# Studies on Microlepidoptera

By L. A. Gozmány, Budapest

In 1913, Rebel described Cnephasia wertheimsteini (Rov. Lap. 1913, and Verh. zool.—bot. Ges. Wien, 53, p. 5—7) on the ground of four males and three female specimens, caught in the Great Hungarian Plains and the Deliblat sand hills. The Museum of Natural History of Hungary possesses one female specimen of this rare moth caught in Kiskunhalas (the Great Plains), 17. Sept. 1939, leg. Szent-Ivány. Its collector compared it with the type specimens in Vienna, so, though it is a rather worn female specimen, there is no doubt that it belongs to wertheimsteini Rbl. I have also examined this moth, having some doubts regarding its status in the group of species comprising the genera Nephodesme Hbn., Cnephasia Curt., and Cnephasiella Adamczewski, so fitfully revised by this latter author in 1936 (Ann. Zool. Mus. Pol. 11. p. 263—294). The result was that wertheimsteini Rbl., far from being a cnephasid species, belongs to a new genus near Oxypteron Staudinger.

Among *Tortricidae* s. str. there are only two genera in the Palearctical region which lack vein M<sub>2</sub> in the hindwings: Oxypteron Stgr., and *Tortricodes* Gn. Now, apart from other considerations, wertheimsteini Rbl. lacks the secondary cell of the forewings, characteristical to *Tortricodes* Gn.; its wings are also

more pointed, with termen on both wings not so sinuous as oval.

Staudinger, in his description of Oxypteron (Berl. ent. Zeit. 1870, p. 276) says, as part of its characterization, that in the hindwings vein  $IV_2$  originates from the lower cell vein at 2/3, and that veins II and  $III_1$  are on a short stalk. Kennel's description (p. 226) says that »Ader  $IV_2$  entspringt aus der hinteren Mittelader weit saumwärts«, and that »Ader II und  $III_1$  entspringen getrennt, aber sehr nahe beisammen aus der forderen, etwas vorgezogenen Ecke der Mittelzelle...« My impar specimens, which are topotypical, originating from Sarepta and caught or bred by Christophin 1865 (»coll. Zeller, coll. Walsingham, received in exchange from the British Museum«) agree much better with the above characterization than with that of Staudinger er's. (There is also a curious vein-formation on the right forewing of my male specimen: veins  $II_{1+2}$  are on a rather long stalk! — the left wing is normal.)

Amsel, in his study on the Mediterranean Tortricodes-species (Bull. Soc. Fouad 1er Entom., 32, 1948, p. 299—303) gives a detailed account of the species belonging to Oxypteron, rectifying also the erroneous conceptions of both Staudinger and Kennel in that not vein  $M_3$  but  $M_2$  of the hindwings are absent in this genus. Now, in wertheimsteini Rbl., veins  $RR + M_1$  of the hindwings are stalked,  $M_2$  far from  $Cu_1$ , and — on the forewings —  $Cu_2$  originates almost at the middle of under cell vein. In the copulatory organs the chief

differences with regard to the *Oxypteron* species are in the peculiarly strongly chitinized and bent sacculi, and the straight, smooth, narrow valvae. There is a fultura superior. On these characters I erect a new genus for *wertheimsteini* Rebel, to be called **Oporopsamma** genus nova.

Of the biology of wertheimsteini Rbl., it must be said that all specimens were caught hitherto in September (similarly to all Oxypteron species that are on the wing in the autumn and winter) while all cnephasid species fly in the late

spring or summer. We have no date on the flying season of impar Stgr.

During my work in this genus I found in the Collection three Spanish specimens of a species, put tentatively to *impar* Stgr., by Dr. A. Schmidt, who was till 1938 Keeper of the Collection. These individuals are indeed very similar to *impar* Stgr., but they proved eventually to be a new species, the description of which is as follows:

## Oxypteron neogena sp. n.

Alar exp.: 19—21 mm. Head & thorax brown, palpi brown, second joint erect with dense scales, third slightly protruding, antennae longer than 1/2.

densely ciliated on both sides, brown.

Forewings elongated, basic color sandy grey, lightest along costa. Costa creamy, light orange-yellow at base, among veins, and before and after spots in cell, darkest in cell and on veins to apex. Two spots in cell (one at middle, second at end), fold and termen light grey, veins irrorated grey, ciliae gray, basally creamy. Whole wing lutescent, making right determination of colors difficult. Hindwings 3/2 broad, shiny, refracting grey, ciliae much lighter. Underside of wings grey. Abdomen light fuscous with grey.

Holotype male: Montarco, Prov. Madrid, 20. Sept. (1923?), leg. F. Esca-

lera. Paratype males of the same locality and date.

Regarding its allied species, I have already given the differences to *impar* Stgr. *Palmoni* Amsel have leaden grey dark scales, and has no dark spots in the cell.

A m s e l in his above mentioned paper has grouped the species belonging to Oxypteron Stgr., into two assemblages. The most significant character seems to be the presence or absence of the fultura superior in the male genitalia. Also, there is a certain resemblance with regard to the antennae, with the same structure in polita Wlsm., eremica Wlsm.; while impar Stgr., palmoni Amsel, and wertheimsteini Rbl., have differently shaped antennae. O. neogena, further, also lacks the fultura superior (fig. 1—3.), whilst wertheimsteini Rbl., possesses a well-developed one (figs. 4—5.). I find it advisable, in the light of a new species having now been relegated to the genus Oxypteron Stgr., to split up this genus tinto two subgenera, one of which is new. This is the more advisable, as, in my opinion, more new species may be found, the detailed examination of which will eventually shed more light on the relationship and characteristics of this complex group.

On the base of the fultura superior being absent in the male genitalia I erect therefore the subgenus **Psammozesta** sg. nov., with subgenotype neogena sp. n. To this group belong also polita Wlsm., and eremica Wlsm. Subgenus Oxypteron Stgr., will comprise of impar Stgr., and palmoni Amsel. In natura unknown to me is partitanum Chrét., and the relegation of exigua Lah., (= chapmanni Wals.) cannot be made at the present time, as no male specimen is known.

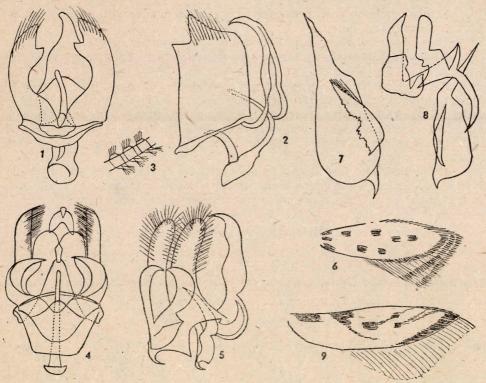


Fig. 1. Male genitalia of Oxypteron neogena sp. n., ventrally. — 2. Male genitalia of Oxypteron neogena sp. n., laterally. — 3. Antennal joints from the shaft of Oxypteron neogena sp. n. — 4. Male genitalia of Oporopsamma gen. n. wertheimsteini Rbl., ventrally. — 5. Male genitalia of Oporopsamma gen. n. wertheimsteini Rbl., laterally. — 6. Forewing of Megacraspedus jablonkayi sp. n. — 7. Aedoeagus of Megacraspedus jablonkayi sp. n. — 8. Male genitalia of Megacraspedus jablonkayi sp. n., laterally. — 9. Forewing of Metzneria éhikeella sp. n.

# Megacraspedus jablonkayi sp. n.

Alar exp.: 16 mm. — Head yellowish-white with brown scales, face whiter ivory, labial palpi as long as head and thorax, bush of second joint large, inside ivory, outside dark smoky grey, third joint 1/1, also whitish. Antenna 1/1, ringed with dark and light grey. Thorax smoky dark-grey with yellow. Forewings long, broadening to pointed apex. Basic color dirty white with smoky grey: tips of scales being dark, their bases white. Three small dark grey longitudinal streaks at base of wing, two dark smoky grey spots in fold at 1/3 and 2/3, two spots on subcostal and  $R_{\rm 1}$  (almost at base and above and between the two spots in fold), then two spots in cell: at 2/3 over tornus and at cell's end. An orange-yellowish streak along subcosta till extreme apex, joined from below by a similar streak running in fold, then along termen. A third and similarly colored streak from base, running inside cell, terminating at distal cell spot. Ciliae on costa dusty yellowish-white chequered by smoke grey, yellowish-white along termen with three straight grey lines in them, from apex to tornus, lighter at tornus and extreme end of tornus (Fig. 6.).

Hindwings light pearl grey, almost 1/1, ciliae whiter with a slight yellowish tint, long, 2/1 on dorsum.

Underside of wings, grey; darker along costa and on apex.

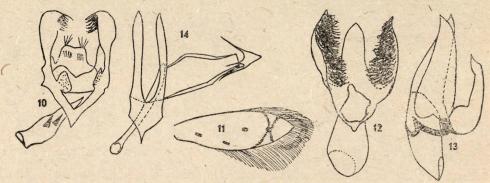
Abdomen yellowish, whiter posteriorly, anal tuft white. Legs yellowish white.

As most of the European Megacraspedus species are whitish grey with almost no markings and pattern, this species is very easily separated from them. Indeed, I know of no other species in this group which has 9 dark and conspicuous spots on the forewing, and only one, tristictus Wlsm., (Cannes, France) has an ochreous coloration to any amount. This species, however, has only 3 spots.

Holotype male: Farkasvölgy, Budapest, 13. August, 1953, leg. J. J a blonk ay, ardent lepidopterist with an interest also in micros. Genitalia in figs. 7—8. Type in the Collection of the Hungarian Natural History Museum.

## Metzneria éhikeella sp. n.

Alar exp.: 18,5 mm. — Head, face and thorax straw-colored yellow, scapulae reddish. Labial papil long, recurved, 1/5 as long as head, third joint less than half second. Antennae yellowish brown, 4/5. — Forewings with a white



10. Male genitalia of *Metzneria éhikeella* sp. n., ventrally. — 11. Forewing of *Aristotelia agasta* sp. n. — 12. Male genitalia os *Aristotelia agasta* sp. n., ventrally. — 13. Male genitalia of *Aristotelia agasta* sp. n., laterally. — 14. Male genitalia of *Glyphipteryx nattáni* sp. n., ventrally.

basic color, mostly suppressed by light golden and ochreous yellow. A suffused eddish brown elongated spot at base of costa, another but smaller at 1/3, with an inconspicuous drawn-out line consisting of brown scales originating from its inner tip, running diagonally across middle of wing to fold, a large brown spot in middle of cell above termination of this line, two small dots at end of cell, upper one nearer base, two suffused brown lines from these dots along veins  $R_1$  and  $R_2$ , apex suffused brown extending downwards, always narrower, tapering at tornus. Costa, fold, dorsal base, and outer third light golden-yellowish to ochreous, basic white remaining only on dorsum, above fold, middle of cell and between discal spot and dots. Ciliae on costa yellow, reddening along termen to a dark tornus, lighter on dorsum (Fig. 9).

Hindwings silvery dark grey with dark cilia. Abdomen grey, anal tuft

yellowish. Legs grey, irrorated with brownish scales.

Of all other Eurasian and North African species with yellow and white pattern, which also have spots, only *dichroa* Wlsm., (Teneriffa) is somewhat similar, but its spot in cell is duplicated with almost the whole dorsum and subdiscal area ochreous.

The male genitalia (fig. 10) stands nearest to *metzneriella* Stt., but here the uncus is bilobate with small inner spines, valvulae rounded not pointed, aedoeagus with 2 great and sharp thorns.

Holotype male: Ágasegyháza, Com. Bács, S. Hungary, 2. Oct. 1953,

on the shores of a reedy lake with Typha, Carex, Molinia spp.

I dedicate this new *Metzneria* to Prof. Gy. É h i k, mammalogist, also a zealous lepidopterist, who caught this specimen by lamp.

Type in the Collection of the Hungarian Natural History Museum.

## Aristotelia (Xystophora) agasta sp. n.

Alar exp.: 10—11 mm. — Head cupreous brown, face lighter. Labial palpi twice as long as head, recurved, ascending, inside light fuscous, outside darker fuscous, second joint with appressed scales, third joint long, pointed, as long as second. Antennae 3/4, brown. Forewings long, narrow. Scales bicolorous: base light fuscous (smoky/brown), tips dark fuscous. Dots almost invisible: two in fold, at 1/5 and 3/5, then one in cell at 1/2, finally one larger spot at end of cell. Two light yellowish brown triangular streaks beginning in cilia and extending with their points to spot at end of cell which lies between them, basally curved, externally not well defined, exactly in juxtaposition. Ciliae beginning at upper streak on costa, longest on tornus, reaching till 1/3 on dorsum, a dark line in them embracing apex, terminating above tornus, returning to wing. They are dark grey: yellow only about apex and along termen inside above line, then at tornus (Fig. 11).

Hindwings 3/4, light grey.  $M_1$  near  $M_2$ ,  $M_3$  twice this distance away. Tornus sharply curved to termen, apex as long as termen. Ciliae yellowish grey, light.

Underside of forewings uniform fuscous, base of yellow costal streak shining through in cilia. Hindwings light grey. Thorax and abdomen shining fuscous, anal tuft light grey. Legs yellowish grey with almost no markings.

This species, as regards pattern, stands nearest to atrella Hw., which is, however, bigger, dark brown with a violet shine, the two yellow posterior streaks are not facing each other but are in a sharp oblique line: the above one being further away to apex, the lower to base. Labial palpi ochreous. Male genitalia of agasta (figs: 12—13), very different from atrella Haw.: uncus simple, harpe pointed, valvula plain, aedoeagus without cornuti.

Holotype male: 27. April, 1952, Nádasdy forest, Kaposvár, Com. Somogy, SW. Hungary, leg. Nattán; paratype male: of the same date.

Holotype in the Collection of the Hungarian Natural Hist. Museum; paratype in that of N. Nattán, Kaposvár.

# Glyphipteryx nattáni sp. n.

Aler exp.: 5,5—6 mm. — Belongs to Group B(b)beta (in Spuler: p. 298—99.). — Head, thorax and scapulae greenish bronzy fuscous; labial palpi hanging, as large as head, 2nd joint appressed scales, white, mingling

with black, more blackish outwards, tip white, terminal joint pointed, inside white, outside with white and black streaks. Antennae longer than  $^{1}/_{2}$ , blackish. Forewings elongated, bronzy fuscous with some cupreous sheen, with 5 pure white streaks; the first three parallel, 4th and 5th oblique towards first three, with uniform distance from each other, not reaching middle of wing. Apex with black spot, no silver dot within. Cilia dark with white incision below apex; one minute white streak under apex and a second, larger, on tornus, pointed toward third costal streak. Of the three specimens a very inconspicuous and very oblique white dorsal streak on the left forewing of Allotype female only. Hindwings half as broad as forewings, greyish with some yellowish tint. Underside of forewings brownish black, white streaks more or less visible (extreme 2—3). Abdomen greenish bronzy fuscous, anal tuft somewhat lighter. Legs of same color, tips of joints white.

Holotype male: 14, May, 1951, Kislaki erdő, on *Prunus spinosa*, Kaposvár, SW. Hungary, leg. N a t t á n; paratype male: 19, May, 1951, allotype female: 3, June, 1951, localities the same. According to Mr N a t t á n, the two latter were sitting on »grasses«.

Of all Palearctic *Glyphipteryx* species this is the smallest of all. I have even compared it with *pygmaeella* Rbl., of the Canary isles but even this is 7 mm large. A curious feature is the seemingly absent characteristical white dorsal mark, then the absence of the silvery, iridescent spots along the termen, and so can only be compared with *cramerella* Fabr., (= *fischeriella* Zell.). This latter is, however, larger, with a conspicuous white dorsal streak. In the male genitalia it differs from *cramerella* F., in having a sharp, pointed cornutus; aedoeagus simple, with no thorns. Besides, N. Nattán also caught *cramerella* F., at the same time and place (Fig. 14.).

I dedicate this new species to honor Mr. Nicholas Nattán, the zealous and excellent collector in SW. Hungary, discoverer of many new and rare Lepidoptera.

Holotype and allotype in the Collection of the Hung. Nat. Hist. Museum, paratype in the collection of Mr. Nattán, Kaposvár.

# Gnorimoschema census sp. n.

Alar exp.: 14 mm. Head and thorax brown; face bone-white; labial palpi big, recurved, ascending, brownish, second joint brown, third joint  $^1/_1$ , base white, tip blackish. Antennae brown with inconspicuous light ringing. Forewings dark brown with three suffused yet rather big blackish-brown spots: one in fold at  $^1/_3$ , two further away to apex in cell, at middle and end. The basic dark brown color abruptly ends in a vertical straight line at  $^3/_4$  of wing, from then on, to extreme apex, it is a smooth creamy white with some light brownish scales in middle of this light area. Ciliae light grey, lighter around apex (almost white). Hindwings grey, ciliae somewhat darker then on forewings. Underside of wings shiny brown, hindwings greyish. Abdomen dark, legs also.

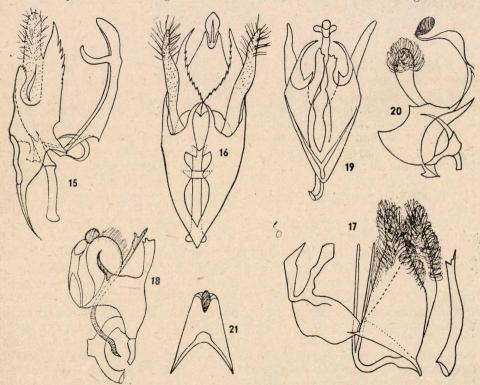
This species, with regard to its remarkable pattern, somewhat resembles *Trichophaga tapetzella* L. And though I have scanned over the whole *Gnorimoschema* literature at my disposal, this dreary task never presented me with any species which might resemble mine. It was caught during census work done on lepidoptera imagines by the aid of lamps near Budapest on a forest clearing

with a Festucetum vaginatae plant association (with a large number of Silene species).

Holotype female: 31 July, 1952, Hársbokorhegy, Budapest, leg. Dr. Gozmány. In the Collection of the Hung, Nat. Hist. Museum.

### Bubulcellodes amseli sp. n.

Alar exp: 19 mm. — Head and thorax white and yellowish, face lighter. Labial palpi longer than head, second joint with large brush and mixed brownish-white scales and hairs, third joint seems to be somewhat longer than second. Antennae almost  $^{1}/_{1}$ , brown with light white ringing. Forewings long, white with some yellowish shading and a dense but uneven brownish scaling mixed to



15. Male genitalia of Bubulcellodes amseli sp., n., laterally. — 16. Male genitalia of Bubulcellodes amseli sp. n., ventrally. — 17. Male genitalia of Holoscolia homaima sp. n., laterally. — 18. Male genitalia of Eupista etelka sp. n., laterally. — 19. Male genitalia of Eupista etelka sp. n., ventrally. — 20. Male genitalia of Eupista eupepla sp. n., laterally. — 21. Gnathos and subscaphium of male genitalia of Eupista eupepla sp. n.

them, darkest at base of costa. Two large brown spots consisting of the aggregation of the same brown scales in cell: one at  $^1/_3$ , second at cell's end; and a longitudinal dark shade between and under them in fold. Ciliae light whitish with the dark scales running out onto them from wing. Hindwings yellowish, ciliae of same color, whitish at apex and inner base. Underside light brown, hindwing lighter. Abdomen brownish, legs with long white hairs.

A m s e l has revised this group (Veröff, Dt. Kol.-u Üb. Mus, Bremen, 3, Heft 3, 1942, p. 230—236), relegating 5 species to this genus, erected by him at this place. The new species stands nearest to hartigi Tur., as regards pattern, but this is much lighter and yellower. Amseli has serrated harpae in the male genitalia, its aedoeagus  $\frac{2}{3}$  as long as harpe (figs.: 15—16).

Holotype male: July, 1927, Murcia, Alberca, Spain, coll. Com a.

I dedicate this species in friendly esteem to honor Dr. A m s e l. Type specimen in the Collection of the Hung. Nat. Hist. Museum.

I have yet to remark that, with regard to my new species described from Spanish collecting localities, there is a certain amount of danger that they will be synonymized later, as I am incognizant of new Spanish microlepidoptera which may be published in the periodical Eos. This important publication cannot be procured by the Library of our Museum at present.

## Holoscolia homaima sp. n.

Alar exp: 14,5—16,5 mm. — Head and thorax white; palpi much longer than head + thorax, 1,5 as long as in *forficellus Hbn.*, third joint hidden in bush of second joint, this pure white above, inner and outer side brownish, antennae  $^3/_4$ , dark. Forewings with pure white costal streak; then an almost as broad light brownish-golden streak on upper discoidal vein; a golden brown lighter spot at end of cell; with same color a sparse irroration on veins  $R_3$ ,  $R_{4+5}$ ,  $M_1$ ; and also very sparse scales around apex and termen; a very light brown tint in fold; otherwise whole wing pure white. Ciliae white with a characteristical dark basal line of the same fuscous color, end of ciliae also brownish around apex. Hindwings a very light silky grey; ciliae white, gray at inner angle.

Underside of wings light grey. Abdomen dark, anal tuft light brownish-

white. Legs same color as abdomen.

Holotype male: 26, July, 1918, Mt. Korab, 1750—1800 m, Albania, leg. C s i k i (Akad. Balk. Exp.); Paratype males (2): of same date and locality.

This big new *Holoscolia* species can be distinguished very easily from all its other three congeners, *forticella* Hbn., *majorella* Rbl., and *berytella* Rbl. *Forficella* has a much more extensive pattern with copious yellow coloration, whilst *homaima* has no yellow scales at all. Its labial palpi are also much longer than those of *forficella*, and the hindwings are also much lighter than the very dark ones of *forficella*. *Berytella*, and *majorella*, on the other hand, are much darker, and have no white costal streak, whilst they possess yet two dark oblique spots on the forewings, totally absent in *homaima*. Though ssp. *monticolella* Zerny (Iris, 1934, p. 23) of Libanon has a costal streak, this is also dark, and also retains the two spots.

The case-history of this species is also remarkable. Rebeland Zerny worked out their Albanian material, collected in 1918 by Penther, Zerny, and Predota in Albania (Die Lepidopteren Albaniens, Denkschr. der math.—naturw. Kl., 103.). They collected at Kula e Lumes for some months, at the foot of Mt. Korab, where large series of forficella Hbn., were caught. They also visited the mountain itself (23, July—1. August), but, as presumably they were collecting by lamp, they did not get the new species, which, as all Holoscolia do, fly in the sunshine. Now, Dr. Csiki, Director of the Hungarian Natural History Museum, the famous coleopterist, was also present, representing the

Academy of Sciences of Hungary. The three *homaima* species were caught by him at the same time and place (Mt. Korab) where the other scientists were working. I can explain the curious collecting of *homaima* by the coleopterist member only by the fact that they were swept out of the grass by the beetle-collecting net, to which also their somewhat torn appearance testifies. Dr C s i k i communicated this verbally to me.

.The Holotype and the two paratypes are in the Collection of the Hungarian Natural History Museum. Fig. 17., of the male genitalia shows the armature

and the aedoeagus.

## Eupista etelka sp. n.

Alar exp.: 12 mm. — Belongs to Heinemann's Group A. — Male: Head and thorax shining silvery white. Antennae  $^3/_4$ , white. Labial palpi white, twice as long as head, straight, 2nd joint with appressed scales, third as long as second, slender, pointed. Forewings with no pattern at all, shining white (silvery white); ciliae of the same color as forewings with some yellowish tinge on dorsum. Hindwings of thesame color as forewings with some greyish tint; ciliae yellowish light gray. Underside of wings whitish grey, light. Abdomen white; anal tuft with yellowish tint. Legs white, shiny. Female: same as male, but forehead and base of antennae yellowish.

Figs. 18. 19. show the male genital armature.

This new species must, judged by its external appearance, be relegated to H e i n e m a n n's Group A. It lives presumably on *Vaccinium myrtillus*, as the circumstances of its capture makes this the most plausible assumption. I know of no other *Eupista* in this group (in Europe) which has this light color. With some stress of imagination it may be likened to *iuncicolella* Stt., which is, however, much darker and also smaller. Besides, this species lives on *Calluna*, and I caught *iuncicocella* at the same place and time as my *etelka* series.

Collecting locality: Uzsa, on the vesternmost ridges of the Bakony Mts., Western Hungary, in a Betuletum—Callunetum (with Betula pubescens, Vaccinium myrtillum, Calluna vulgaris, Sarothamnus scoparius, etc.). I caught the first (Holotype) specimen on the afternoon of 27, May, 1952, flying low among Vaccinium bushes, whilst six females (Allotype and paratypes) were collected during the night of the same day (21—22 p. m.), flying also among Vaccinium at the foot of my collecting lamp. They did not take to the sheet nor to the lamp but were caught by killing bottles among the leaves of Vaccinium; (flight to light was very scarce owing to rather low temperature).

I dedicate this species, with gratification, to Mrs. Etelka Drozdy, preperatress of the Hungarian Natural History Museum, my most assiduous help during collecting trips.

All type specimens in the Collection of the Museum.

# Eupista eupepla sp. n.

Alar exp.: 17—18 mm. — Belongs to Heinemann's Group F. — Head, thorax, scapulae white. Labial palpi 2,5 as long as head, porrect, second joint very long with its bush reaching to the tip of third joint. Antennae  $^{3}/_{4}$ , white, unringed, with very small (if any) basal bush. Forewing long, apical part slightly curved, costa with broad, pure white (not shining) streak, ending continued in

ciliae of uniform breadth in apex; middle of wing yolk-yellow; dorsum with same broad, pure white streak, but narrowing from beginning of dorsal ciliae, and running along their base to apex. No medial or plical lines. Ciliae white around apex, yellowish along termen and dorsum. Hindwing grey, ciliae yellowish. Underside of wings dark silky grey; ciliae white on costa, yellowish elsewhere. Abdomen white with some grey tinge; anal tuft white. Legs white. Holotype male: 10. June, 1905, P. Peszér, on the Great Plains, (Central

Hungary), leg. Uhrik; allotype female: 17, June 1909, P. Peszér, leg.

Dr. Schmidt.

If my diagnosis is right, and the basal bush of antenna is not broken away, then I can relegate this new species in Group F., only. All of the species belonging here have discal, median, and/or plical lines, with the exception of the niveicostella Z., group, whose members are, however, without dorsal streaks. Also, they are all smaller, only tringilella Z., and vestalella Stgr., approximate it in size (this latter have, however, a very dissimilar pattern).

Male genitalia: figs: 20-21.

As I have not at hand the necessary literature, I cannot try to better insert the new species among more natural groupings of Eupista, based on the male genital armatures, and so I have to rest content with (temporarily) leaving it in Heinemann's Group F.

The two Types in the Collection of the Hungarian Natural History Museum.

## Apatetris agenjoi sp. n.

Alar exp.: 8 mm. — Head, palpi, thorax, scapulae, forewing, coxa and femur chalk white, irrorated with sparse fawn-colored brown scales. Labial palpi short, third joint half of second, tip white. White ground color of forewings, aside of above brown irroration, with following pattern: a dark base; a band at <sup>1</sup>/<sub>a</sub>, arched from costa to dorsum, bent outwards; a second band vertically from broad costal origin to small end in dorsum, at its dorsal end a stronger marked circular and rather large spot; a spot in apex; one between these on termen; and two smaller on outer 3/4 of costa. All elements diluted, consisting of accumulated fawnish scales. Cilia white, with brown irroration and a line at <sup>2</sup>/<sub>2</sub> its length. Hindwings light whitish grey, cilia yellowish white. Underside of wings medium grey. Abdomen yellowish grey, anal tuft yellowish. Antenna grevish brown.

Holotype male: June, 1927, Murcia, Alberca, Spain, coll. P. Coma. Dedicated to the excellent Spanish lepidopterist, R. Agenjo, in esteem.

Of the other European and Mediterranean Apatetris species, alphitodes Meyr., altithermella Wisghm., and echiochilonella Chrét., are much larger; halimigenella Wlsghm., of identical size has three bands instead of two, and an »elongate spot« on the external border of the median band.

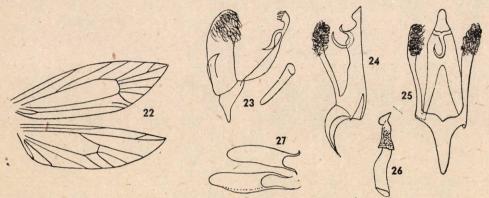
Holotype in the Collection of the Hungarian Natural History Museum.

# Pantacordis g. n. (Gelechiidae)

Generotype: Pantacordis pales sp. n.

Head with hairs loosely forward, labial palpi twice as long as eye is broad, straight, terminal joint shorter than second joint, antennae smooth. Wings first with parallel sides then narrowing to apex, hindwings as broad as forewings, dorsum and termen with slight arch to pointed apex. Legs with two equal thorns.

Venation of forewings: Sc to  $^{1}/_{2}$ ,  $R_{1}$  near base, long, curved, nearing  $R_{2}$  in its middle,  $R_{3}$  near to  $R_{4+5}$ , which is on a long stalk,  $R_{5}$  into apex,  $M_{1}$  near to discal apex,  $M_{2}$  originating far from it, but near to  $M_{3}$  which is also near to coincident  $Cu_{1+2}$ . This is very inconspicuous, from hind corner of discus. Analis but a short line on tornus, axalis very long with loop, ending on tornus near analis and  $Cu_{1+2}$ . Hindwings: Sc to  $^{4}/_{5}$ , straight,  $RR + M_{1}$  on a very long, curved stalk from the upper but far receded apex of discus,  $M_{1}$  to apex, posterior



22. Venation of forewing and hindwing of *Pantacordis* gen. n. — 23. Male genitalia of *Pantacordis pales* sp. n., laterally. — 24. Male genitalia of *Sophronia ascalis* Gozm., laterally. — 25. Male genitalia of *Sophronia ascalis* Gozm., ventrally. — 26. Aedoeagus of *Sophronia ascalis* Gozm. — 27. Seventh tergite and sternite of the male genitalia of *Sophronia ascalis* Gozm.

part of discus blunt, M<sub>2</sub> nearer to connascent M<sub>3</sub> and Cu<sub>1</sub> than to M<sub>1</sub>, Cu<sub>2</sub> back from discus. (Figs: 22.)

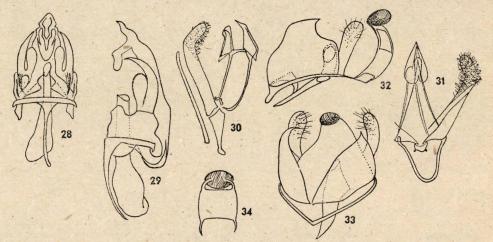
The new genus stands between *Symmoca* Hbn., and *Donaspastus* Gozm., and is a derivation of *Symmoca*. Some species of *Symmoca* Hbn., must be relageted here: so (based on the available material at my disposal) *pallida* Staudinger. *cedestiella* Zeller, *musculina* Staudinger, and *kalifella* Amsel. The male genitalia, are characterized by the absence or very weak »thumb-like protuberance« of valvae at base of their costa, (which is variously long and sharp is *Symmoca* species), then the absence of cornuti in the aedeagus (also large in Symmoca).

# Pantacordis pales sp. n.

Alar exp.: 12—13,5 mm. The species is rather varying in the intensity of its coloration, which is yellowish and brown. Head yellowish with brown scales intermingling, especially on the sides and tip of scapulae, palpi brownish, darker in the outsides, lighter inside, terminal joint light, smaller than second, straight forward. Antennae unicolorous brown. Forewings with straw-yellowish basic color, over which are strewn light, fawn-colored brown scales. These are rather evenly distributed, but somewhat denser at base of costa. The majority of specimens are without any markings, in other, more sharpely delineated specimens, the brown scales accumulate at the end of discus to form an indefinite

spot, with (in 5 specimens) a further spot at  $^{1}/_{3}$  on upper discal vein. Yet these spots are very inconspicuous and uneven. Ciliae light yellowish with some brown scales extending over them. Hindwings very light and almost translucent yellowish, with light ciliae. Underside of forewings as above, darker along costa, hindwings light. Thorax brownish, abdomen as light as hindwings. Legs of the same light color.

Of the related species musculina Stgr., and cedestialla Z., are very dark, pallida Stgr., much intensively yellower and smaller (I have examined, thanks to prof. Hering, one of Staudinger's types). I have not been ably to examine (and therefore I do not know wheither they belong to Symmoca or to some other new genera on which I am now working) contristella Car., which is



28. Male genitalia of Gnorimoschema xanthorhabda Gozm., ventrally. — 29. Male genitalia of Gnorimoschema xanthorhabda Gozm., laterally. — 30. Male genitalia of Heterographis eremita Gozm., laterally. — 31. Male genitalia of Heterographis eremita Gozm., ventrally. — 32. Male genitalia of Eupista edithae Gozm., laterally. — 33. Male genitalia of Eupista edithae Gozm., ventrally. — 34. Gnathose and subscaphium of male genitalia of Eupista edithae Gozm., dorsally.

greyly irrorated and larger; trinacriella Car, has dust-grey color, third joint of palpi white; turana Car.; has milk-white head and palpi. Pantacordis kalifella Amsel seems to stand nearest to this species, but it has a connecting cross-bar between Cu<sub>1+2</sub> and analis on the forewings, whilst it corresponds in every other characteristics to the description of the new genus as given above. Furthermore, kalifella flies in September, pales chiefly in July. (The weak, and somewhat obsolete cubital system of the forewings is a special character of Pantacordis: it still exists in all species thus far examined but in musculina it is almost invisible, while in kalifella it has a special extension in the form of the cross-bar.)

The first specimen which called my attention to examine our symmocoid material, was caught by Dr. L. K o v á c s in the course of one of our mutual ecological survey work on lepidoptera imagos, on the Hársbokorhegy, a hilly chalk plateau near Budapest, in the complex plant association of Quercetum pubescentis — Festucetum sulcatae, 9 August, 1952. This will be the Holotype. In the material of the Collection I found two other male specimens from Hungary: Farkasvölgy, 18. VI. 1910, and 13. VIII. 1911, leg. U h r y k, in a similar plant

association. Then, relegated to pallida Stgr., I found in the Palearctical Collection 52 other specimens: 50 males and 2 females, from Zengg (Dalmatia), leg. Dobiasch, of the following dates: June 15, 20, 22, July 2, 6, 8, 10, 11, 12, 13, 14, 20, 21, 23, 24, 25, 27, 29, 30. (Paratypes) of the year 1918. One of the females shall be the Allotype: 14. July, 1918, Zengg. It is well known that along the Dalmatian shores and in the hills there are similar plant associations like the ones of the Hungarian collecting localities. (Male genitalia: fig. 23.)

All specimens in the Collection of the Hung. Nat. Hist. Museum.

I have described in a paper (Neue Kleinschmetterlinge, Rov. Közl., Fol. Ent. Hung. S. N. 4. Nr. 3., and 7., 1951.), the following new species: Sophronia ascalis Gozm., p. 17., Metzneria xanthorhabda Gozm., p. 20., Heterographis eremita Gozm., p. 22, and Eupista edithae Gozm., p. 69, of which I had been then unable to publish figures of their male genitalia. Let they be figured here.—Sophronia ascalis Gozm., (Figs. 24—27.), Metzneria xanthorhabda Gozm., (Figs. 28—29.), Heterographis eremita Gozm., (figs. 30—31.), Eupista edithae Gozm., (Figs. 32—34.). As the copulatory organs witness, Metzneria xanthorhabda Gozm., must be relegated to Gnorimoschema Busck, into the group of artemisiella Tr.

#### Molylepke-tanulmányok

Írta: Gozmány László, Budapest

Szerző, az 1953 őszén az ágasegyházi homokbuckásban gyűjtött Cnephasia wertheimsteini Rbl. példányok alapján megvizsgálja a faj hovatartozásának kérdését, s a Cnephasia Curt. nemből kiemelve az Oxypteron Stgr. szomszédságában felállított új nembe, az Oporopsamma g.·n.-ba helyezi. A vizsgálatok során egy új spanyolországi faj is előkerült, amelynek leírása (neogena sp. n.) után az Oxypteron Stgr. nemet kettéosztja, és felállítja a subg. Oxypteron Stgr. és sg. Psammozesta subg. n. alnemeket. A sg. Oxypteron Stgr., az impar Stgr., és palmoni Amsel, míg a sg. Psammozesta a subgenerotipus neogena sp. n., polita Włsghm., és eremica Włsghm. fajokat öleli fel. — A továbbiakban leírja a Farkasvölgyben gyűjtött Megacraspedus jablonkayi sp. n., az Ágasegyházán fogott Metzneria éhikeella sp. n., a Kaposvárott gyűjtött Aristotelia agasta sp. n., és Glyphipteryx nattáni sp. n., a budapesti Hársbokorhegyen előkerült Gnorimoschema census sp. n., az na spanyolországi Bulbucellodes amseli sp. n., az albániai havasokról a Holoscolia homaima sp. n., az uzsai védett területről az Eupista etelka sp. n., a pusztapeszéri Eupista eupepla sp. n. és végül a budapesti Hársbokorhegyen gyűjtött pales sp. n. új fajokat, amelyek közül ez utóbbi az új Pantacordis g. n. új nemzetség leírását is szűkségessé tette.

