

Studies on the Crambidae.

Part VII. Studies on the European Species of the
„*Pediasia fascelinella*“ Hbn. — group.

Materiały do znajomości wachlarzykowatych (*Lepidoptera-Crambidae*). Część VII. Studia nad europejskimi gatunkami grupy „*Pediasia fascelinella*“ Hbn.

Материалы к познанию травянок (*Lepidoptera-Crambidae*).

Часть VII. Исследования европейских видов группы „*Pediasia fascelinella*“ Hbn.

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The *fascelinella* - group is one of the more difficult and less known of the Genus *Crambus* F. s. l. To it belongs a great majority of European species of the Genus *Pediasia* Hbn. My work is certainly not complete and may contain some errors which in such cases are inevitable. First of all it deals with the separation of some species. This is an extremely difficult problem the forms being very similar to each other externally as well as in the structure of the copulative apparatuses. Often in similar researches it is very difficult to establish the criterion of the specific peculiarity if one does not possess sufficiently big comparative materials. Such materials, and specially those concerning rare species are often hard to obtain.

The materials on which I based this work are taken chiefly from my own collection, in addition I had to my disposition the specimens borrowed from the Polish Zoological Museum, Warsaw, the Zoological Museum of the Humboldt-University of Berlin, British Museum (Natural History), London, and from Dr. S. Toll of Stalinogród. I wish to express here my heartiest thank to Dr. S. Adamczewski, Prof. Dr. M. Hering, Dr. J. Bradley and Dr. S. Toll for lending me respective materials which helped me very much in my work.

For the right determination of these materials the examination of the types of some species, described previously by various authors had been necessary. Especially difficult proved to be *P. epineura* Meyr. (= *Crambus ramosellus* Zell. nom. praeoc.). I was able

to solve this problem only after receiving, by courtesy of the British Museum, microphotos of the copulative apparatus of this above mentioned species which was described by Zeller (it is a female from Sarepta) and several specimens from Zeller's collection, and after the examination of several specimens of *P. epineura* Meyr. from Lederer's collection lent me by the Zoological Museum of the Humboldt-University of Berlin.

I was informed by Prof. Dr M. Hering that the types of *Crambus jucundellus* H. S. and of *Crambus pudibundellus* H. S. do not exist.

I had, however, to my disposition some specimens of these species from regions in which they were described i. e. *P. jucundella* H. S. from Budapest, Hungary, and *P. pudibundella* H. S. from Sarepta, Russia (5).

The species *P. pectinicornis* Rebel, and *P. uhryki* Rotsch. are not well known to me.

The type of *P. pectinicornis* Rebel is in the collection of Caradja in Bucharest, and the type of *P. uhryki* Rotsch., which probably belongs to the *P. fascelinella* -group Hbn., is in the possession of the Museum of Tring. Except these single specimens, as far as I know, no further ones of these species had ever been collected, because I did not find, — except original descriptions — any other notes in the literature.

The determination of the remaining species i. e.:

P. pedriolella Dup., *luteella* Den. & Schiff., *fascelinella* Hbn., and *subflavella* Dup., did not present any greater difficulties.

It should be mentioned that the species *C. digitellus* H. S., reported by Spuler as „similar to *fascelinellus* Hbn.” does not belong to the *C. fascelinella*-group Hbn. M. Marion (7) showed that *P. digitellus* H. S. and *C. petrosellus* De Joan. (= *petrificellus* Dup.) are in fact only one species. The priority has the name given by Herrich-Schäffer. To make myself sure I wrote to Prof. Dr. M. Hering of Berlin requesting him to make a preparation of the copulative apparatus of the type of *C. digitellus* H. S. He lent me that preparation and after comparing those of the type of *digitellus* H. S., and of *petrosellus* De Joan., I was able to state that they are identical.

As to the geographical distribution of the species of the *P. fascelinella*-group Hbn., the data in the literature, concerning the di-

tribution of some species, may depend, in some cases on errors. For example I should like to mention that in the year 1910 Rebel and Caradja probably did not know the species *epineura* Meyr.

Rebel in his description of the *Crambus pectinicornis* (9) reports that this species, having the antennae of the one-side-pectinated-type differs from all other palearctic species of the genus *Crambus* F. For the Genus *Crambus* F., indeed, the characteristic feature are serrated, not pectinated antennae however the ♂♂ paratypes of *epineura* Meyr., undoubtedly have distinctly one-side-pectinated antennae. As Caradja in his work about the geographic distribution of Pyralids (4) refers to *pectinicornis* Rebel as to the species in which the pectinate antennae, are the specific feature it proves that Caradja's data of the distribution of *epineura* Meyr. (Uralsk, Kalmukov, Krasnoïarsk, Caucasus, Zeitun) refer to some other species. From these facts one could judge that *P. epineura* Meyr., and *P. pectinicornis* Rebel are in fact one species but investigating Rebel's photo included to his description I was able to state that it is not so. This problem can be definitely solved only after an examination of the copulative apparatus of the type of *pectinicornis* Rebel.

The systematics of the P. fascelinella -group Hbn.

The species of the *P. fascelinella*-group can be divided into two sub-groups, due to the coloration and design of the wings: the species belonging to the first and more numerous one have the fore wings brown-, olive-, and sand-like-coloured. The sexual dimorphism occurs undistinctly. This sub-group contains the greater part of the group in question and includes the most common *P. fascelinella* Hbn. To the second sub-group belong only two species viz. *P. luteella* Den. & Schiff. and *P. subflavella* Dup. The characteristic feature of this second sub-group is the distinct sexual dimorphism occurring in the coloration of the fore wings. Those of males are orange-rusty-like, and those of females are brownish-grey or pale-yellow.

This above given division has however only a slight value because it does not demonstrate the real inter-specific affinities. These can be determined accurately only by the examination of the copulative apparatuses.

In the Staudinger and Raebel's Catalogue (12) the specific systematics are based upon the external resemblance and therefore we find the species of the *fascelinella*-group, then known, in the following order:

- 28. *spuriellus* Hbn.
- 33. *pudibundellus* H. S.
- 34. *fascelinellus* Hbn.
- 35. *epineurus* Meyr.
- 36. *jucundellus* H. S.
- 43. *subflavellus* Dup.
- 65. *luteellus* Schiff.

Between these are placed many other species often very little related to them e. g. *tristellus* F., *geniculeus* Haw., *permutatellus* H. S., etc.

On the base of the structure of the copulative apparatuses all above mentioned species should be placed in the systematics next to each other and arranged in somewhat different order. Assuming for the basis, in the case of the *P. fascelinella*-group, the supposition that those species which have less complicated copulative apparatuses are evolutionary older, the series of this group should begin with the species *P. pedriolella* Dup., *P. epineura* Meyr, and should end with the species *P. fascelinella* Hbn., *P. pudibundella* H. S. Such a filing, as any other, will never be free from mistakes, and because of the lack of the fossil forms, will be always hypothetical. Besides, inside such an arrangement there always will appear some ramifications and some evolutionary lines. In the *P. fascelinella*-group, too, one may establish some of such lines. The first could consist of the species: *pedriolella* Dup., *epineura* Meyr., *jucundella* H. S., *sareptella* sp. n., *adamczewskii* sp. n., *luteella* Den. & Schiff., and *fascelinella* Hbn. In this case the gradual increase of the size of the *aedeagus* of the male and of the *ductus bursae* of the female may be observed. The second line contains two species viz.: *P. hübnéri* sp. n. and *P. pudibundella* H. S. Their *pars basalis* and *aedeagus* are of somewhat other type while their *cornutum* is considerably longer than that of the species of the first line. To the third and last line belong the following species: *P. subflavella* Dup. and *P. soffneri* sp. n. The *cornutum* in the *aedeagus* of these species is broken into several smaller parts. Similar *cornuti* has the recently des-

cribed *P. persella* Toll. (14). In spite of this common feature I think that the close relation of those species, is not certain. The presence of several *cornuti* may be in this case a convergent feature. Against the relation of those two species apart from the remarkable differences in the coloration and design of the wings and in the structure of the copulative apparatus, speaks a zoogeographical argument. *P. subflavella* Dup. is an Corsican endemite while *P. soffneri* sp. n. inhabits Southern Russia.

The general characteristics of the P. fascelinella-group Hbn.

As I mentioned earlier inside the *P. fascelinella* -group one can distinguish two sub-groups differing in coloration. The species belonging to the first one are characterized by brown, olive-brown or sand-like tint of the fore wings. Along the veins there appear more or less distinct clearings having the shape of narrow stripes. Across the wing run two bands, the medial and the postmedial one, in the shape of the streaks, generally darker than the ground, oblique, often unplain, having in their free part serrated bends. The cilia of the fore wing are generally several times lightly cut. The number of these cuts is sometimes a variable feature. The sexual dimorphism, besides the structure of the antennae occurs generally in the shape of the fore wings. Those of the females are generally less widening outwardly, more tapering and have more oblique diagonal margin than those of the males. The species of the second sub-group, to which belong *P. luteella* Den. & Schiff., and *subflavella* Dup. show out a distinct sexual dimorphism in the coloration of the wings. The diagonal bands appear generally only in traces. Alongside the clearings and light cuts are in decline.

P. luteella Den. & Schiff. lacks them completely.

Relatively deep serrating of the antennae of males is a very characteristic feature for the species of the *fascelinella*-group, though rather rare in the Genus *Crambus* s. l. This serrating is for certain species a very important systematic feature. The number of joints of the antennae is sometimes a specific feature too. This number varies from about 30 to 50. For the respective species it may differ in several joints.

The copulative apparatuses: the males lack the ventral appendix on the *sacculus*. The *pars basalis* (the dorsal appendix of the

sacculus) is very developed, in the shape of a long hook, reaching almost to the end of the valva, sometimes even longer, very distinctly separated from the *sacculus* and widened at the base. The *sacculus* (*vinculum*) prolonged. The *valvae* long, rather narrow, slightly narrowed at the end. The *gnathos* always ending with a small hook. The *uncus* slender, pointed. The *aedeagus* big, sometimes, as in *P. fascelinella* Hbn. and *P. luteella* Den. & Schiff. reaching monstrous sizes, almost always very curved. The *cornutum* appears always, single, big, long, distinctly widened on its end. Sometimes the *cornuti* occur as a number of single or merged together serrae. The *gonapophyses anteriores* and *posteriores* of the females very long. The connection between the subgenital plate and *ostium bursae* very slight made of delicate chitin which is a feature very rarely observed in the Genus *Crambus* F. s. l. The *ostium bursae* does not differ from the rest of the *ductus bursae*. I met the last two features also in the species belonging to the *P. contaminella*-group which is closely related to the *P. fascelinella*-group. It may be right perhaps to join both these groups into one as I did in the first part of my „Studies” (2). The *ductus bursae* long, sometimes exceeding many times the length of the whole *abdomen*, e.g. *P. fascelinella* Hbn. in which species it makes numerous loops close to the *ostium bursae*. On the *bursa copulatrix* the *signum* always lacking. The degree of chitinization of the *ductus bursae* is a very important specific feature.

As to the taxonomic value of the copulative apparatuses of the *P. fascelinella*-group a very interesting fact is that the females provide much more specific differences than the males, e.g. externally widely differing *P. fascelinella* Hbn. (tab. VIII, fig. 44—46) and *P. luteella* Den. & Schiff. (tab. IX, fig. 50—53), where I did not find any differences in the male copulative apparatuses (tab. III, fig. 13, 15) while those of females differ visibly (tab. III, fig. 14, 16).

The systematic review of the species of the P. fascelinella-group- Hbn.

Pediasia pedriolella Dup.

A very big species (tab. VI, fig. 26, 28). The male has wide wings. Those of the female are narrower, less widening outwardly. The fore wings almost lustreless, light-grey-brownish, sprinkled with

dark scales. Both bands, the medial and postmedial, slight. The clearings on the veins almost invisible. The cilia rather distinctly several times lightly cut. The hind wings lightgrey with whitish cilia. The male antennae flatly serrated, the serrae long (tab. X, fig. 60). The number of joints of the male antenna ca. 50. The length of the male fore wing ca 14 mm, that of the female ca 13 mm. The width: male ca 5,5 mm, female ca 4,5 mm.

The copulative apparatus: — male (tab. I, fig. 2, 3): the *aedeagus* short, visibly shorter than the whole apparatus. The *cornutum* longer than in *P. fascelinella* Hbn. The remaining parts of the apparatus similar to those of the *P. fascelinella* Hbn. Female: — (tab. IV fig. 17): the *gonapophyses anteriores* somewhat longer than in *P. fascelinella* Hbn. The *ductus bursae* rather short, without the loop, wider than that of *P. fascelinella* Hbn., on the whole length strongly chitinized. *Bursa copulatrix* round. *Signum* lacking.

P. pedriolella Dup. is the only montane species discussed here. It occurs in the high parts of the Alps. I found two specimens in the collection of the National Zoological Museum in Warsaw labelled „*Rossia m. Sarepta* Chr. 1871”. I thought at first that I deal with a species new for science because it is hard to believe that *P. pedriolella* Dup., an alpine species, could appear in the South-eastern European steppes. After a thorough investigation, however, of the copulative apparatuses I did not find any differences, among the specimens from Sarepta on one hand and from the Alps on the other. We have here a very interesting zoogeographical and ecological phenomenon. It is, however, possible that these specimens were erroneously labelled, moreover because Christoph had not labelled them himself.

Pediasia epineura Meyrick

This species was described under the name *Crambus ramosellus* by Zeller in the work entitled „Chilonidarum et Crambidarum genera et species” (1863) on pp. 38-39. In 1883 E. Meyrick gave a short note in Ent. Monthly Mag. vol. xx, p. 141 entitled „*Crambus ramosellus*: change of nomenclature”. He writes: „The name *ramosellus* applied by Zeller in his Monograph to a species of *Crambus* from Sicily, cannot stand, as there is another *Crambus ramosellus*, from New Zealand, described by Doubleday some twenty

years previously... I therefore propose the name of *Cr. epineurus* for the Sicilian species". Meyrick made here a major inadvertency, viz. *Crambus ramosellus* was described by Zeller from south-eastern Europe and not from Sicily. Zeller writes clearly in the description: „Hab. in montibus Uralensibus ad Orenburgum (Led.) — ad Sareptam (Wocke). Varietatem b. Christoph ad Sareptam cepit" — and he does not mention Sicily at all. Moreover it should be mentioned that *Crambus ramosellus* had not been found by anybody in Sicily, because most certainly it does not appear there.

For the identification of the species *P. epineura* Meyr. it was necessary to know the copulative apparatus of the type. After applying to the British Museum (Natural History) I obtained the microphotographs of the copulative apparatus of the type of *Crambus ramosellus* Zeller and a photograph of the said specimen, which I give below on the tabl. V by the permission of the Trustees of the British Museum (Nat. Hist.). It is a female from Sarepta. I do not know what has happened to the specimen or specimens from Orenburg. Besides afore-mentioned photographs I obtained for comparison from the British Museum (Natural History) 1 male and 3 females labelled „Compared with type *Cr. ramosellus* Z.=*epineurus* Meyr. det J. D. Bradley 1951". I give the photographs of all these specimens in tabl. VII and VIII.). After making the preparations of genitals of these specimens I stated that one of the females (tabl. VIII fig. 47) labelled „Zell. Coll. 1884" belongs to the species *P. fascelinella* Hbn., and the two remaining labelled: 1) „ $\frac{5}{7}$ ", „21", „*Festivellus Sarepta* Christ. 75", „Zell. Coll. 1884" (tabl. VII, fig. 35), and 2) „20", „Zell. Coll. 1884" (tabl. VII, fig. 39) respectively, have genitals related, but nevertheless different from those existing in the type *Crambus ramosellus* Zell. This type (tabl. V, fig. 23) has *ductus bursae* apparently as long as *bursa copulatrix*. Both examined females have *ductus bursae* twice as long as *bursa copulatrix*. Here appears a problem whether these differences should be understood as individual variations or as features of two different species? According to the second hypothesis it would be absolutely impossible to ascertain to which of these two species belongs the male. It is labelled: „*Ramosellus* Led. ut. 11/62" „Zell. Coll. 1884", „39" (tabl. VI, fig. 29). In the external appearance

both aforementioned females are quite similar to the type of *Crambus ramosellus* Zell. of which, however, I know only photographs. Unfortunately in this case the external similitude does not decide whether it is the same species. Therefore I cannot solve this problem presently because of the insufficient comparative materials. For the time being I put both doubtful females, as well as the male, to the species *Pediasia epineura* Meyr.

In addition to the previously mentioned materials I had 3 males and 3 females determined as *Crambus epineurus* Meyr., which Prof. M. Hering has kindly lent me. All 3 females after the examination of their genitals proved to be new for science viz. *Pediasia subepineura* Blesz. *Pediasia ledereri* Blesz., and *Pediasia saisanella* Blesz. (For the descriptions vide: Studies on the Crambidae Part VI).

Pediasia subepineura Blesz., is from Lederer's collection and is labelled as follows: „Ustkamenog”, „Ramosellus”, „Z.”, „coll. Led.”, „Origin”, „Paratypus”, „epineurus”. It is different from *P. epineura* Meyr. externally as well as in the structure of its genitals. The second species *P. ledereri* Blesz. is labelled „Altai”, „Ramosellus”, „coll. Led.”, „Origin”, „ex coll. Staudinger”. Its genitals are related to those of *P. subepineura* Blesz., but it differs externally. I do not exclude the possibility that it may be only a subspecies of *P. subepineura* Blesz. The third female described by me as *P. saisanella* Blesz. is labelled: „ex coll. Staudinger”, „Saisan”, „Haberhauer”. This species is considerably less related to *P. subepineura* Meyr. and stands much nearer to *P. jucundella* H. S. The three males are labelled as follows 1) „Ramosellus Z.”, „Origin”, „coll. Led.”, „Paratypus”, „epineurus”, 2) „Altai”, „Ramosellus”, „coll. Led.”, „Origin”, „ex coll. Staudinger”, 3) „Saisan”, „Hbhr.”, „ex coll. Staudinger”. All three males (tabl. VI, fig. 31-33) have the genitals identical with those of the male from Zeller's collection. Considering that I had one pair of „*Cr. epineurus* Meyr.” from Altai and one from Saisan it seems that the females of *P. epineura* Meyr. show a great variability in their appearance as well as in the genitals. It is, however, only due to an accident, because, as I mentioned previously, the female from Saisan belongs to the species described by me as *P. saisanella* Blesz. which is related to the species differing widely from *P. epineura* Meyr., viz. *P. jucundella* H. S. Similarly *P. ledereri* Blesz. approaches *P. su-*

bepineura Blesz. which is undoubtedly a species different from *P. epineura* Meyr.

I examined also 2 females of *P. epineura* Meyr. from the collection of the National Zoological Museum in Warsaw (tabl. VII, fig. 36). They were from Sarepta and were labelled as *Crambus jucundellus* H. S. *ab. festivellus* H. S. Their genitals are exactly like those of 2 females of Zeller's collection. This fact proves again the stability of the structure of the female genitals of this species.

In addition I investigated 1 male and 1 female labelled as *Crambus epineurus* Meyr. from Dr. S. Toll's collection. The genitals of the male from S. E. Europe (tabl. VI, fig. 30) are identical with those of the males obtained from London and Berlin. The female from Gorlovka (S. E. Europe) (tabl. VII, fig. 37) has the *ductus bursae* distinctly longer than that of other examined females, its initial part wider, and the *bursa copulatrix* somewhat bigger. This specimen has different colouring than the females of *P. epineura* Meyr. Because it was found together with a male of *P. soffneri* *sp. n.* (description further) I treat it for the time being as the allotypus of this species.

Summarizing the above data it should be stated that on the basis of thus far investigated materials it cannot be ascertained with absolute certainty whether the examined specimens of *P. epineura* Meyr. really belong to this species. It is possible, for example, to assume that *P. epineura* Meyr. is a rare species not found since its discovery and description by Zeller and the specimens supposed to belong to this species form an undescribed, common, and widely distributed species. The fact, that we have not at least some specimens, found in one place and at one time, of any aforementioned species might lead to a false fitting of males and females of the respective species.

The fore wings of *P. epineura* Meyr. slender, lighth-brown, with sharply marked clearings on the veins. The postmedial band with a distinct serra in the lower part, whitish bordered on the outer side. The medial band less distinct than the postmedial one; very oblique.

On the outer margin lies a series of dark spots. The cilia lustrous, in its upper part several times rather unplainly lightly cut, with a stripe of shining scales at the base. The white dividing

line at the base of the cilia very unplain. The hind wings white, near the margin narrowly darkened. The cilia snow-white. The length of the fore wing ca 12,5 mm, the width 4,5 mm.

The antennae very deeply serrated. The serrae narrow, the slits between them wide (tabl. VII, fig. 64). The number of joints ca 40.

The copulative apparatus (tabl. I, IV, V, fig. 4, 5, 20, 24, 25): Male: similar to *P. fascelinella* Hbn. except the *aedeagus*, a little less chitinized, weakly built. The *aedeagus* much shorter than that of *P. fascelinella* Hbn., as long as the whole copulative apparatus or a little longer (1,5—1,8 mm). The *cornutum* almost as long as that of *P. fascelinella* Hbn. 0,43—0,49 mm. Its length: *P. epineura* Meyr.—0,42—0,45 mm, Female: The *ductus bursae* without loops, rather thick, strongly chitinized on its whole length. The *bursa copulatrix* very prolonged, almost as long as the *ductus bursae* (the typus). The remaining examined females have the *ductus bursae* longer (as long as the whole abdomen), and the *bursa copulatrix* is relatively shorter; it reaches about $\frac{1}{2}$ of the length of the *ductus bursae*.

Pediasia adamczewskii sp. n. ♂.

Resembling *P. fascelinella* Hbn. The fore wings (tabl. VIII, fig. 43) brown, with a smeared, very undistinct design. The medial and postmedial band occur in the shape of a faint trace, the postmedial one more distinct. The length of the fore wing 11,5 mm the width 4 mm. The hind wings whitish with a little darker margin. The cilia white.

The antennae rather deeply serrated, similar to *P. fascelinella* Hbn. The slits between the serrae very narrow. The serrae trapezoidal.

The male copulative apparatus: (tabl. I, fig. 6), rather similar to that of *P. fascelinella* Hbn. but smaller; the *pars basalis* a little bent downward, not upward as that of *P. fascelinella* Hbn., the *aedeagus* visibly shorter, the *cornutum* as long as at *P. fascelinella* Hbn.

Holotype: „Ural m. Guberti, Duske, F. 6. 8. 97”. Coll. Museum Zoologicum Polonicum. — Warsaw.

Pediasia sareptella sp. n. ♂

In the design and shape of the wings similar to *P. fascelinella* Hbn., in the coloration nearer to *P. pudibundella* H. S. (tabl. VIII, fig. 42). The fore wings light-brownish-sand-like. The bands

unplain, brownish-orange-coloured, contrasting slightly with the ground of the wings. The clearings on the veins unplain because of very light ground. The cilia brownish, distinctly darker than the ground of the wings, several times cut by white streaks. The length of the fore wing 11,5 mm, the width 4 mm. The hind wings white, with yellowish-orange darkened margins. The cilia snow white.

The antennae similarly serrated to those of *P. fascelinella* Hbn.

The copulative apparatus of the male: (tabl. II, fig. 7) small relatively more prolonged than in *P. fascelinella* Hbn., more weakly built than this of that species. The *aedeagus* shorter than at *P. fascelinella* Hbn. and still shorter than that of *P. adamczewskii* sp. n.

Holotype: „*Rossia m. Sarepta* Z. Chr. 1871”. Coll. Museum Zoologicum Polonicum. — Warsaw.

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As I do not know the females of *P. adamczewskii* sp. n. and *P. sareptella* sp. n. ? it is very difficult to establish whether these are separate species (*species bonae*) or only *sub-species* of the *P. fascelinella* Hbn.

In the female copulative apparatuses of the species of the *P. fascelinella*-group we find more important systematical features. The male copulative apparatuses in this case tend to greater individual fluctuations and, besides, show a relatively smaller number of specific features. For the specific separation of *P. adamczewskii* sp. n. and *sareptella* sp. n. speaks the size of the *aedeagus* of the two forms. This does not vary very much in the case of *P. fascelinella* Hbn. as I observed after investigation of large series of specimens of this species. Besides this separation is proved by some external features like the snow white cilia on the hind wings. This feature I did not observe in any specimen of the large series containing materials from various parts of Europe. It is a pity I have no materials of *P. fascelinella* Hbn. from Russia. Such materials certainly should solve this problem. For comparative purposes I made the measurings of the copulative apparatus, *aedeagus* and *cornutum* of a great number of specimens of *P. fascelinella* Hbn., and *P. adamczewskii* sp. n. as well as of *P. sareptella* sp. n.

These data I give in the table below.

	The length of the whole apparatus	The length of the aedeagus	The length of the cornutum
<i>P. fascelinella</i> Hbn.	1,65—1,72 mm	2,37—2,4 mm	0,43—0,46 mm
<i>P. adamczewskii</i> sp. n.	1,57	1,80	0,36
<i>P. sareptella</i> sp. n.	1,41	1,69	0,37

The rate of the length of the copulative apparatus to the length of aedeagus:

P. fascelinella Hbn. 0,70, *P. adamczewskii* sp. n. 0,87, *P. sareptella* sp. n. 0,83. The difference of this rate between *P. fascelinella* Hbn. and *P. adamczewskii* sp. n. and *sareptella* sp. n. is great, and I think, this is a decisive specific feature. Similar differences in the male copulative apparatuses appear also between *P. fascelinella* Hbn. and *P. jucundella* H. S. and *P. epineura* Meyr.

Pediasia jucundella H. S.

Similar to *P. fascelinella* Hbn. but always smaller with lighter hind wings (tabl. VII, fig. 38—41). This species varies considerably in size and coloration. The females have fore wings narrower and more pointed than the males. *P. fascelinella* Hbn. lacks almost completely this dimorphism. The fore wings, olive-brownish or brown, sometimes, especially those of females, visibly cleared. The bands and clearings on the veins rather distinct; the form *festivella* H. S. has them less marked, while the form *simplicella* Szent-Ivány & Uhrík lacks them completely. The cilia lustreless several times cut by white. In the form *simplicella* Szent-Ivány & Uhrík these cuts are considerably less marked. The length of the fore wings 8,5—12,5 mm, the width 2,7—4,5 mm.

The male antennae a little deeper serrated than that of *P. fascelinella* Hbn. (tab. X, fig. 62). The number of joints ca. 55.

The copulative apparatus: male (tab. II, fig. 8) smaller than at *P. fascelinella* Hbn. besides very similar in the construction and shape to that of *P. fascelinella* Hbn. except the aedeagus which is relatively small but longer than the whole apparatus. The cornutum as long as at *P. fascelinella* Hbn. Female: (tabl. IV, fig. 18): the gonapophyses anteriores considerably shorter than those of *P. fascelinella* Hbn. The ductus bursae has a couple of loops behind the ostium bursae but is visibly shorter and thicker than

in *P. fascelinella* Hbn., on its whole length strongly chitinized. The *bursa copulatrix* round, made of fine chitin. The *signum* lacking.

I examined a series of specimens from around Budapest, Hungary, where this species had been described from, and one specimen from S. E. Europe.

Pediasia luteella Den. & Schiff.

Variable in the wing design. The fore wings slender, those of the female not so visibly widening outwardly than those of the male (tab. IX, fig. 50—53). The male fore wings more or less intensively brick-orange-coloured, those of the female light-grey or creamy-grey. Sometimes the bands do not appear at all, or appear only in the shape of very unplain streaks a little darker than the ground of the wings. The male always lacks the clearings on the veins while those of the female, if appearing, are less contrasting. The cilia one-coloured, lustreless, without light cuts. The length of the fore wing 10,5—12 mm, the male width ca 4—5 mm, that of the female 3—3,5 mm. The hind wings grey-brownish, the cilia white.

The antennae rather deeply serrated with the serrae lower than those of *P. fascelinella* Hbn. (tabl. X, fig. 61). The male copulative apparatus identical with that of *P. fascelinella* Hbn. (tab. III, fig. 13). The *ductus bursae* of the female longer than in *P. fascelinella* Hbn., has a couple of loops. It is strongly chitinized only near the *bursa copulatrix* to ca 1/3 its length, further on made of fine, transparent chitin. The shape of the *bursa copulatrix* variable. The *gonapophyses anteriores* of *P. luteella* Den. & Schiff. are the longest of those observed by me in the *P. fascelinella*-group Hbn.

The examined specimens were from various places of Poland, Germany and France.

Pediasia fascelinella Hbn.

This species varies very much in its size and coloration (tabl. VIII, fig. 44—47). The fore wings lustreless, brown or olive-brown or ochre-brown-coloured. The clearings on the veins rather distinct. The bands often not very sharply marked. The cilia have a delicate lustre and are almost always several times lightly cut. On the outer margin are several dark points. The length of the fore wing 10,5—14 mm, the width 3—5 mm. The hind wings grey-brownish rarely dirty-whitish with similarly coloured cilia. The sexual dimorphism in the shape of the wings rather weakly marked.

The antennae rather deeply serrated. The serrae have the shape of the short trapezoids. The slits between the serrae very narrow (tabl. X, fig. 58).

The copulative apparatus: male (tabl. III, fig. 15): the *pars basalis* long, reaches almost to the end of the *valva*. The shape of the *valva* variable. The *uncus* rather narrow, pointed, the *gnathos* provided on its end with a hook like in all the species of this group. The *aedeagus* very big, exceeding considerably the length of the whole apparatus. The *cornutum* single, big. Female: The *gonapophyses anteriores* long but a little shorter than those of *P. luteella* Den. & Schiff. The *gonapophyses posteriores* long. The *ductus bursae* exceeds several times the length of the whole *abdomen*. The *bursa copulatrix* oblong, more chitinized than in the other species of the *P. fascelinella*-group Hbn.

I investigated a series of specimens from many spots of Poland, Germany and France and one specimen from Sarepta.

Pediasia hübneri sp. n.

The fore wings brown, dim, with a shadowed design (tabl. VIII, fig. 48, 49). The medial band similar to that of *P. fascelinella* Hbn., the postmedial one less oblique than of that species, little marked, but plainly light bordered with a slight convexity in its lower part. The clearings on the veins almost invisible. On the outer margin several dark spots. The cilia lustrous with a shining basal stripe. The female costa strongly convex. The length of the fore wing of the male 11 mm, that of the female 10,5 mm, the width 4 mm. The hind wings whitish with fuscous margins. The cilia white.

The antennae deeply serrated, like those of *P. epineura* Meyr (tabl. X, fig. 65). The serrae narrow triangular, sharp, the slits between them wide. The number of joints in the male antenna 56.

The copulative apparatus: male (tabl. II, fig. 10) similar to that of *P. pudibundella* H. S. The *valva* narrow, less than at *P. pudibundella* H. S. The *pars basalis* more curved, without the hooked end characteristic for *P. pudibundella* H. S. The *tegumen* very narrow. The *uncus* and *gnathos* long and slender. The *aedeagus* a little bent, the *cornutum* thin, long but visibly shorter than in *P. pudibundella* H. S. Female (tabl. IV, fig. 21): the subabdominal plate wide, the *gonapophyses anteriores* a little longer than those of *P. ju-*

cundella H. S. The *ductus bursae* longer than at *P. pedriolella* Dup., with one slight loop behind the ostium bursae, to almost half length strongly chitinized, the rest of transparent chitin, before the *bursa copulatrix* made again of thicker chitin. The *bursa copulatrix* made of fine, transparent chitin, the signum lacking.

The placing of the male and female described here in one species it not quite certain, because they are from various localities.

Holotype (male) is labelled: „*Rossia mer.*” — coll. Bleszyński.

Allotype (female) is labelled „*Rossia m. Sarepta 1866 Chr.*” — coll. Museum Zoologicum Polonicum, Warsaw.

Pediasia pudibundella H. S.

The fore wings (tabl. IX, fig. 56) narrow, long, a little widening outwardly with a slight-brownish-sand-like lustre resembling that of *Agriphila lythargyrella* Hbn. The clearings on the veins distinct, sharply marked. The bands yellowish, sharply marked, but, because of the light coloration of the wings slightly contrasting with the ground. The cilia seven times lightly cut. On the outer margin no dark spots. The length of the fore wing 12,5—13,5 mm, the width 4,5—5 mm. The hind wings light grey-whitish with fuscous margins. The cilia white.

The antennae rather flatly serrated, the serrae long (tabl. X, fig. 63). The number of joints 44—49.

The male copulative apparatus (tabl. II, fig. 9): big, very oblong similar to that of *P. hübnerei* sp. n. The *valva* narrow visibly bent. The *pars basalis* hooked. The *tegumen* narrow. The *uncus* and *gnathos* slender and long. The *aedeagus* very thin, strongly bent. The *cornutum* narrow the longest of all observed in the *fascelinella*-group, has $\frac{1}{3}$ of the length of the whole *aedeagus*.

I examined several males from Sarepta where the *P. pudibundella* H. S. had been described from (5). I do not know the female of this species.

Pediasia soffneri sp. n.

Female: The fore wings brown, distinctly darker than those of *P. epineura* Meyr. The design similar to that of *P. epineura* Meyr. The bands rather distinctly marked. The medial band very oblique. The clearings on the veins distinct. On the outer margin several fuscous spots. The cilia several times lightly cut with a stripe

of glistening scales at the base. The length of the fore wing 12 mm, the width 4 mm. The hind wings whitish with fuscous margins. The cilia white. I do not know the male of this species. Dr. S. Toll received in the year 1944 from Soffner two specimens described as *Crambus epineurus* Meyr., collected at Grolovka (S. E. Europe). Dr. S. Toll made a preparation of the male copulative apparatus, had drawn it and gave the specimen, together with the preparation back to Soffner. The female remained in Dr. S. Toll's collection.

I give on the tabl. II (fig. 11) the drawing of the male copulative apparatus: the *pars basalis* merged with the valva on a longer sector than in *P. fascelinella* Hbn. and other related species. The *aedeagus* small. It has only the length of the whole copulative apparatus. Several *cornuti* with interesting shapes, e. g. single or merged serrae. Female (tabl. IV, fig. 22): the *gonapophyses anteriores* visibly shorter than those of *P. fascelinella* Hbn. The *ductus bursae* 2,5 times longer than *bursa copulatrix*, on its begin thick, further on becoming narrow, on its whole length strongly chitinized. The *bursa copulatrix* big, of fine chitin. The *signum* lacking.

Allotype (female) is labelled „Rossia mer. Gorlovka 24. VII. 1943” — coll. Dr. S. Toll, Stalinogród.

Pediasia subflavella Dup.

The fore wings of the male (tabl. IX, fig. 54) lustreless, brick-yellowish with unplain bands having the shape of fine streaks, those of the female pale-yellow with the clearings on the veins delicately marked and with more distinct bands than those of the male. The light cuts on cilia in decline. The length of the fore wing 12—13,5 mm, the width 4—4,5 mm. The female wings a little narrower than those of the male.

The male antennae rather deeply serrated, similar to *P. pedriolella* Dup. The serrae rather long (tabl. X, fig. 59).

The copulative apparatus: — male (tab. II, fig. 12) the *pars basalis* relatively short and thick. The *aedeagus* a little shorter than the whole apparatus, thick, twice as thick as that of *P. soffneri* sp. n. Several *cornuti* single or merged resembling French rolls. Female: — (tabl. IV, fig. 19) the *gonapophyses anteriores* very narrow. The subgenital plate very narrow, too. The *ductus bursae*

short, on the beginning very thick, on its whole length strongly chitinized. The *bursa copulatrix* very small, transparent, of fine chitin.

I examined several specimens from Corsica.

Pediasia pectinicornis Rebel.

I do not know where to place this particular species because as I mentioned previously I do not know its copulative apparatus. I quote here the translation of Rebel's original description: „...it differs from palearctic species of the genus *Crambus* F. having the antennae provided with a row of strongly pectinated serrae. The palpi a little shorter than those of *C. jucundellus* H. S., from above white, on sides and from below sprinkled yellow-brownish. The front and vertex white, the remaining parts of the body such as legs dominantly yellow-brown-coloured. The fore wings distinctly widening outwardly, yellow-brown with white-yellow veins visibly widening near the outer margin. The areas between them sprinkled more or less fuscous, so that only the lower part of the wing and the discal area free of this darkening. On the outer margin between the veins lie intensively black dots. The cilia wide with golden shining dividing line at their base. The hind wings very light, brownish with clear white cilia. The fore wings below are yellow-grey with whitish veins. The length of the fore wing 12,5 mm. The type is in Caradja's collection”. (tabl. IX, fig. 57).

This specimen had been collected 6. IX. 1907 at Uralsk. Judging from the photo included to the description I stated that this specimen is closely related to *P. epineura* Meyr. It is possible that these two species are identical.

Pediasia uhryki Rotsch.

This species had been described (10) like *P. pectinicornis* Rebel from one male collected by Uhrík (Drawa Sarvas, Szerem Co., Hungary). This specimen is in the Museum of Tring. Because of the coloration and design of the fore wings it has been placed in the *P. contaminella*-group Hbn. But on the other hand, judging by the fragmentary drawing of the genitals the copy of which I include (tabl. I, fig. 1) I think that *P. uhryki* belongs to the *P. fascelinella*-group Hbn. The species of the *P. contaminella*-group have a very narrow valva while on Rotschild's drawing of

P. uhryki Rotsch. the valva is relatively wide. The lack of *aedeagus*, *uncus* and *gnathos* on this drawing prevents me from the sure establishing of the group-appurtenance of this interesting species. According to Rotschild's description *P. uhryki* Rotsch. is greybrownish, almost unicoloured.

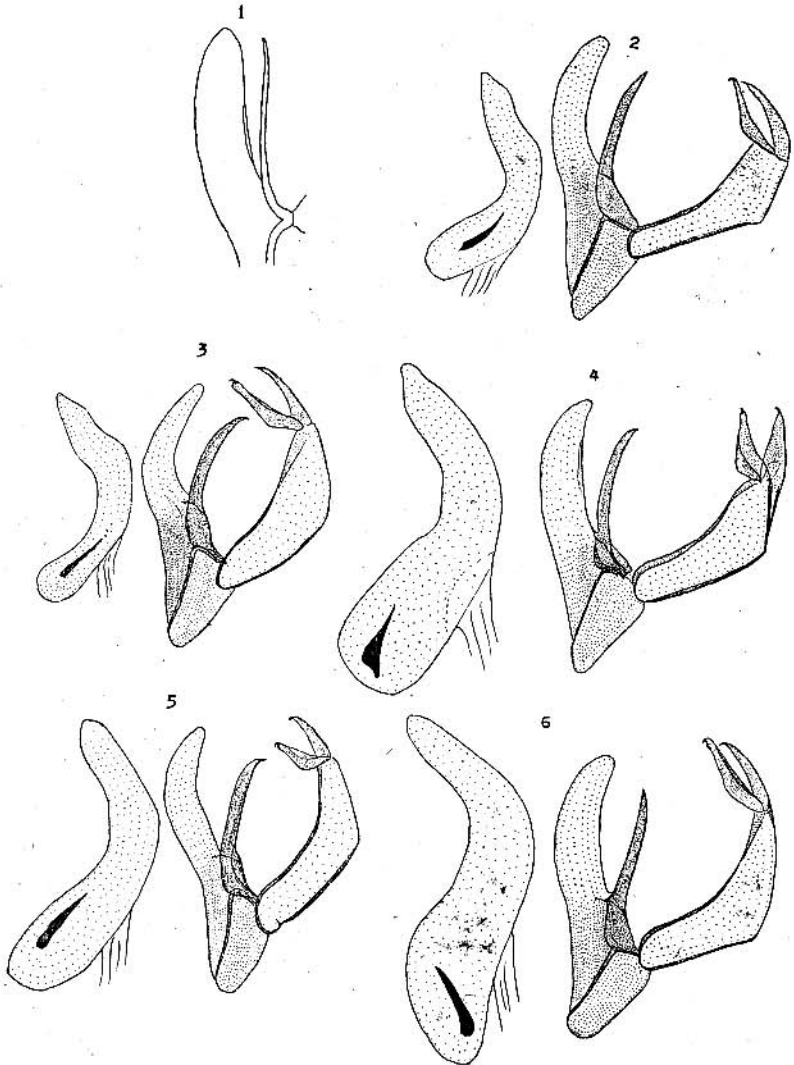
* * *

My work on the *P. fascelinella*-group Hbn. has the character of a short sketch and therefore I tried to make the descriptions of the respective species as short as possible, marking only the essential features and comparing them often with those of the typical representative of this group, i. e. with *P. fascelinella* Hbn. A description of the good many details omitted by me should require the study of voluminous comparative materials which in the case of some species were not to my disposition.

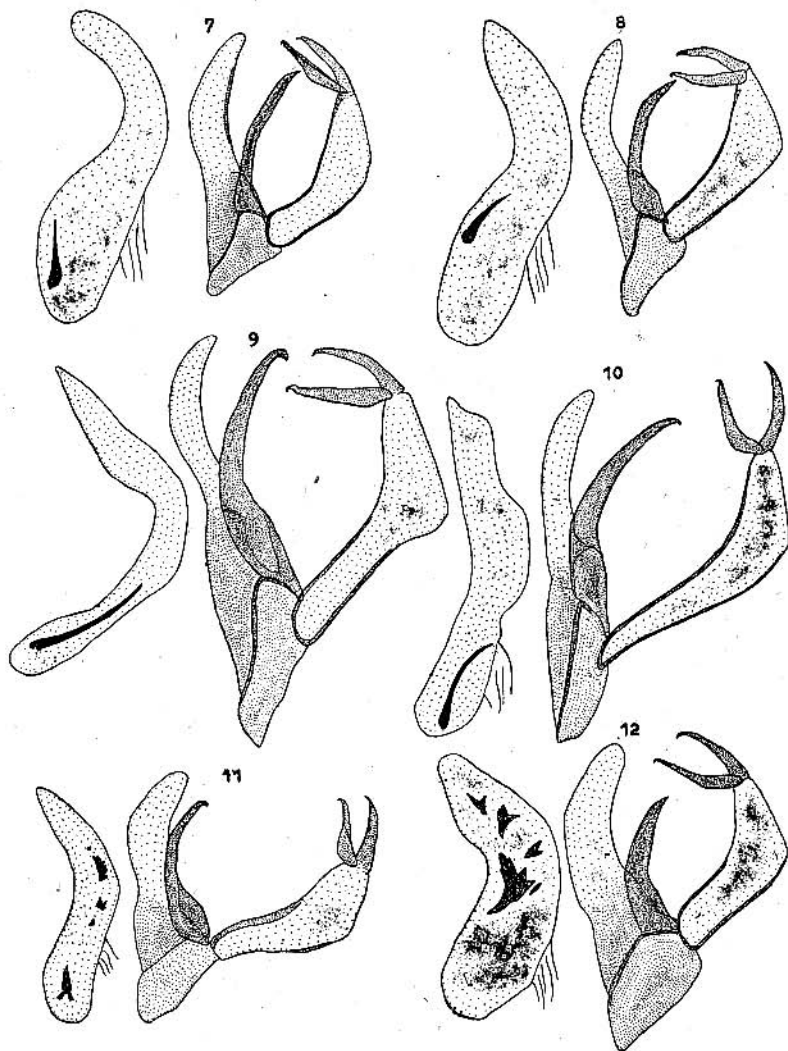
I think also that further studies on the materials from South-eastern Europe and Asia will enable the discovery of many still unknown species of the *P. fascelinella*-group. This was proved by my investigation of a relatively small number of specimens from those regions.

As to the geographical distribution of the species of the *P. fascelinella*-group, the many detailed data from the literature should be — as I mentioned previously — re-examined critically because of the possibility of wrong detections. Generally taken the centre of distribution of this group are the S. E. European steppes and Asia. The further west the less of these species. In the Central, North, South and West Europe the most widely distributed and most common are *P. luteella* Den. & Schiff. then *P. fascelinella* Hbn. There are probably two known endemic species for these regions: the Alpine *P. pedriolella* Dup., a high mountain element, and the Corsican *P. subflavella* Dup. Here may be included — known in one specimen only — the Hungarian species *P. uhryki* Rotsch. Throughout Hungary runs the Western border of the distribution of *P. jucundella* H. S. All remaining species of the *P. fascelinella*-group Hbn. appear only in the S. E. European steppes. Outside European borders, going further East the number of the species of the *P. fascelinella*-group is certainly considerable and may even be greater than in Europe.

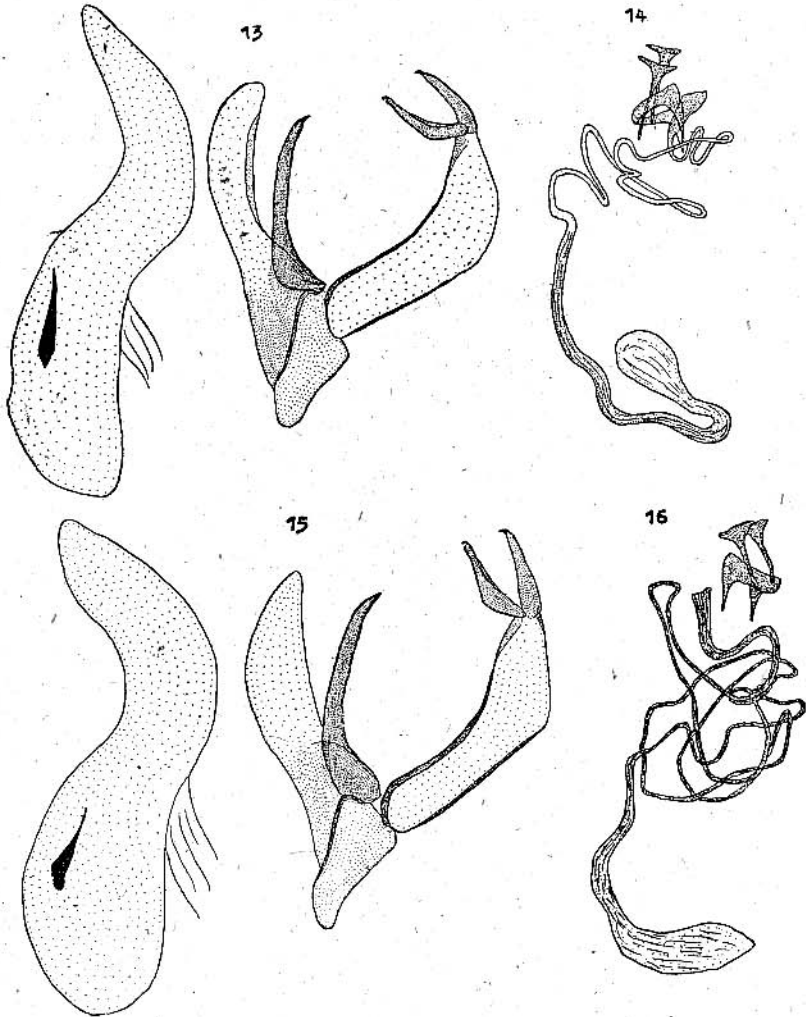
TABL. I.



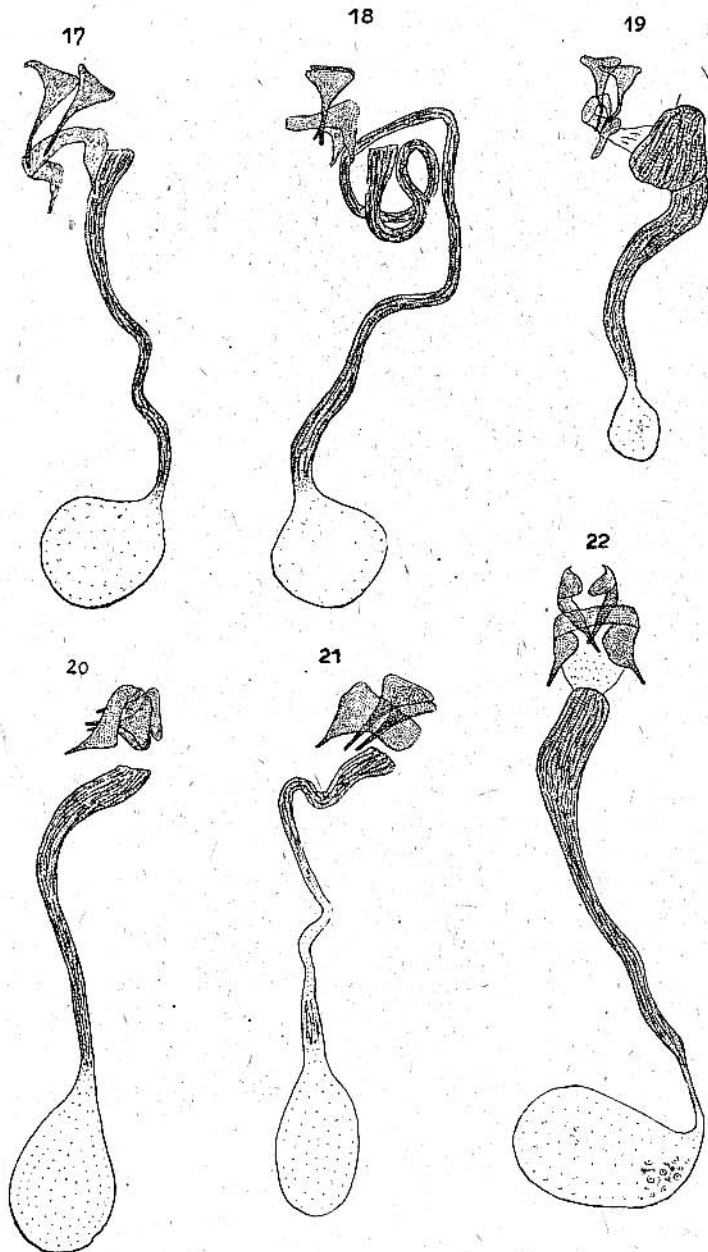
TABL. II.



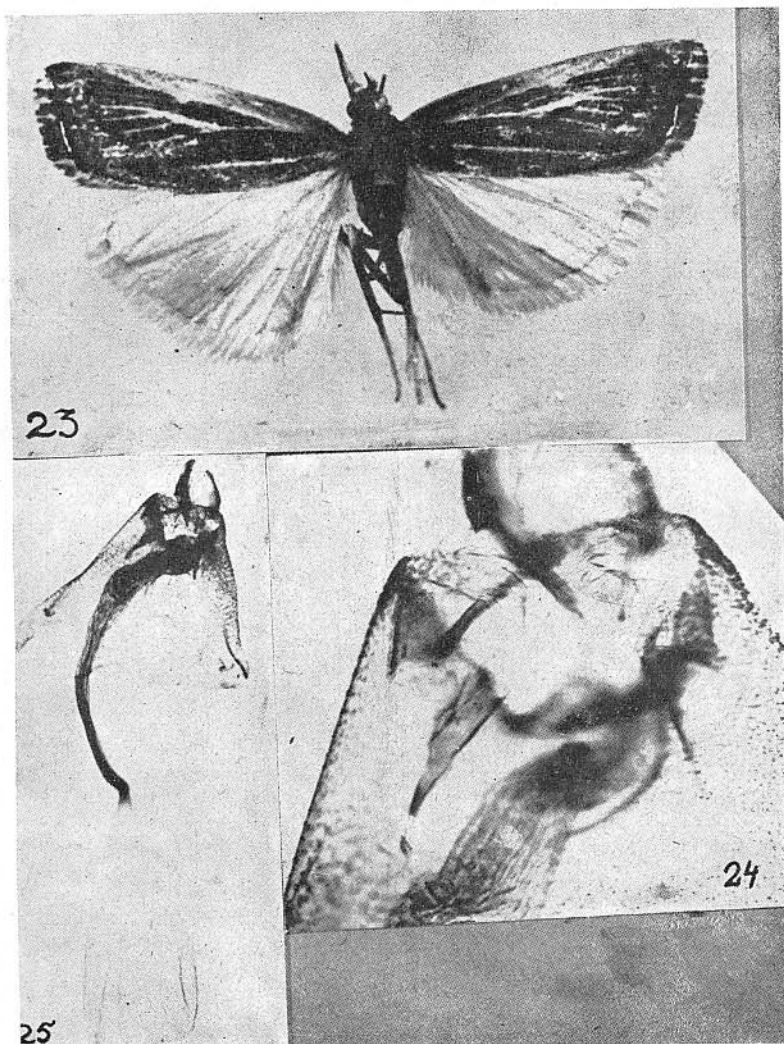
TABL. III.



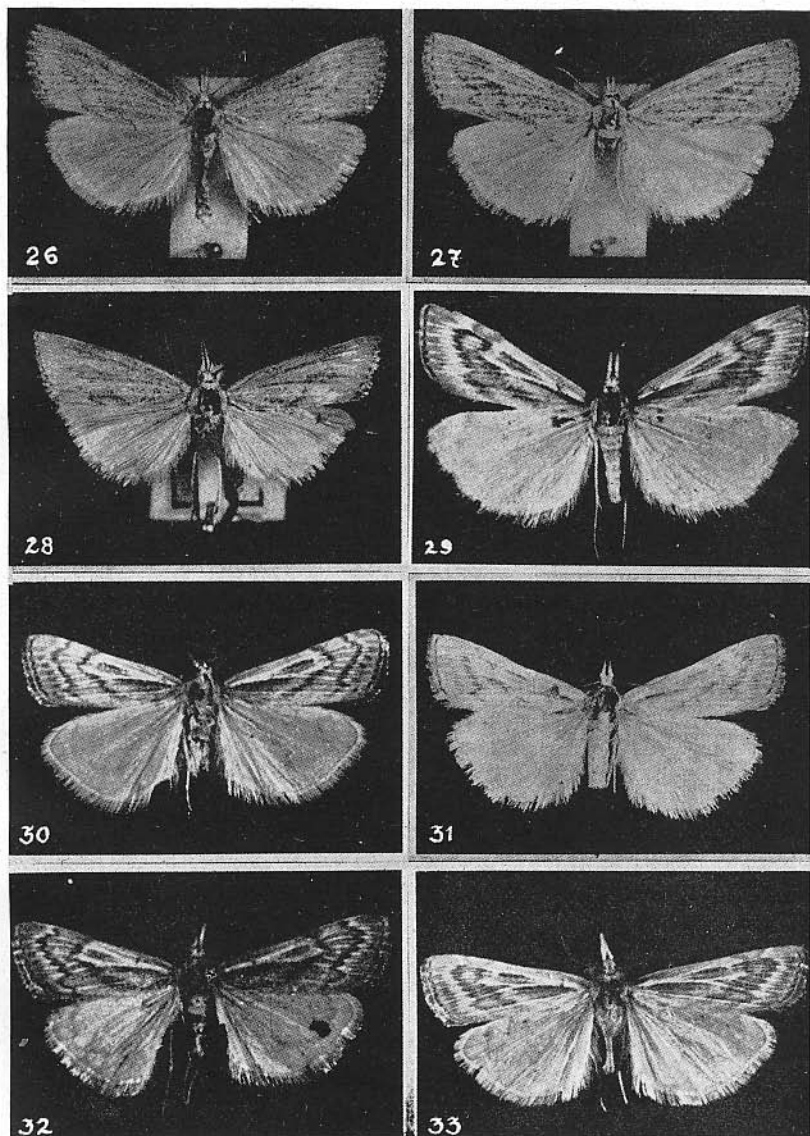
TABL. IV.



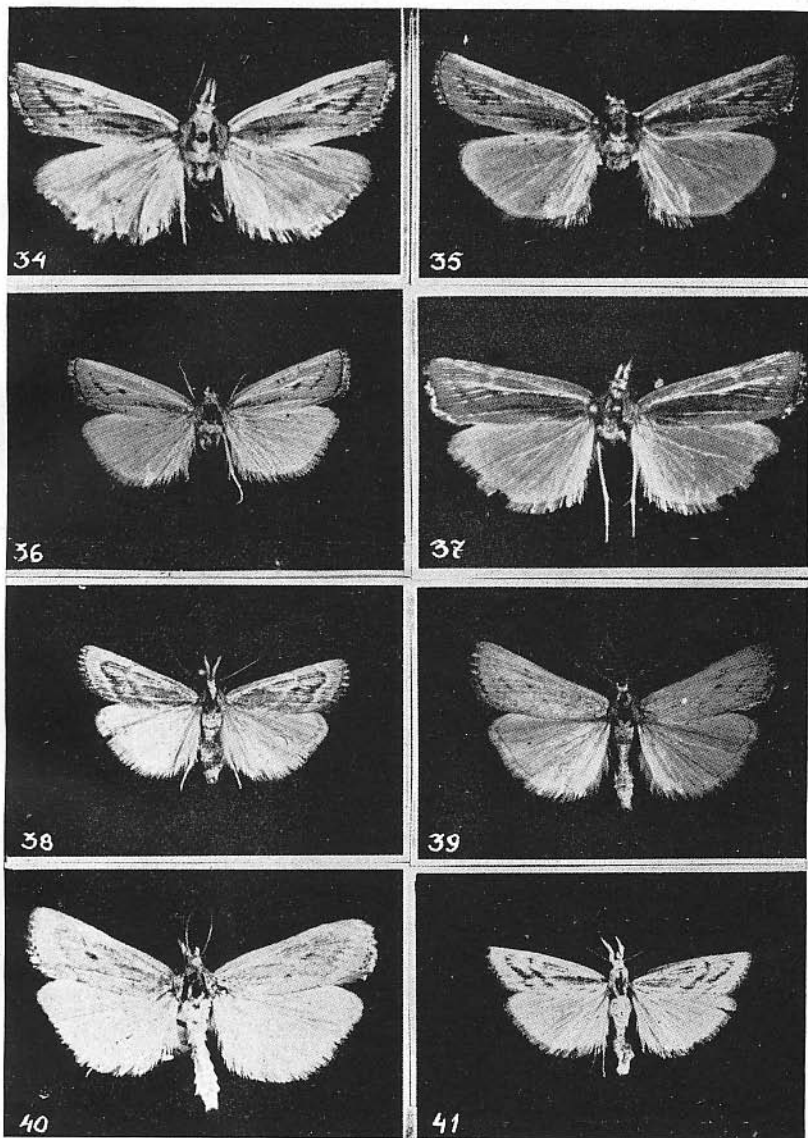
TABL. V.



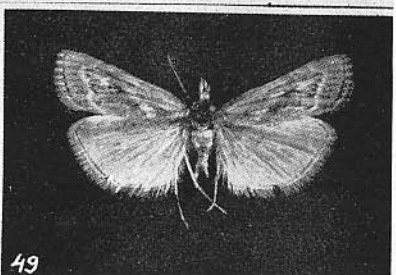
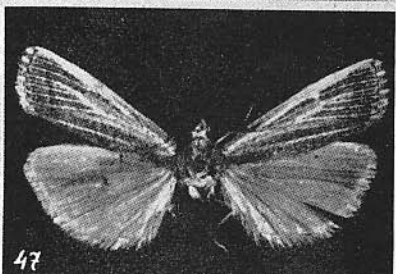
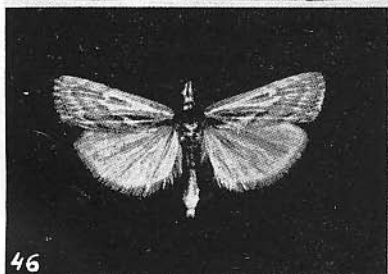
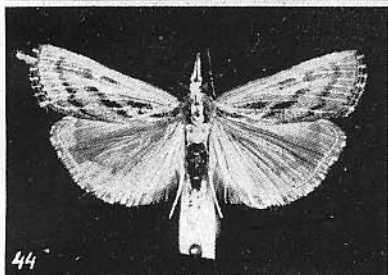
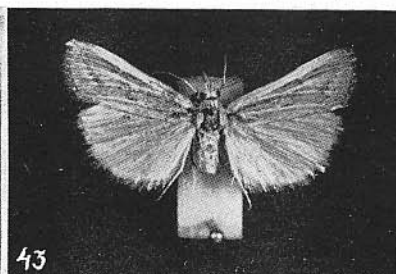
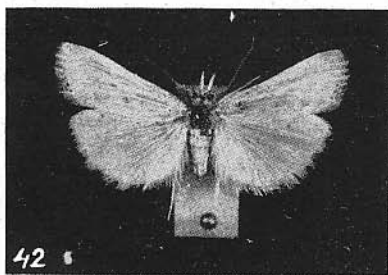
TABL. VI.



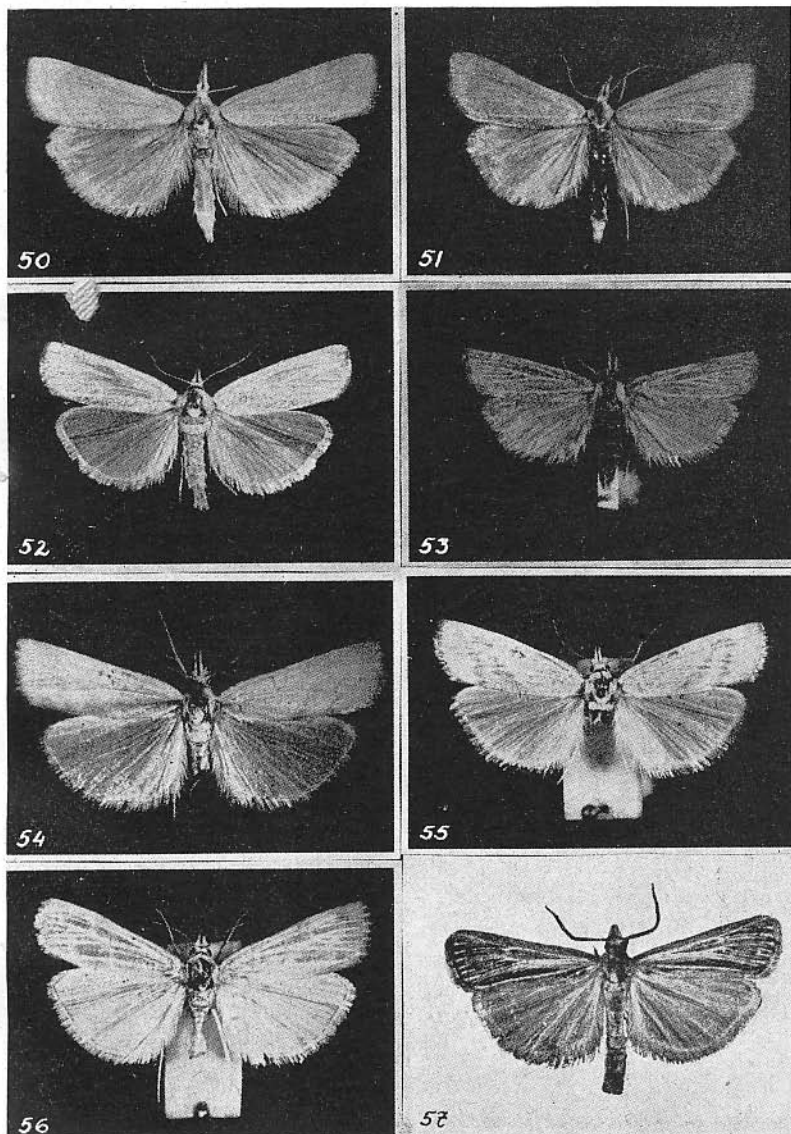
TABL. VII.



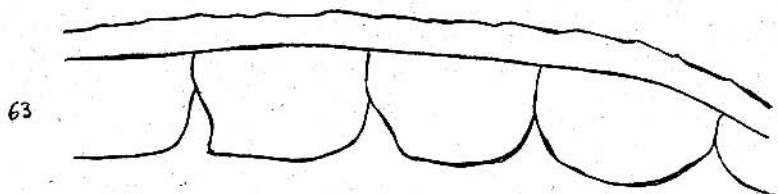
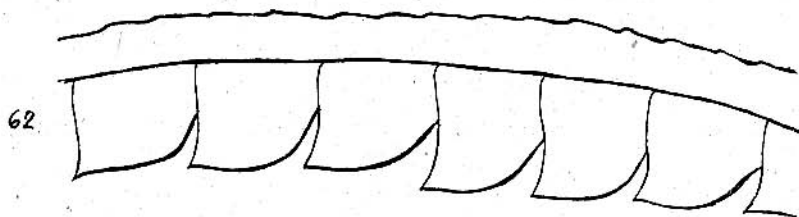
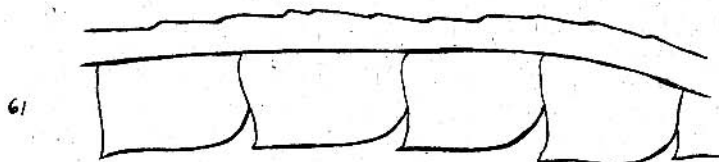
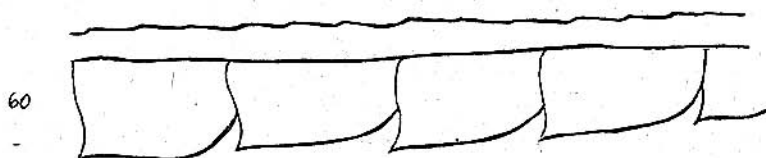
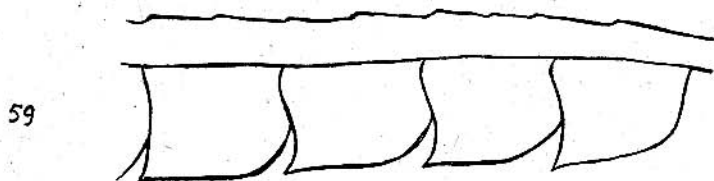
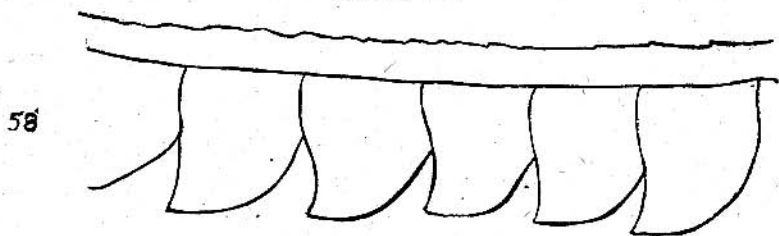
TABL. VIII.

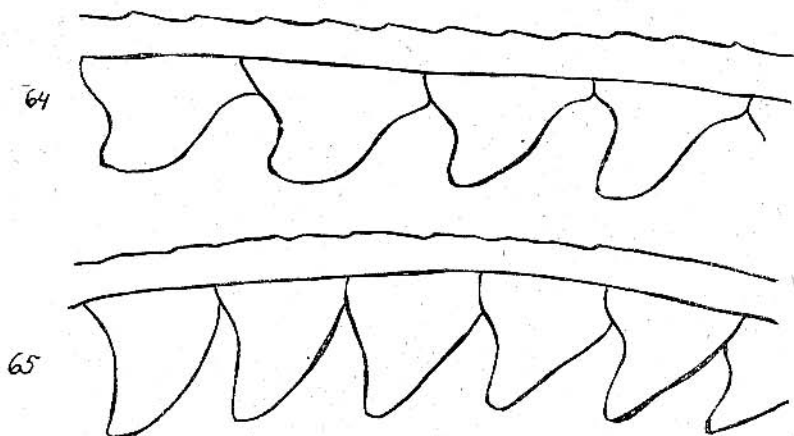


TABL. IX.



TABL. X.





The explanation of tables

Objaśnienia tablic. — Объяснения таблиц

Tabl. I. ♂♂ copulative apparatuses — ♂♂ aparaty kopulacyjne — ♂♂ копулятивные аппараты

Fig. 1. *Pediasia uhryki* Rotsch. Typus. Drawa, Sarvas, Szerem Co., Hungary.

Fig. 2. *Pediasia pedriolela* Dup. Alps. Prep. Gen. 36. coll. Bleszyński.

Fig. 3. *Pediasia pedriolella* Dup. Sarepta. Prep. Gen. 31. coll. Museum Zoologicum Polonicum, Warszawa.

Fig. 4. *Pediasia epineura* Meyr. Europa S. E. Prep. Gen. 1466. coll. dr. S. Toll-Katowice.

Fig. 5. *P. epineura* Meyr. Europa S. E.

Fig. 6. *P. adamczewskii* sp. n. Holotypus. Guberlinskaja. (Eur. S. E.). Prep. Gen. 24. coll. Museum Zoologicum Polonicum, Warszawa.

Tabl. II. ♂♂ copulative apparatuses — ♂♂ aparaty kopulacyjne — ♂♂ копулятивные аппараты

Fig. 7. *Pediasia sareptella* sp. n. Holotypus. Sarepta. Prep. Gen. 28. coll. Museum Zoologicum Polonicum, Warszawa.

Fig. 8. *Pediasia jucundella* H. S. Budapest. Prep. Gen. 257. coll. Bleszyński.

Fig. 9. *Pediasia pudibundella* H. S. Sarepta. Prep. 248. coll. Bleszyński.

Fig. 10. *Pediasia hübnerei* sp. n. Holotypus. Europa S. E. Prep. Gen. 279. coll. Bleszyński.

Fig. 11. *Pediasia soffneri* sp. n. Europa S. E., Gorlówka. coll?

Fig. 12. *Pediasia subflavella* Dup. Corsica. Prep. 258. coll. Bleszyński.

Tabl. III. copulative apparatuses — aparaty kopulacyjne — копулятивные аппараты

Fig. 13. *Pediasia luteella* Den. & Schiff, ♂ Kraków. Prep. Gen. 120. coll. Bleszyński.

Fig. 14. *Pediasia luteella* Den & Schiff. ♀. Kraków. Prep. Gen. 159. coll. Bleszyński.

Fig. 15. *Pediasia fuscinelina* Hbn. ♂. Kraków. Prep. Gen. 114. coll. Bleszyński.

Fig. 16. *Pediasia fuscinelina* Hbn. ♀. Kraków. Prep. Gen. 269. coll. Bleszyński.

Tabl. IV. ♀♀ copulative apparatuses — ♀♀ aparaty kopulacyjne. - ♀♀ копулятивные аппараты

Fig. 17. *Pediasia pedriolella* Dup. Alps. Prep. Gen. 197. coll. Bleszyński.

Fig. 18. *Pediasia jucundella* H. S. Budapest. Prep. Gen. 261. coll. Bleszyński.

Fig. 19. *Pediasia subflavella* Dup. Corsica. Prep. Gen. 27. coll. Museum Zoologicum Polonicum, Warszawa.

Fig. 20. *Pediasia epineura* Meyr. coll. British Museum (Natural History), London.

Fig. 21. *Pediasia hübnerei* sp. n. Allotypus. Sarepta. Prep. Gen. 22. coll. Museum Zoologicum Polonicum, Warszawa.

Fig. 22. *Pediasia soffneri* sp. n. Allotypus. Europa S.E., Gorkówka, Prep. Gen. 1791. coll. dr. S. Toll.

Tabl. V.

Fig. 23. *Pediasia epineura* Meyr. ♀ Typus of *Crambus ramosellus* Zeller. Sarepta. Gen. Slide. Nr. B. M. 2398. coll. British Museum (Natural History), London. By the permission of the Trustees of the British Museum (Natural History).

Fig. 24. *Pediasia epineura* Meyr. ♀ Typus of *Crambus ramosellus* Zeller, copulative apparatus.

Fig. 25. *Pediasia epineura* Meyr. Typus of *Crambus ramosellus* Zeller, copulative apparatus.

Tabl. VI.

Fig. 26. *Pediasia pedriolella* Dup. ♂. Alps. coll. Bleszyński.

Fig. 27. *Pediasia pedriolella* Dup. ♂. Sarepta. coll. Museum Zoologicum Polonicum, Warszawa.

Fig. 28. *Pediasia pedriolella* Dup. ♀ Alps. coll. Bleszyński.

Fig. 29. *Pediasia epineura* Meyr. ♂. „Ramosellus Led. ut. 11/62”, „Zell. Coll. 1884”, „39”. — coll. British Museum (Natural History) — London.

Fig. 30. *Pediasia epineura* Meyr. ♂. Europa S. E. coll. dr. S. Toll.

Fig. 31. *Pediasia epineura* Meyr. ♂. „Ramosellus Z.”, „Origin”, „Coll. Led.”, „paratypus”, „epineurus” — coll. Zoologisches Museum der Humboldt Universität in Berlin.

- Fig. 32. *Pediasia epineura* Meyr. ♂. „Altai”, „Ramosellus Z.”, „coll. Led.”, „Origin”, „ex coll. Staudinger”. — coll. Zoologisches Museum der Humboldt Universität in Berlin.
- Fig. 33. *Pediasia epineura* Meyr. ♂. „Saisan”, „Hbrh.”, „ex coll. Staudinger”. — coll. Zoologisches Museum der Humboldt Universität in Berlin.

Tabl. VII.

- Fig. 34. *Pediasia epineura* Meyr. ♀ „20”, „Zell. Coll. 1884” — coll. British Museum (Natural History), London.
- Fig. 35. *Pediasia epineura* Meyr. ♀. „⁵/₇”, „21”, „Festivellus Sarepta Christ. 75”, „Zell. Coll. 1884”. — coll. British Museum (Natural History), London.
- Fig. 36. *Pediasia epineura* Meyr. ♀. Sarepta. coll. Museum Zoologicum Polonicum, Warszawa.
- Fig. 37. *Pediasia soffneri* sp. n. ♀ Allotypus. Europa S. E., Gorlówka. coll. dr. S. Toll.
- Fig. 38. *Pediasia jucundella* H. S. ♂ Budapest. coll. Bleszyński.
- Fig. 39. *Pediasia jucundella* H. S. ab. *festivella* H. S. ♂ Budapest. coll. Bleszyński.
- Fig. 40. *Pediasia jucundella* H. S. ♂ Europa S. E. coll. Bleszyński.
- Fig. 41. *Pediasia jucundella* H. S. ♀. Budapest. coll. Bleszyński.

Tabl. VIII

- Fig. 42. *Pediasia sareptella* sp. n. ♂ Holotypus. Sarepta. coll. Museum Zoologicum Polonicum, Warszawa.
- Fig. 43. *Pediasia adamczewskii* sp. n. ♂ Holotypus. Gubernskaja. coll. Museum Zoologicum Polonicum, Warszawa.
- Fig. 44. *Pediasia fascelinella* Hbn. ♂. Bremen. coll. Bleszyński.
- Fig. 45. *Pediasia fascelinella* Hbn. ♀. Kraków. coll. Bleszyński.
- Fig. 46. *Pediasia fascelinella* Hbn. ♂. Kraków. coll. Bleszyński.
- Fig. 47. *Pediasia fascelinella* Hbn. f. ? ♀. „Zell. coll. 1889”. coll. British Museum (Natural History).
- Fig. 48. *Pediasia hübnerei* sp. n. ♀. Allotypus. Sarepta. coll. Museum Zoologicum Polonicum, Warszawa.
- Fig. 49. *Pediasia hübnerei* sp. n. ♂. Holotypus. Europa S. E. coll. Bleszyński.

Tabl. IX.

- Fig. 50. *Pediasia luteella* Den. & Schiff. ♂. Kraków. coll. Bleszyński.
- Fig. 51. *Pediasia luteella* Den. & Schiff. ♂. Wólka Kozłowska ad Thuszcz distr. Radzymin (Polonia centr.). coll. Bleszyński.
- Fig. 52. *Pediasia luteella* Den. & Schiff. ♀. Poznań, coll. Bleszyński.
- Fig. 53. *Pediasia luteella* Den. & Schiff. ♀. Mińsk. coll. Bleszyński.
- Fig. 54. *Pediasia subflavella* Dup. ♂. Corsica. coll. Bleszyński.
- Fig. 55. *Pediasia subflavella* Dup. ♀. Corsica. coll. Museum Zoologicum Polonicum.
- Fig. 56. *Pediasia pudibundella* H. S. ♂ Sarepta. coll. Bleszyński.
- Fig. 57. *Pediasia pectinicornis* Rebel. ♂. Typus Uralsk. coll. Caradja.

Tabl. X. The profile of the male antenna — profile samczych rozków.

Fig. 58. *Pediasia fascelinella* Hbn.

Fig. 59. *Pediasia subflavella* Dup.

Fig. 60. *Pediasia pedriolella* Dup.

Fig. 61. *Pediasia luteella* Den. & Schiff.

Fig. 62. *Pediasia jucundella* H. S.

Fig. 63. *Pediasia pudibundella* H. S.

Fig. 64. *Pediasia epineura* Meyr.

Fig. 65. *Pediasia hübnéri* sp. n.

Streszczenie

Grupa „*Pediasia fascelinella* Hbn. należąca do rodzaju *Pediasia* Hbn. jest jedną z trudniejszych w rodzaju *Crambus* F. s. l. i obejmuje większość europejskich gatunków z rodzaju *Pediasia* Hbn. Materiały, na których została oparta niniejsza praca, pochodzą ze zbiorów autora, Państwowego Muzeum Zoologicznego w Warszawie, British Museum (Natural History) w Londynie, Muzeum Zoologicznego Uniwersytetu w Berlinie oraz dr. S. Tolla w Stalinogrodzie

Z powodu dużego podobieństwa w rysunku i ubarwieniu jak też w budowie aparatów kopulacyjnych gatunków z grupy „*fascelinella*”, rozgraniczenie pewnych gatunków napotkało na duże trudności. Szczególnie odnosi się to do opisanych tu nowych dla nauki gatunków *Pediasia sareptella* sp. n. oraz *P. adamczewskii* sp. n., co do których są pewne wątpliwości czy nie stanowią one tylko podgatunków *Pediasia fascelinella* Hbn.

Po omówieniu systematyki jak i charakterystyki gatunków z grupy „*fascelinella*” zostały podane opisy nowych gatunków: *Pediasia sareptella* sp. n., *P. adamczewskii* sp. n., *P. soffneri* sp. n. oraz *P. hübnéri* sp. n. Wszystkie one pochodzą z Europy południowo-wschodniej. Jak wyżej już wspomniano *P. sareptella* sp. n. i *P. adamczewski* sp. n. są najbliższymi spokrewnionymi z gatunkiem *P. fascelinella* Hbn., być może nawet stanowią tylko podgatunki jego. *P. soffneri* sp. n. zbliża się do gatunku *P. epineura* Meyr., choć posiada pewne cechy w aparacie kopulacyjnym zbliżające go do *P. subflavella* Dup. Cechy te jednak autor uważa za konwergencyjne. *P. hübnéri* sp. n. ze względu na budowę aparatu kopulacyjnego został uznany za gatunek najbliższy spokrewniony z *P. pudibundella* H. S., choć różni się od niego wyraźnie w rysunku i ubarwieniu skrzydeł.

Na końcu zostało omówione w bardzo ogólnych zarysach rozmieszczenie geograficzne gatunków wyżej omawianych.

Резюме

Группа „*fascelinella*” обнимает большую часть европейских видов рода *Pediasia* Hbn. Материалы на которых базируется данная работа находятся в коллекциях автора, Варшавского Зоологического Музея, Лондонского Зоологического Музея (British Museum of Natural History), Берлинского Зоологического Музея и в коллекциях доктора С. Толла из Сталинограда.

Разграничение некоторых видов группы „*fascelinella*” очень трудное. Причина этого — это очень большое сходство в рисунке, цвете и структуре половых органов. Это касается особенно ново описанных для науки видов *Pediasia sareptella* sp. n. и *P. adamczewskii* sp. n. так как сомнительно чтобы они были лишь подвидами вида *Pediasia fascelinella* Hbn.

После ревизии систематики и характеристики видов группы „*fascelinella*” описаны новые виды *Pediasia sareptella* sp. n., *P. adamczewskii* sp. n., *P. soffneri* sp. n.

Все они происходят из юго-восточной Европы. *Pediasia sareptella* sp. n. и *P. adamczewskii* sp. n. очень похожи на *P. fascelinella* Hbn. и может быть это лишь подвиды этого вида. *P. soffneri* sp. n. близкий к виду *P. epineura* Meyr. но имеет тоже приметы вида *P. subflavella* Dup. Признаки эти автор считает конвергентными.

С точки зрения структуры половых органов автор принимает, что вид *P. hübneri* sp. n. очень похожий на вид *P. rudibundella* H.S. хотя они разнятся рисунком и цветом крыльев.

В конце автор обращает внимание на географическое размещение приводимых видов.

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