.

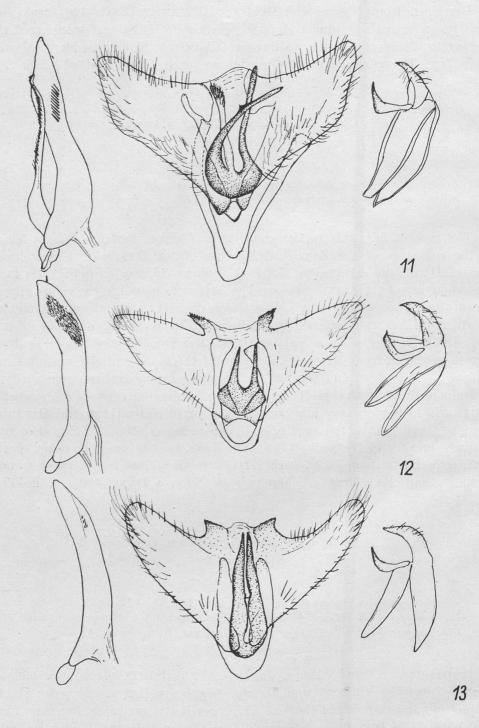
# Chilo argyropasta (HMPS.), n. comb. [Text fig. 9]

1919. Argyria argyropasta Hampson, Ann. Mag. nat. Hist., (9) 3: 449.

1919. Diatraea argyrolepia Hampson, Ann. Mag. nat. Hist., (9) 4: 54 (male) (in part).

1919. Diatraea argentisparsalis Hampson, Ann. Mag. nat. Hist., (9) 4: 55.

Distributed in South Africa. In 1954: 120, Martin placed the male of Diatraea argyrolepia Hmps. and D. argentisparsalis Hmps, under the species in question and transferred them to Chilotraea Hmps., which is, however, identical with Chilo Zck. C. argentisparsalis ssp. fuscata (Janse) is identical with C. argentisparsalis ssp. pallidifascia (Janse). Both described as varietes of Diatraea argentisparsalis Hmps. (Trans. ent. Soc. Lond., 1922: 5-6).



Figs. 11—13. Male genitalia: 11 — Chilo mesoplagalis (HMPS.). GS-7013-BM. Typoid. Sierra Leone. 12 — Chilo ochrileucalis (HMPS.). North Australia. GS-1913-BL. 13 — Chilo agamemnon n. sp. GS-881-BL. Egypt. Holotype.

# Chilo louisiadalis (HMPS.), n. comb. [Text fig. 6]

1919. Diatraea louisiadalis Hampson, Ann. Mag. nat. Hist. (9) 3: 545.

Described from St. Aignan (Louisiade Arch.). Judging by the external appearance and the genitalia, referable to the genus *Chilo* ZCK. Close to *Chilo terrenellus* (PAG.) [text fig. 7].

# Chilo ochrileucalis (HMPS.), n. comb. [Text figs. 12, 24]

1919. Diatraea ochrileucalis Hampson, Ann. Mag. nat. Hist. (9) 3: 547.

Described from Queensland. Facies and genitalia typical of *Chilo* Zck. Genitalically very distinct by a group of very nemerous tiny cornuti in the aedoagus.

# Chilo bostralis (HMPS.), n. comb. [Text fig. 23]

1919. Argyria bostralis Hampson, Ann. Mag. nat. Hist., (9) 3: 455.

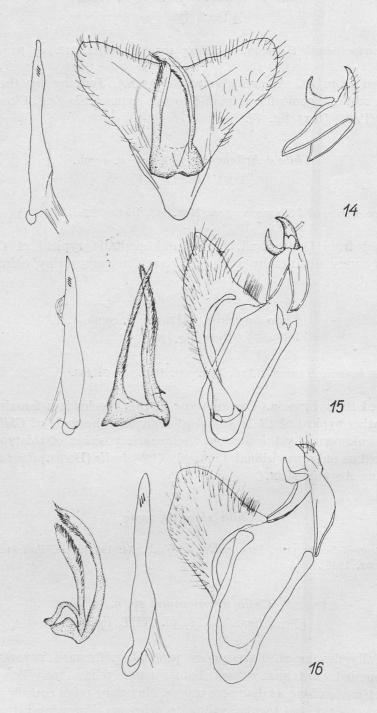
Described from Uganda. The holotype of this species is a female with the genitalia rather typical of *Chilo* Zck. Unfortunately the male of *Chilo bostralis* (HMPS.) is unknown. By this reason, the generic position of this species may be considered as only provisional. Certainly *C. bostralis* (HMPS.) does not belong to the genus *Argyria* HBN.

### Chilo xingu n. name

1922. Chilo truncatellus Schaus, Proc. ent. Soc. Wash., 24: 142 (nec Chilo truncatellus Zetterstedt, 1840).

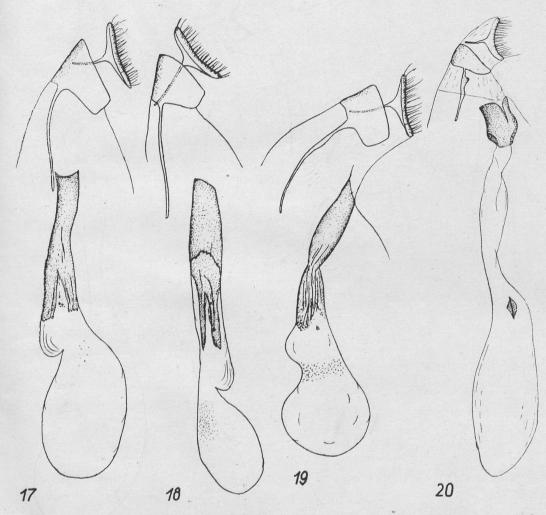
# Chilo agamemnon sp. n. [Text figs. 13, 28, pl. XIII, fig. 6]

Ocelli fully developed. Face rather protruding forward beyond the eye, broadly rounded. Antenna yellow. Labial palpi yellow to yellow-ochreous, abouth six times as long as diameter of eye. Maxillary palpi concolorous. Face, head, vertex, thorax and tegulae yellow to ochreous. Forewing rather slender; costa nearly straight; apex acute; termen nearly straight, rather distinctly oblique, in females more than in males. Ground colour dull yellow to ochreous-



Figs. 14—16. Male genitalia: 14—Chilo argyrolepia (HMPS.). GS-7009-BM. Typoid. Natal. 15—Chilo aleniella (STRAND). GS-2671-BM. Holotype. Guinea. 16—Chilo orichalcociliella (STRAND). GS-2672-BM. Holotype. Tanganyika.

yellow with pattern more or less distinctly defined. Terminal dots rather distinct from apex to anal angle. Discal dot at least traceable, in some instances very distinct. Subterminal line more or less distinct. In some specimens there is a poorly traceable, oblique, dark shadow running from the apex to the discal

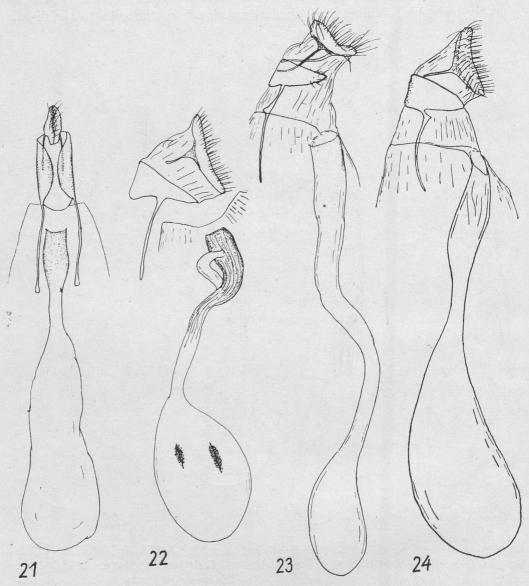


Figs. 17—20. Female genitalia: 17—Chilo luteellus (Motsch.). GS-553-Bl. Issyk-Kul. 18—Chilo luteellus (Motsch.). GS-765-Bl. Santa Anastazia. 19—Chilo luteellus (Motsch.). GS-762-Bl. Syntype od Chilo molydellus Zerny. Syria. 20—Chilo infuscatellus Snell. GS-412-Lm. Lectotypoid of Chilo tadzhikiellus Ger. Tadzhikistan.

dot. Fringes slightly glossy, slightly paler than ground colour. Hindwing rather glossy, white to yellowish with concolorous fringe. Under surface of fore- and hindwings unicolorous with no trace of pattern.

Male genitalia. Uncus and gnathos of a basic *Chilo*-type. Valva with apex broadly rounded; basal-costal angle produced in a distinct process provided with some tiny spikes; hair slightly developed, no bristles present. Juxta-plate

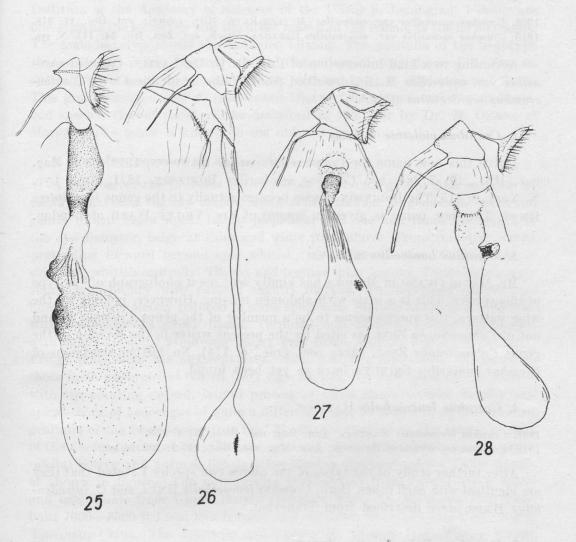
elongate with narrow, pointed arms. Aedoeagus distincly bent with a distinct caudal, rounded, bordered projection. No cornuti present.



Figs. 21—24. Female genitalia: 21 — Chilo pulverosellus Rag. GS-760-Bl. Asia Minor. 22 — Chilo costifusalis (Hmps.). GS-7060-Bm. Typoid. Nyasaland. 23 — Chilo bostralis (Hmps.). GS-7129-Bm. Holotype. Kenya. 24 — Chilo ochrileucalis (Hmps.). GS-2402-Bl. North Australia.

Female genitalia. Labia normal. Anterior apophyses abnormally long. Ostium pouch lightly sclerotized, its orifice round with edges rather wrinkled. a distinct lateral projection with a heavily sclerotized, rather square patch; Bursa copulatrix with no signum.

The new species is described from two male and six female specimens coming from Egypt. One specimen was bred from maize.



Figs. 25—28. 25 — Chilo perfusalis (HMPS.). GS-7058-BM. Holotype. Yorubaland. 26 — Chilo argyrolepia (HMPS.). GS-7022-BM. Typoid. Natal. 27 — Chilo mesoplagalis (HMPS.) GS-7003-BM. Typoid. Nigeria. 28 — Chilo agamemnon n. sp. GS-882-BŁ. Typoid. Egypt.

Holotype-male, Egypt, coll. Naturhistorisches Museum in Vienna. Typoids—three females from Egypt, coll. Naturhistorisches Museum in Vienna; one male and one female from Egypt, author's coll.; two females from Egypt, Cairo, coll. Dr. H. G. Amsel, Karlsruhe. Genital slides: 881-Bl., 882-Bl., 871-Bl. Two females have the abdomens missing.

#### MISCELLANOUS NOTES

### 1. Xanthocrambus caducellus (MÜLLER-RUTZ), n. status, n. comb.

1908. Crambus saxonellus var. eaducellus Müller-Rutz, Mitt. schweiz. ent. Ges., 11: 318. 1910. Crambus saxonellus var. occidentellus Caradja, Dtsch. ent. Zeit. Iris, 24: 111. N. syn.

According to a kind information of Prof. Dr G. De Lattin, *Crambus saxo-nellus* var. *caducellus* M. R., described from Wallis, is identical with *Xantho-crambus occidentellus* (CAR.).

#### 2. Crambus violettae n. name

I give this new name for *Crambus minimellus* Hampson, 1919, Ann. Mag. nat. Hist., (9) 3:284, nec *Crambus minimellus* Robinson, 1871, Ann. Lyc. N. York, 9:315. The Robinson species belongs actually to the genus *Raphiptera* Hmps. The new name is given in honour of Mrs. Violet Ward of London.

### 3. Crambus boninellus SHIBUYA

Mr. Masao Okano of Morioka has kindly sent me a photograph of the type of this species. This is a male with abdomen missing. However, judging by the wing pattern, this species seems to be a member of the genus *Crambus* F. and not of *Calamotropha* Zell. as cited by the present writer in the revision of the genus *Calamotropha* Zell. (Acta zool. crac., 6: 174). No further specimens of *Crambus boninellus* Shibuya have as yet been found.

#### 4. Crambus leucoschalis Hampson

1898. Crambus leucoschalis Hampson, Ann. Mag. nat. Hist., (7) 1: 159. 1919. Crambus infradentatus Hampson, Ann. Mag. nat. Hist., (9) 3: 292. N. syn.

After further study of the types of the above two species I stated that they are identical with each other. Both, *Crambus leucoschalis* HMPS. and *C. infradentatus* HMPS. were described from Transvaal.

### 5. Crambus diplogrammus Zeller

1863. Crambus diplogrammus Zeller, Chil. Cramb. Gen. Spec.: 25. 1881. Crambus textellus Christoph, Bull. Mosc., 46:47.

The problem of the synonymy of Crambus diplogrammus Zell. has hitherto been very obscure. Some workers have sonynimized Crambus argentistriellus Leech with the Zeller species, or, on the other hand, the Christoph species has been considered to be a distinct one. It has been quite impossible to clarify the situation without a study of the genitalia of the types of the three species, since they are strikingly similar to each other in colour and pattern. The genitalia of these species proved to be very distinct. The type of C. diplogrammus

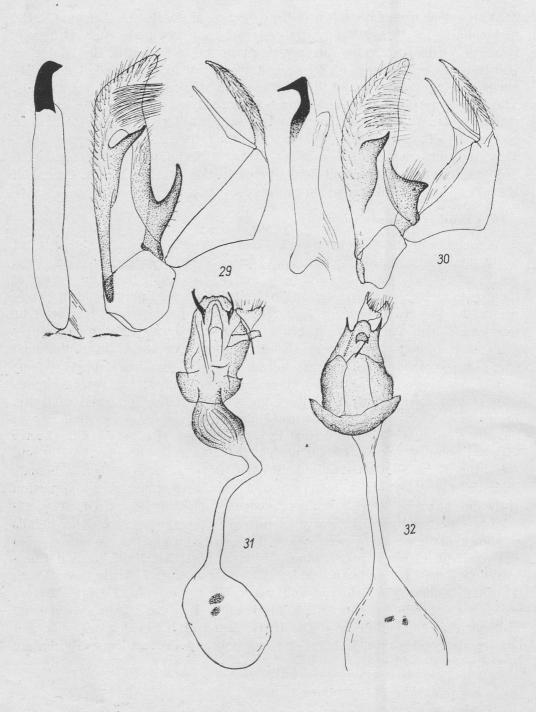
Zell. is a male from Japan; it is in the collection of the British Museum (N. H.) in London. C. textellus Christ. was described from two males and one female taken in Vladivostok. They are preserved in the collection of the Zoological Institute of the Academy of Sciences of the USSR in Leningrad. I designate one male as the lectotype and the other male and the female as the lectotypoids. The male lectotypoid has the abdomen missing. The genitalia of the lectotype studied by Dr. V. I. Kuznetcov proved to be identical with those of the Zeller species. The Leech species is perfectly distinct from C. diplogrammus Zell. This group includes also C. moriokensis Okano from Japan and two undescribed species. One of these will be described in this year by Dr. M. Okano of Morioka. The other is known to me only by two females.

### 6. Crambus gonoxes sp. n.

A member of the Crambus porcellanellus (Motsch.) group. Alar expanse 24 to 32 mm. Costa sligthly arched, apex acute, termen perpendicular to costa, gently inbent below apex. Labial palpi four and one half times the length of the eye-diameter, beige at sides and white from above. From rounded, barely protruding forward beyond eye, whitish, vertex concolorous. Collar beige at sides and whitish centrally. Thorax and tegulae shiny bronzy. Forewing strongly shiny light bronzy with pattern slightly marked. An ill-defined subterminal line, nearly completely reduced in some specimens. Median line strongly oblique with a concolorous streak basad. Terminal dots present. Fringe concolorous with ground colour. Hindwing glossy grey-beige, whitish lightened centrally. Fringe paler than the adjacent area. Male genitalia show some similarity to those in C. picturatellus South (text figs. 29, 30), but with pars basalis shorter with tip pointing dorsad, lateral process of valva much broader basally and apical thorn of aedoeagus of quite a different shape as shown in figures. Female genitalia of the two species (text figs. 31, 32) are distinct on the caudal portion of the ductus bursae which is bulbose, grooved and heavily sclerotized in C. pieturatellus South and normal, lightly sclerotized in the new species. Other details as shown in figures. The new species is described from twenty-seven males and one female from Upper Burma (Hpimaw Fort, Nr. Myikaina and Kambalti 7000-8000 ft.) and two females and one male from Li-kiang Prov. North Yuennan, China. The holotype and twenty-six typoids from Upper Burma are in the collection of the British Museum (N. H.); one female typoid from Li-kiang is in the collection of Dr. H. G. Amsel of Karlsruhe, one male and one female typoids from Li-kiang and one male typoid from Upper Burma are in the author's collectin.

### 7. Novocrambus propygmaeus n. name

I give this new name for *Crambus pygmaeus* Zeller, 1881, Horae Soc. ent. ross., **16**: 173, pl. xi, f. 10 (actually a member of the genus *Novocrambus* Amsel), nec *Crambus pygmaeus* Stephens, 1834, Ill. Brit. Ent. Haustellata, **4**: 324 [a synonym of *Platytes cerussella* (D. & Schiff.)].



Figs. 29-32. Male and female genitalia. 29. Crambus picturatellus South. GS-959-Bł. China. 30. Crambus gonoxes sp. n. GS-1435-Bł. Typoid. Upper Burma. 31. Crambus picturatellus South. GS-4622-BM. Lectotypoid. China. 32. Crambus gonoxes sp. n. Typoid. GS-1511-Bł. Li-kiang, China.

### 8. Mesocrambus pallidellus (DUPONCHEL)

1836. Crambus pallidellus Duponchel, Hist. nat. Lép. Fr., 10: 63, pl. cclxx, f. 6. 1849. Crambus grammiculellus H. Lucas, Expl. Alg. Zoologie, 3: 407, pl. iv. f. 8. N. syn.

Judging by the figure given by H. Lucas, Crambus grammiculellus H. Lucas is an obvious synonym of Mesocrambus pallidellus (Dup.)

### 9. Agriphila argentistrigellus (RAGONOT)

1888. Crambus argentistrigellus RAGONOT, Ann. Soc. ent. Fr. (6) 8: 279, pl. bi, f. 9. 1956. Agriphila monica Bleszyński, Ann. hist.-nat. Mus. nat. hung., 7: 420, f. 4. N. syn.

Agriphila monica Blesz. described from a unique male specimen from Algeria, seems to be identical with A. argentistrigellus (RAG.). This species shows a rather considerable variability in the forewing-pattern.

### 10. Hednota vetustellus (WALKER), n. comb.

1863. Crambus vetustellus Walker, List Spec. lep. Ins. B. M., 27: 176. 1887. Hednota asterias Meyrick, Trans. ent. Soc. Lond., 1887: 250. N. syn.

Hampson in 1896 (Proc. zool. Soc. Lond., 1895: 972) cites this species to be a member of *Phycitidae* and to be identical with *Crambus cygnosellus* Walk. However, *Crambus vetustellus* Walk. belongs obviously to *Crambidae* being identical with *Hednota asterias* Meyr. On the other hand, *Crambus cygnosellus* Walk. is a member of *Phycitidae*. The type of *Crambus vetustellus* Walk. has the abdomen missing, however, there is no doubt that it is the same species as *Hednota asterias* Meyr. The two species were described from Australia. It is of interest to note, that *Eromene vetustella* Walk. is quite a different species and has nothing to do with *Hednota vetustellus* (Walk). For *Eromene vetustella* Walk. was erected a separate genus *Soroscotia* Rosenstock and this species belongs to *Nolidae*.

### 11. Haimbachia obliquilineellus (HAMPSON), n. comb.

1896. Chilo obliquilineellus Hampson, Proc. zool. Soc. Lond., 1895: 957.

Judging by the female genitalia, this species is a member of *Haimbachia* DYAR. The male of this species is unknown to me.

### 12. Haimbachia proalbivenalis ssp. hampsoni (KAPUR), n. comb., n. status

1950. Coniesta hampsoni Kapur, Trans. ent. Soc. Lond., 101: 422, pl. ix, ff. 2, 8.

Judging by the male genitalia of the types of Haimbachia proalbivenalis (Blesz.) and H. hampsoni (Kapur), they are rather identical specifically. The Kapur species, described from India (in the genus Coniesta Hmps.) should be considered as only a geographical subspecies of the Hampson species which was described from Gambia (in the genus Diatraea Guild). Slight differences in the wing pattern of the forms are to be detected.

### 13. Calamotropha baibarellus (SHIBUYA), n. comb.

1928. Crambus baibarellus Shibuya, J. Fac. Agric. Sapporo, 22: 48, pl. iv. f. 3.

I have received a photograph of the type of this species through the kindness of Mr. Masao Okano of Morioka. Judging by that photograph, this species is very close to or identical with *Calamotropha sattleri* Blesz. from Formosa. *Calamotropha baibarellus* (Shibuya) was described also from Formosa. Only a study of the genitalia of the Shibuya type might solve if the above two species are distinct or not.

#### 14. Talis wockei FILIPJEV

1929. Talis wockei Filipjev, Annu. Mus. zool. Leningrad, 30: 2, pl. i, f. 1, pl. ii a, f. 1. 1938. Talis menetriesi f. taiskanensis [sie!] Caradja, Stett. ent. Ztg., 99: 251. N. syn.

Talis wockei Fil. was described from five males, one of these was from Munku-Sardyk (Eastern Sajan Mts.), two from South Siberia and two from Urga, Mongolia. Judyging by the original description, and figures given by FILIPJEV (moth and male genitalia), Talis wockei FIL. is identical with Talis menetriesi f. taiskanensis CAR. The latter was described from a unique male specimen taken in Nanshu, Prov. Kansu, China. Possibly, the CARADJA form is a geographical race of Talis wockei Fil. The male genitalia of the two show slight differences in the armature of the apical part of gnathos and the vinculum. At any rate the CARADJA form has nothing to do with Talis menetriesi HMPS. which has one very distinct cornutus in the aedoeagus, wanting in the aedoeagus of the FILIPJEV species. In addition, Talis menetriesi HMPS. is much larger than Talis wockei Fil. I have identified a few males from Uliassutai, Mongolia, to be Talis wockei Fil. This species has hitherto been sometimes determined to be Talis arenella RAG. However, the RAGONOT species occurs only in North Africa and is diametrically distinct from Talis wockei FIL. Talis wockei FIL. was cited by Filipjev & Djakonov in 1924 (Annu. Mus. zool. Leningrad. 25: 150) as Talis arenella RAG.

I designate the male from Sajan Mts. as the lectotype of *Talis wockei* Fil. and the males from South Siberia and from Urga as the lectotypoids. They are in the collection of the Zoological Institute of the Academy of Sciences of the USSR in Leningrad.

### 15. Euchromius zephyrus sp. n.

[Text fig. 33]

This new species is very interesting and distinctive due to its external characters and the armature of the male genitalia. In facies it comes rather near *Euchromius ocellea* (HAW.) in having the double median fascia. However, the male genitalia show an armature quite unlike any other member of the genus *Euchromius* GUEN.

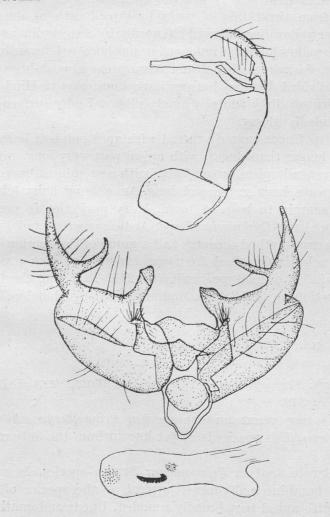


Fig. 33. Male genitalia. Euchromius zephyrus sp. n. Holotype. Nigeria.

Face strongly produced forward, conical with a corneous point; grey-brownish. Antennae uniformly greyish. Vertex, patagia, tegulae and thorax rather glossy, grey-brownish. Length of forewing 9 mm., maximal width 3,5 mm. Costa nearly straight, apex rounded, termen decidedly oblique, nearly straight, At the first look, the forewing appears to be rather grey. Four groups of black terminal dots present; they are followed by strongly shiny, silvery-steely patches. The two dots of the first lower group are rather confluent with each other. The series of the black dots is followed basad by a delicate, light line, which is followed by the subterminal line consisting of two very delicate, greyish lines divided by another light line. In the apical area, the subterminal line is decidedly angled; it closes the apical area with a pattern characteristic of the species of the genus Euchromius Guen. This pattern consists of a yellow triangle containing second, smaller, dirty steely triangle. The area between the subterminal line and the median line is whitish, sprinkled with dark brown atomes. Median fascia from two-thirds of costa to three-fourth of dorsum; double, yellow; the outer yellow line followed outwardly by a steely line; another steely line divides both yellow lines; the inner yellow line bordered inwardly by a slightly defined, narrow, dark line. Medial and basal areas greyish-brownish. Fringes dirty whitish, divided by two narrow dark lines; glossy. Hindwing greyish, rather glossy; fringes dirty white, strongly glossy. Under surface of the wings is uniform, decidedly glossy.

Male genitalia. Uncus curved ventrad with apex pointed; hairs scarse, long. Gnathos much longer than uncus, with apical part very long, rather rounded. Tegumen with ventral apices broad. Valva with a prominent basal process; apical portion bifurcate, hairs scarse and long. An oblique hairy fold from about half of ventral margin to base. A basal, hairy projection is present. Juxtaplate of a rather basic-Euchromius shape. Aedoagus with caudal portion much broadened; a narrow toothed cornutus and a group of tiny cornuti are present.

The new species is described from one example of each sex from Ilesha, Southern Nigeria. The holotype, male (GS-2465-BŁ.) and the female typoid are in the collection on the British Museum (N. H.) in London.

### 16. Zovax n. gen.

Typus generis: Prionopteryx [sic!] whiteheadi Wollaston, 1879, Ann. Mag. nat. Hist., (5) 3: 340.

I erect this new genus for one species, *Prionopteryx whiteheadi* Woll. from Santa Helena. This species is as yet known from the only male specimen (holotype).

Facies similar to that in *Prionapteryx* Steph.-species. In male genitalia valva without basal-internal process typical of the species of *Prionapteryx* Steph. Valva with apical part broadly rounded. Uncus and gnathos very slender and long. In the species of *Prionapteryx* Steph. uncus and gnathos are

rather similar to those in the members of the genus Suratha Walk. Possibly, the genus Suratha Walk. is synonymous with Prionapteryx Steph. The latter is characterized by a distinct incision of the termen of the forewing, lacking in the former. Hovever, it seems that some intermediate species between the two genera occur. The wing venation in this case has no greater importance as a study of numerous species of the two genera has shown. Quite a similar situation I have found in regard to Talis Guen. and Mesolia Rag. On the other hand, several species referred to above four genera are in need to be placed in genera of their own. Only further thorough study of this interesting group will clarify the situation.

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#### STRESZCZENIE

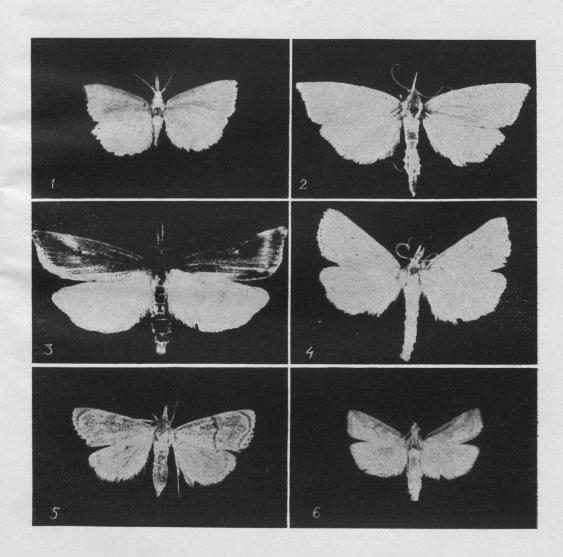
Autor omawia 26 gatunków z rodzaju *Chilo* Zck. Większość z nich została przeniesiona z innych rodzajów, głównie z rodzaju *Diatraea* Guild. Jeden gatunek, *Chilo agamemnon* sp. n. z Egiptu — został opisany jako nowy dla nauki. Szczegółowo została omówiona synonimika gatunku *Chilo luteellus* (Motsch.).

#### РЕЗЮМЕ

Автор описывает 26 видов из рода *Chilo* Zск. Большинство из них перенесены из иных родов, главным образом из рода *Diatraea* Guild. Один вид, *Chilo agamemnon* sp. n. из Елипта, описан как новый для науки. Тщательно разобрана синонимика вида *Chilo luteellus* (Motsch.).

### Plate XIII

- Fig. 1. Chilo luteellus (Motsch.). Male. Syntype of Chilo plumbosellus (Chrét.).
- Fig. 2. Chilo luteellus (Motsch.). Female. Central Asia.
- Fig. 3. Chilo phragmitella ab. nigricellus Rebel. Male. Europe.
- Fig. 4. Chilo pulverosellus RAG. Male. Near East.
- Fig. 5. Chilo chiriquitensis (Zell.). Female. Holotype. Panama.
- Fig. 6. Chilo agamemnon n. sp. Male. Holotype. Egypt.



Auctor phot. St. Bleszyński

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