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Revision of the Generic Group *Agapeta* HÜBNER (*Lepidoptera*, *Cochylidae*)

[P. 73—102, 38 text-figs.]

Rewizja grupy rodzajowej *Agapeta* HÜBNER (*Lepidoptera*, *Cochylidae*)

Ревизия родовой группы *Agapeta* HÜBNER (*Lepidoptera*, *Cochylidae*)

Abstract. This paper contains a revision of the group of the genera closely related to *Agapeta* HBN., e. g. *Ceratoxanthis* RAZ., *Fulvoclysia* OBR., *Agapeta* HBN. and *Phtheochroides* OBR. Besides the descriptions of three new species the redescrptions of 12 other species are given.

HÜBNER (1822) included to his genus *Agapeta* 28 species, only two of which, namely *A. zoegana* (L.) and *A. hamana* (L.) are still placed in it. Now two further species are referable to this genus. In 1943 OBRAZTSOV created his *Fulvoclysia* which at present contains 7 species. This genus is very close to *Agapeta* HBN. and shows only slight differences in the wing venation. In the genital armatures the differences are more distinct, but it may be supposed that some intermediate species will be found in some future time. The third genus is *Ceratoxanthis* RAZ. described for *Conchylis argentomixtana* STGR., and it has a rather distinct position in the group in question. The genus *Phtheochroides* OBR. erected for a single species contains now two species which, whilst having some common features, differ somewhat in others. Further species are needed to solve the problem of the relations among the mentioned genera. Also it is not impossible that some them (especially *Fulvoclysia* OBR. and *Phtheochroides* OBR.) will be compacted into a single genus. Our present knowledge permits the following key for the identification of genera, based on genitalia.

KEY TO GENERA BASED ON MALE GENITALIA

1. Aedeagus coalescent with juxta *Ceratoxanthis* RAZ.
- Aedeagus connected to juxta by caulis 2
2. Strong spines on valva, cornuti if present thin, not numerous
 *Fulvoclysia* OBR.
- No spines on valva, or when present very strong, numerous cornuti in
 vesica 3
3. Cornuti present *Phtheochroides* OBR.
- Cornuti absent *Agapeta* HBN.

KEY TO GENERA BASED ON FEMALE GENITALIA

1. Eighth tergite large, elongate 2
- Eighth tergite small, short 3
2. Ostium bursae very broad *Fulvoclysia* OBR.
- Ostium bursae small, narrow *Ceratoxanthis* RAZ.
3. Large sclerites in bursa copulatrix present *Phtheochroides* OBR.
- No sclerites in bursa copulatrix *Agapeta* HBN.

CHARACTERISTIC OF THE GROUP

The species of all four genera are characterized by a similarly broad wing shape, i. e. forewing with more or less distinctly arched costal edge, short, pointed or delicately rounded apex, and usually slightly oblique termen. Hind-wing apex delicately protruding, rounded.

Coloration and shape of the pattern common for many species. The ground colour of the forewing is usually yellow, more or less dark, tinged ochreous or orange; the pattern brown to rusty, if present. It consists of four variably transformed elements, namely median fascia, subapical blotch, tornal pattern and subterminal stripe, the latter, however, being usually reduced. The median fascia extends from about the middle of the costa to before the middle of dorsum, or more anteriorly and is very often atrophied in the middle. In *Agapeta zoegana* (L.) only an ovate, distinct spot situated subdorsally remains of the median fascia; in some *hamana* specimens the median fascia is completely atrophied. The subapical blotch is well developed. The tornal bar is an elongate pattern extending from tornus to disc, and is very often connected either to an elongate subapical blotch, or to the anterior part of median fascia. The subterminal pattern is usually ill-defined, parallel to termen, broadening at costa and sometimes forming an additional discal spot. In *A. zoegana* (L.) the termen is uniformly dark by extended subterminal pattern. The pattern in *Phtheochroides* OBR. differs from the above described, since large suffusion, typical of other *Cochylidae*-pattern is developed. Median and even basal pattern are

rather well developed. Sexual dimorphism is slight, in connection with wing shape and intensity of coloration, or not realized.

Male genitalia. Tegumen broad, partially weakly sclerotized or even membranous laterally, with broad but short pedunculi. Posterior part of tegumen well sclerotized, sometimes protruding apically in minute tip resembling uncus. Socii well developed, elongate, tapering apically, broadly basally. Tuba analis distinct, membranous or provided with ventral sclerite, for instance in *Agapeta* HBN. Vinculum strong, broad ventrally with membranously connected ends. Exceptionally in *Ceratoxanthis* RAZ. and in *Agapeta zoegana* (L.) the vinculum is uniform, broad ventrally, and this feature distinctly divides the genus *Agapeta* HBN. into two groups. Valva very broad anteriorly with a tendency to protrude its costal portion (in *Fulvoclysia* OBR. the extremes are with *F. arguta* sp. n. and *F. aulica* sp. n.). Sacculus differently developed, short, without free termination to very large, provided with long terminal projection. Costa of valva strongly protruding anteriorly, large, provided with the spines in *Ceratoxanthis* RAZ. In this genus an elongate basal process of the sacculus is present. Many species have spines in the upper part of the valva. Transtilla specifically shaped, often with large median part; juxta sometimes with median or lateral processes. Aedeagus of uniform shape in *Fulvoclysia* OBR., of various shaped in the species of *Agapeta* HBN. (even bifurcate in *A. zoegana* (L.)), of specific character in the majority of the species.

Female genitalia (in several species unknown). Papillae anales well developed; anapophyses strong. Eighth tergite very strong in *Fulvoclysia* OBR. and *Ceratoxanthis* RAZ., weaker in the remaining genera. Sterigma sometimes well developed (in *Phtheochroides apicana* (WALSM.) and in *Agapeta*-species), sometimes limited to small sclerites (*Ceratoxanthis* RAZ.) or only large membrane protecting ostium bursae from the rear is present. Antrum more or less distinctly sclerotized. Ductus bursae rather short, corpus large, transparent or distinctly sculptured or provided with large sclerites. Additional sacs on bursa copulatrix in *Phtheochroides*-species.

Early stages. The early stages insufficiently known. Chaetotaxy described only in case of *Agapeta zoegana* (L.) (SWATSCHEK, 1958).

Distribution. The species of the group in question are known from all the Palaearctic Realm. The majority of them are distributed in western Palaearctic Realm: only two are known from Central and East Asia exclusively, and some from Asia Minor. It seems the species are largely confined to southern regions, but *Agapeta hamana* (L.) occurs in various biotops in the south as well as in the north, sometimes high in the mountains.

Systematics. I have put the genera in the following order: *Ceratoxanthis* RAZ., *Fulvoclysia* OBR., *Agapeta* HBN. and *Phtheochroides* OBR. The first genus is distinguished by the shape of the aedeagus armature and has rather a distinct position in the group. The three remaining genera are close to each other. I suggest that this group should be placed in the *Cochylidae* system between the groups of the genera correlated with *Stenodes* GUEN. and *Cochylis* TREIT.

KEY TO THE SPECIES OF THE GROUP

1. Posterior third of forewing brown 2
- Ground colour of posterior third of forewing yellow, cream or similar . . . 3
2. Dorsal blotch well developed *Phtheochroides apicana* (WALSM.)
- Dorsal blotch absent *Phtheochroides clandestina* n. n.
3. Forewing almost monochrome or with remainders of median fascia . . . 4
- Forewing with distinct, usually brown pattern present in posterior third too 8
4. Hindwing dark, brown 5
- Hindwing pale, brownish cream 7
5. Forewing olive-yellow *Fulvoclysia forsteri* (OSTH.)
- Forewing yellowish cream, distinctly strigulate, or dark yellow with remainders of brownish median fascia 6
6. Strigulation distinct, median fascia pale brownish yellow if present *Fulvoclysia dictyodana* (STGR.)
- Strigulation antrophied, median fascia brownish, preserved mainly at costa *Fulvoclysia pallorana* (LED.)
7. Labial palpus yellowish brown or ochreous laterally.
- *Ceratoxanthis argentomixtana* (STGR.)
- Labial palpus cream laterally *Fulvoclysia subdolana* (KENN.)
8. Forewing fringes concolorous with ground colour in their major part. . . 9
- Forewing fringes concolorous with pattern 13
9. In forewing the stripe extending from tornus to disc is connected to costal remainders of the median fascia 10
- In forewing no remainders of the median fascia, stripe extending from tornus to disc is connected to subapical pattern, or solitary 11
10. Distinct groups of refractive scales on forewing pattern
- *Fulvoclysia fulvana* (F. R.)
- Refractive scales atrophied *Ceratoxanthis externana* (EVERSM.)
11. Costal, subapical pattern connected to tornal stripe
- *Agapeta zoegana* (L.)
- No costal pattern 12
12. Forewing uniformly broad throughout, costa suffused with rusty colour basally *Fulvoclysia arguta* sp. n.
- Forewing expanding terminated, costa without any suffusion
- *Fulvoclysia aulica* sp. n.
13. Tornal stripe connected to subapical spot or solitary 14
- Tornal stripte connected to median costal spot 15
14. Pale brownish suffusion in forewing near edges anteriorly and medially *Fulvoclysia defectana* (LED.)
- No suffusions *Agapeta hamana* (L.)
15. Two basal spots in forewing present. *Agapeta angelana* (KENN.)
- Only costal spot at forewing base present *Agapeta largana* (RBL.)

SYSTEMATIC PART

Ceratoxanthis RAZOWSKI, 1960

Ceratoxanthis RAZOWSKI, 1960, Pol. Pismo ent., 30: 301, figs. 18, 75. Type species: *Conchylis argentomixtana* STAUDINGER, 1870.

Venation: in the forewing r_1 from before middle of median cell, r_1-r_2 about three times longer than r_2-r_3 , r_5 to termen just beyond apex; remaining veins distinctly separate from each other, cu_2 almost opposite to r_2 . In the hindwing sc long, r stalked with m_1 to $1/3$, m_2--m_3 short-stalked, remaining veins separate.

Male genitalia. Socii broad; sclerite of tuba analis delicate. Vinculum strong, coalescent ventrally. Valva very broad with a tendency to protrude its costal portion; sacculus without a free termination, provided with long, dentate arm anteriorly. Spined plate in anterior portion of costal part of valva. Aedeagus coalescent with juxta, simple. Sometimes short cornutus present.

Female genitalia. Eighth tergite large; sterigma in from of a pair of dentate sclerites; ostium narrow; antrum well sclerotized, elongate; sclerite of bursa present.

Distribution: South-East Europe and Asia.

Two very closely related species known to date.

Ceratoxanthis argentomixtana (STAUDINGER)

Conchylis argentomixtana STAUDINGER, 1870, Berl. Ent. Ztg., 14: 277.

Labial palpus 2, yellowish brown to ochreous-rusty, pale beneath; 2 joint broadening terminad; 3 joint concealed in scales. Head yellow, front paler; antenna rather concolorous with head; thorax dark yellow, paler posteriorly. Forewing not dilated terminad; costa slightly curved to $1/3$, then rather concave; apex delicately rounded; termen fairly straight, oblique. Ground colour yellow, distinctly stringulate with pearl-cream, mainly posteriorly. Pattern partially atrophied, its remainders brownish. Costa suffused anteriorly, then spotted towards to the tip. Spots in middle of costa and in place of subapical blotch distinctly larger than remaining ones. Subdorsal spot usually present; delicate spot in disc and small groups of brown scales instead of tornal stripe. Fringes somewhat paler than ground colour. Hindwing dark cream, slightly mixed with brownish, distinctly brownish grey strigulate transversely; fringes cream. Length of forewing 11 mm.

Male genitalia (fig. 1) large; valva broad, rounded terminally with hardly narrowing costal portion and large, strongly spined anterior plate; ventral arm

very long, bent, minutely spined along middle, long spined posteriorly. Aedeagus fairly straight, tapering terminally, pointed; single, short cornutus present.

The species is known from Krasnoarmiejsk (=Sarepta), South East Europe. KENNEL mentioned Asia Minor, but without any more precise data. However, I have not seen any specimens from localities other than Krasnoarmiejsk. Female unknown. Several specimens examined.

Ceratoxanthia externana (EVERSMANN)

Tortrix externana EVERSMANN, 1844, Fauna Volgo-Uralensis: 490.

Labial palpus 2.5, brownish, similar in shape to that in preceding species; 3 joint thin, concealed in scales. Head pale brownish yellow laterally, front even paler; antenna brownish; thorax dirty yellow; abdomen cream-brown. Forewing slightly dilated terminally; costa delicately curved anteriorly, then straight or hardly concave; apex rather pointed; termen straight, oblique. Ground colour yellow; pattern brown. Costa suffused to $1/3$, then spotted to middle; some two spots in postmedian and subapical parts of costa. Subdorsal spot distinct; tornal stripe connected to costal remainders of median fascia; subapical blotch large, sometimes connected to preceding element at disc. Fringes brown, dark brown at tornus. Hindwing dirty cream, densely strigulate with brownish grey; fringes creamgrey. Length of forewing 7—9 mm.

Male genitalia (Fig. 2) much smaller than in preceding species, very similar to them. Socii smaller, more rounded; valva with distinctly narrower and differentiated costal portion; sacculus similarly shaped as in *C. argentomixtana* (STGR.), but more rounded posteriorly; ventral arm proportionately shorter, long spined posteriorly. Aedeagus thin posteriorly with narrow arms of juxta.

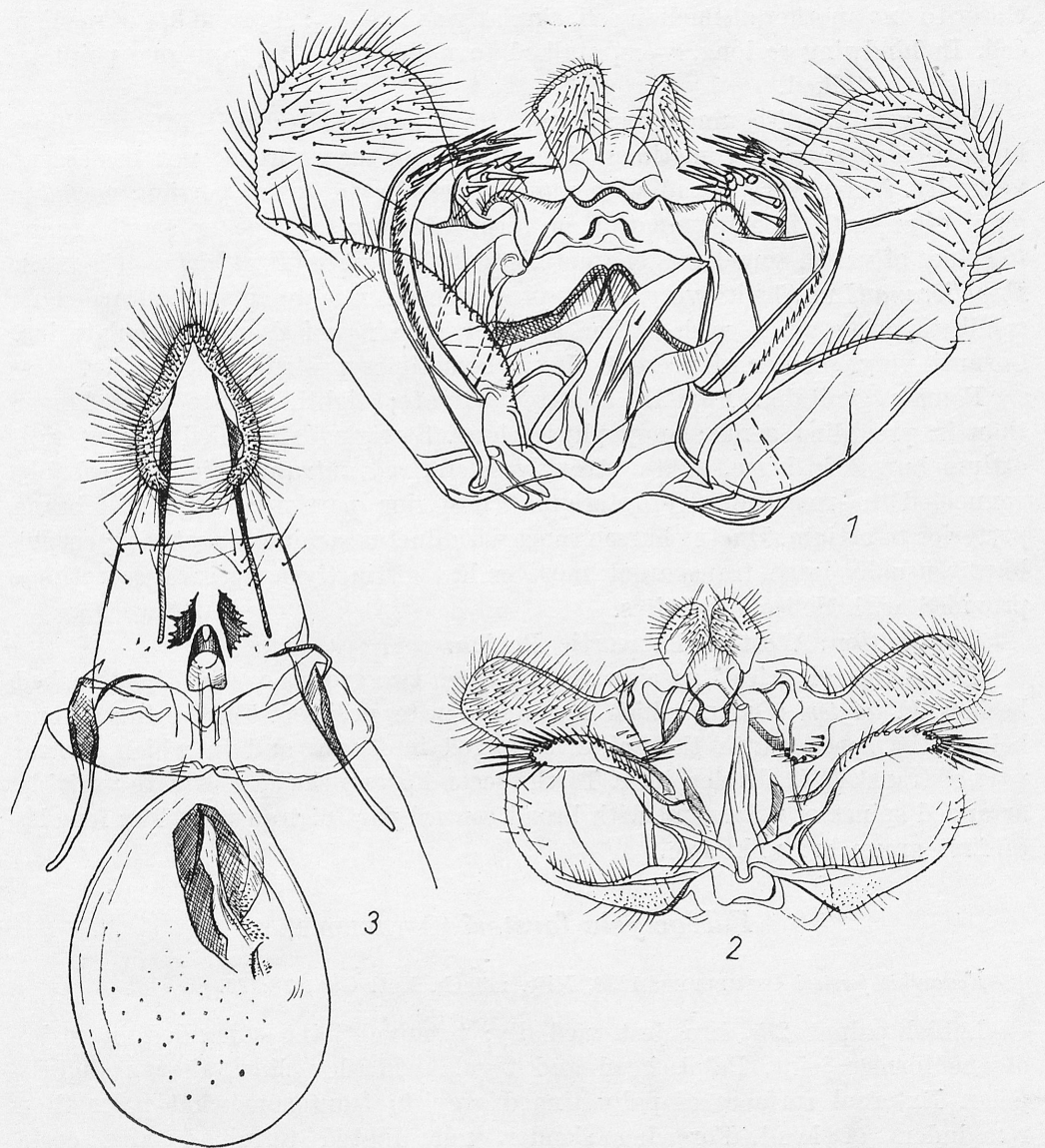
Female genitalia (Fig. 3). Papillae anales slender; anapophyses posteriores long, anapophyses anteriores much shorter, broad basally. Eighth tergite large, elongate; antrum distinctly sclerotized, tapering posteriorly situated in intersegmental membrane; sterigma reduced to two dentate laterally sclerites situated at edges of antrum. Ductus bursae short, transparent; corpus bursae large, ovate, provided with elongate, folded sclerite and delicate minute spines medio-anteriorly.

The species is known in the Southern Urals (Guberli), Azerbaydzhan („Helendorf“), Turkestan (Karaganda) and Spask. Several specimens examined, some without labels. The species appears in June and July, as can be supposed from the dates written on labels (14. VI., 1. VII., and 28. VII.).

Lectotype, ♂ labelled „Spask., coll. EVERSMANN“, G.Sl. 8010 in the coll. of the Leningrad Museum.

C. externana (EVERSM.) has been described in the *Tortricidae* under the generic name *Tortrix* and has to be transferred to the *Cochylidae*. Externally it is very similar to *F. fulvana* (F. R.) and in some collections has been deter-

mined as that species. Sexual dimorphism very slight, but the female has a forewing more uniformly broad than the male. The variability occurs in the development of the pattern which connects the subapical spot and the disc.



Figs. 1—3. *Ceratoxanthis* RAZ.: 1 — male genitalia of *C. argentomixtana* (STGR.), „Sarepta, CHRISTOPH coll.“, G. Sl. 7254, 2 — male genitalia of *C. externana* (EVERSM.), „Spask, coll. EVERSMANN“, G. Sl. 8010, 3 — female genitalia of same species, „Guberli, 28. VII. 1891, CHR.[ISTOPH], G. Sl. 8009

Fulvoclysia OBRAZTSOV, 1943

Fulvoclysia OBRAZTSOV 1943. Zschrft. Wien. Ent. Ges., 28: 43. Type species: *Conchylis pallorana* LEDERER, 1864.

Labial palpus 3—4 times longer than diameter of eye.

Venation: in forewing all the veins run as in preceding genus, but r_4-r_5 closer to one another at median cell, similarly as m_3-cu_1 ; cu_2 from 3/4 of median cell. In hindwing sc long, $r-m_1$ stalked to middle, m_3-cu_1 from one point or very short stalked.

Male genitalia. Tegumen very broad, tapering apically; socii differ in shape in particular species, sometimes thin. Vinculum arms broad, not coalescent ventrally. Valva very broad with more or less broad costal portion; sacculus long, often with free termination or terminal thorns. Large or small groups of spines of valva, sometimes characteristically arranged [*F. subdolana* (KENN.), *F. pallorana* (LED.)] with very strong projections in remaining species. Aedeagus small, tapering apically with rather anterior opening of ductus ejaculatorius. Cornuti very slender of present. Juxta sometimes protruding medially.

Female genitalia. Papillae anales moderate; eighth tergite even longer than in preceding genus; anapophyses long. Sterigma atrophied or vestigial, ostium bursae in large, ovate, strongly sclerotized antrum which is probably connected to remainders of sterigma (posterior portion); large membrane posterior to ostium. Ductus bursae short with ductus seminalis posterior; corpus bursae usually large, transparent, more or less distinctly sculptured, sometimes provided with delicate sclerites.

Distribution: Western Palaearctic Region.

The genus comprises 7 species. Among them two groups can be distinguished besides *F. forsteri* (OSTH.) which has a separate position. To the first group belong the species with the spines arranged in fascia, and in which central part of transtilla is slender, long. To the second group the species with variably arranged spines of valva and with broad central part of transtilla. The females of first group are unknown.

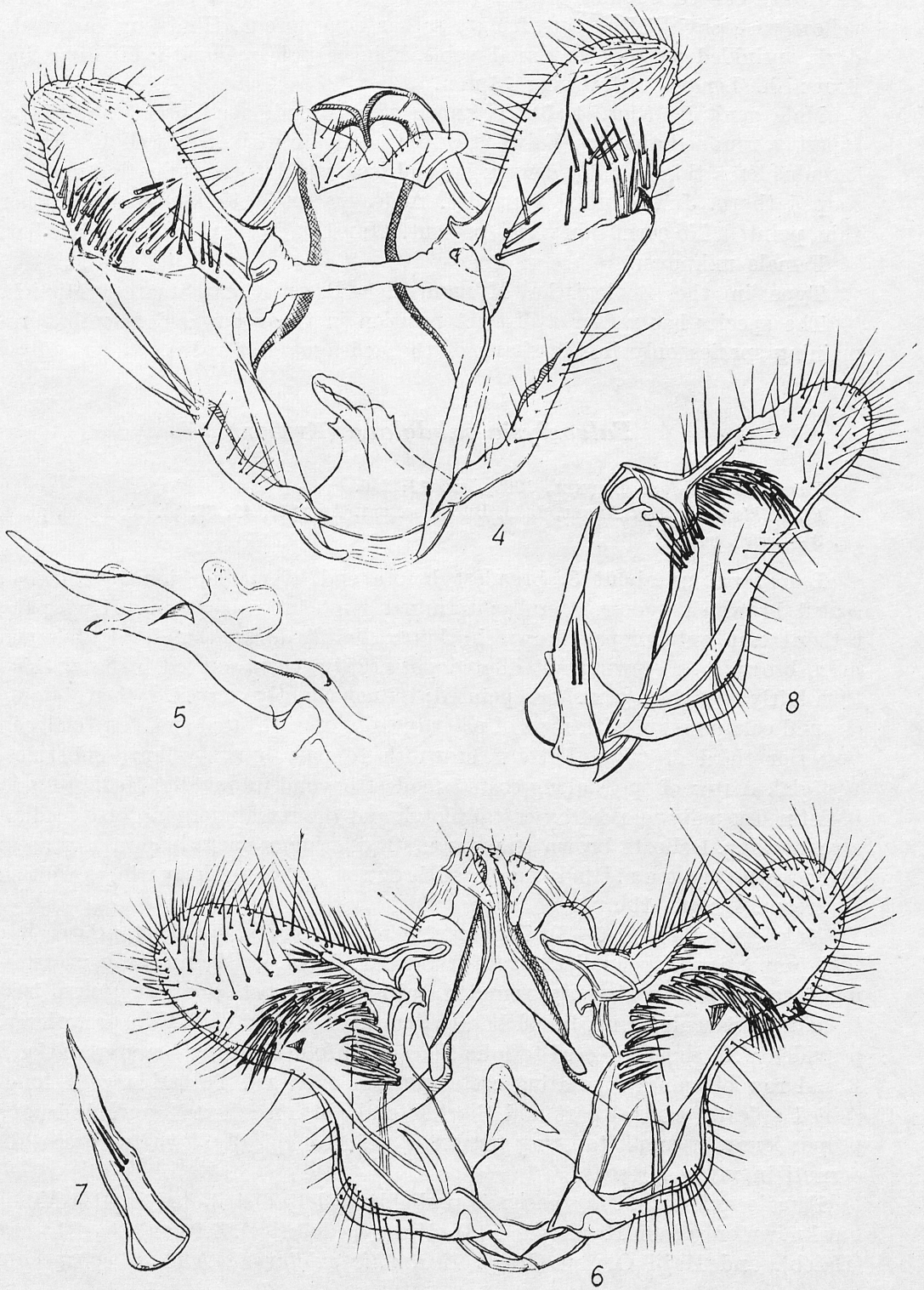
Fulvoclysia forsteri (OSTHELDER)

Euxanthis forsteri OSTHELDER, 1938, Mitt. münch. Ent. Ges., 28: 25.

Labial palpus 2.5, broadest medially; terminal joint concealed in scales of the former joint. Palpi, head and tegula whitish yellow, thorax slightly paler. External surfaces of palpi tinged greyish; front somewhat paler than remainders of head. Forewing slender, not dilated terminad with costa

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Figs. 4—8. *Fulvoclysia* OBR.: 4 — male genitalia of *F. forsteri* (OSTH.), type, 5 — aedeagus of same specimen, 6 — male genitalia of *F. subdolana* (KENN.), „Shar Devesy, Haleb, (Nat. Coll.), LEECH, [No.] 161584“, G. Sl. 7253, 7 — aedeagus of same specimen, 8 — valva and aedeagus of same species, „Kasikoparan, KORB, 1910“, G. Sl. 7591



delicately curved outwards, apex pointed, termen oblique. Wing unicolorous, yellow with slight olive tint, fringes rather concolorous. Hindwing brownish, dark, sprinkled yellowish at anal veins. Fringes pale yellowish; dividing line brownish. Length of forewing 13 mm.

Male genitalia (figs. 4, 5). Tegumen very broad; socii broad anteriorly, tapering, rounded apically. Valva broad but elongate with costa well developed; sacculus long, thin, slightly convex beyond base ventrally, terminating in claw-shaped thorn. Juxta broad ventrally. Aedeagus proportionately long, rather thin, pointed. No cornuti in vesica present. Transtilla in shape of transverse-bar.

Female unknown.

Type in the Zoologische Museum der Bayerischen Staates, Munich.

The species has rather a distinct position in the genus and resembles remaining species only in the shape of the aedeagus and valva.

Fulvoclysia subdolana (KENNEL)

Euxanthis subdolana KENNEL, 1900, Iris, 13: 240.

Euxanthis subflavana AMSEL, 1959, Bull. Soc. ent. Aegypte, 43: 57, pl. 10, fig. 6, pl. 4, fig. 3 — **synon. nov.**

Labial palpus about 3, broadest before end of median joint, yellowish, scaled brownish yellow laterally; terminal joint brownish, thin. Head pale, rather cream, antenna pale brownish; thorax slightly darker than head, abdomen more brownish. Forewing not dilated posteriorly; costa curved in basal third then fairly straight; apex short, pointed; termen slightly convex, rather oblique. Ground colour cream with rows of paler, pearl glossy diffused spots especially in posterior third of wing. Pattern brownish to pale brown-yellow, indistinct, vestigial. A row of spots along costa broadest beyond its middle. Median fascia ill-defined usually marked by costal blotch and the remainders in dorso-median area of wing. Delicate brown transverse strigulation or spots in posterior area. Fringes whitish cream. Hindwing broad, brownish, pale anteriorly fringes whitish to cream. Length 13 mm.

Male genitalia (fig. 6—8). Tegumen membraneous before the top laterally; socii proportionately small, elongate-triangular. Valva broad anteriorly, protruding in costal part posteriorly, rounded apically with costa distinctly sclerotized to middle. Sacculus long, broad basally, curved before middle thin posteriorly, provided with short, pointed termination (often folded during the preparation). Broad row of spines separating costal portion of valva. Transtilla with long, spined apically central part and short lateral portions; juxta large. Aedeagus proportionately small, tapering terminad, pointed apically; two to three thin cornuti in vesica present.

Female unknown. The species is probably widely distributed in Asia Minor but known only from Kasikoparan, Hadjin (type locality), Zeitoon, Shar Devesy (Halcb), and Hajji Omran (Iraq). *Euxanthis subflavana* AMS. is conspecific

with *F. subdolana* (KENN.), as the examination of the genitalia shows and must be sunk as a junger synonyme of it. Variability rather slight, occurring in the intensity of the pattern. Sometimes weak tornal bar present.

Fulvoclysia pallorana (LEDERER)

Conchylis pallorana LEDERER, 1864. Wien. Ent. Monatschr., 8: 171, pl. 3, fig. 11.

Fulvoclysia armeniaca OBRAZTSOV, 1943, Zschrft. wien. Ent. Ges., 28: 43, figs. 2a-c—synon.

nov.

Palpi as in preceding species, but more brownish yellow. Head similarly coloured as the palpi, thorax darker; abdomen brownish grey. Forewing broadening terminad; costa curved at base, then rather straight; apex pointed; termen oblique, almost straight. Ground colour yellowish with small addition of brown, delicately strigulate or spotted with cream-pearl especially posteriorly. Pattern brownish. Costal half of median fascia broad, dorso-median ill-defined. Small brownish spots along posterior portion of costa. Fringes paler than ground colour. Hindwing broad, brownish; fringes whitish with brownish median line. Length of forewing about 12 mm.

Male genitalia (fig. 9). Very similar to those in the preceding species but socii slender and placed in membranous part of tegumen. Valva broad, more elongate posteriorly with broad costal portion and less arched row of spines. Sacculus shorter than in *F. subdolana* (KENN.) straight to middle ventrally, then strongly bent, thin posteriorly, provided with short, sharp termination. Aedeagus shorter, tapering from middle, pointed apically. Single cornutus in type.

Female unknown.

Only the type labelled „Caucas“ and preserved in the Institut für Spezielle Zoologie der Humboldt Universität, Berlin known to me. KENNEL (1913) mentioned it is distributed in Armenia and Syria, but those data are probably based on CARADJAS publication. The CARADJA specimens, however, belong to *F. subdolana* (KENN.).

Type of *F. armeniaca* OBR. has been collected 10. VIII. in Jelisavpol (Transcaucasia) and is preserved in Kiev University. It has not been examined by me, but good illustrations by OBRAZTSOV permit one to judge that it is synonymous with the species in question.

Fulvoclysia dictyodana (STAUDINGER)

Cochylis dictyodana STAUDINGER, 1879, Horae Soc. ent. ross., 15: 238.

Labial palpus about 2, whitish-cream with delicate olive-eyellow hue. Head yellowish, front whitish; thorax yellowish grey; abdomen greyer. Forewing expanding terminad; costa delicately curved outwards apex rather rounded; termen oblique. Ground colour whitish to pale cream densely strigulate and suffused with yellowish grey or greyish ochreous. Basal area darker than re-

maining surface; median fascia broad but ill-defined, strigulae of posterior part of wing connected together forming transverse irregular lines. Fringes whitish, yellowish at tornus. Hindwing brownish grey, rather dark; fringes white with brownish dividing line. Length of forewing about 11 mm.

In ab. *insignatana* STGR. the pattern atrophied except the strigulation of posterior part of wing; wing base suffused ochreous.

Male genitalia (figs. 10, 11). Tegumen broad, short; socii thin, well sclerotized. Valva broad, slightly protruding posteriorly in costal portion, provided with small spined area postbasally; sacculus long, thin, delicately arched outwards, terminating in sharp spine. Median part of transtilla broad. Aedeagus long, broadest medially, pointed apically. No cornuti in examined specimens.

Female genitalia (fig. 12). Papillae anales slender; anapophyses long. Ostium bursae large, ovate; antrum heavily sclerotized, sterigma elongate. Bursa copulatrix transparent.

The type of this species is in the Institut für Spezielle Zoologie der Humboldt Universität, Berlin. In 1961 I synonymized *Phalonia acutana* KENN. with this species on the basis of a mistakenly designated type (coll. ANTIPA Mus., Bucharest). Later on I found the type of *Phalonia acutana* KENN. in the British Museum (N. H.) and the correction must be made, that *acutana* is a valid species.

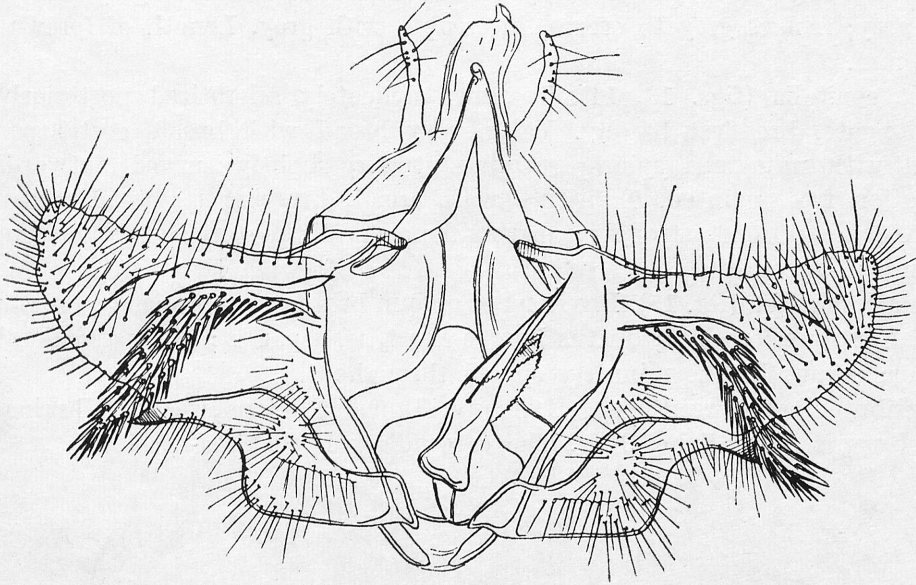
F. dictyodana (STGR.) is distributed in Asia Minor and the Caucasus. Several specimens examined. It is on wing from mid-May to end of June.

Fulvoclysia fulvana (FISCHER v. RÖSLERSTAMM)

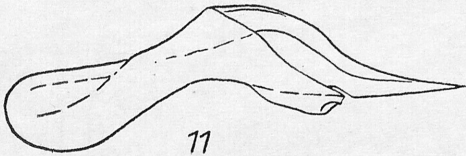
Tortrix fulvana FISCHER v. RÖSLERSTAMM, 1834, Abd. Schmett.: 35, pl. 20, fig. 3.

Labial palpus about 5, broad, expanding posteriorly to beyond middle of median joint, long scaled terminally, terminal joint concealed. Colour of palpi yellowish, somewhat tinged ochreous or even rusty on external sides. Head rather concolorous with palpus or darker, front, however, paler. Antenna pale brownish, scape yellowish. Thorax dark yellow to brownish yellow, darkening anteriorly; abdomen brownish, tuft sometimes yellowish. Forewing broad, expanding posteriorly; costa arched outwards, mainly anteriorly, less in female than in male; apex short, pointed; termen straight, oblique. Ground colour yellow-cream to ochreous-yellow; pattern brownish to rusty-brown. Wing base suffused, costa dark to 1/3; median fascia distinct costally, connected to tornal bar and forming an oblique pattern extending from middle of costa to tornus, remaining portion of median fascia atrophied except for spot or stripe placed subdorsally; subapical spot usually indistinct. Refractive scales on pattern and very often in posterior third of wing where form a delicate trans-

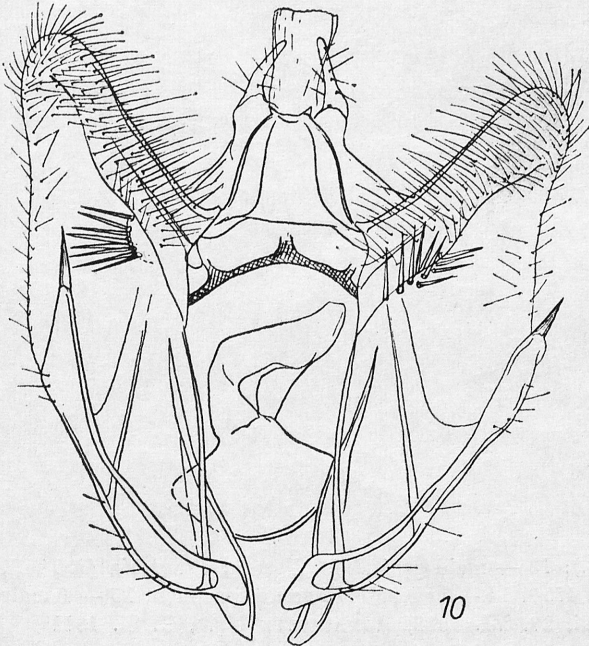
Figs. 9—12. *Fulvoclysia* OBR.: 9 — male genitalia of *F. pallorana* (LED.), type, 10 — male genitalia of *F. dictyodana* (STGR.), „Amasia, Origin“, G. Sl. 3333, 11 — aedeagus of same specimen, 12 — female genitalia of same species, lectotype



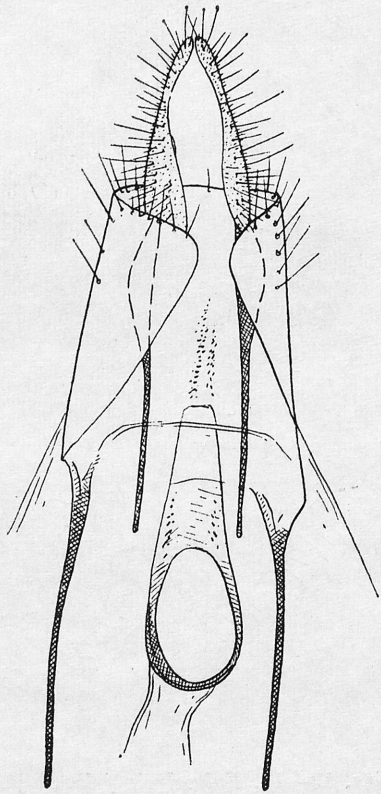
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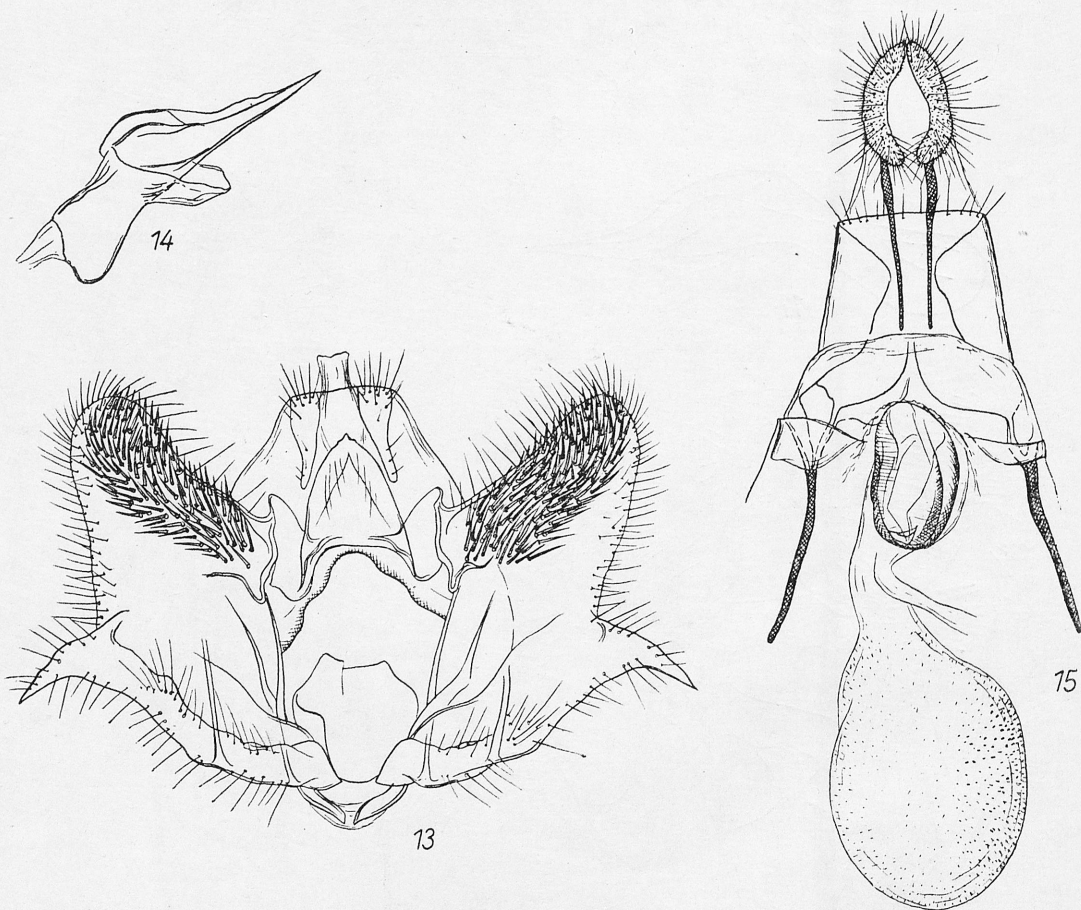
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verse line. Fringes brownish to rusty brown. Hindwing brownish grey to dark brown-grey; fringes grey to cream, interrupted with grey. Length of forewing 10—13 mm.

Male genitalia (figs. 13, 14). Tegumen delicately sclerotized posteriorly; socii elongate, broadest basally. Valva very broad with broad costal part covered with numerous spines; sacculus strong, slightly curved outwards, termination free, pointed. Transtilla with broad, tapering terminal central part. Aedeagus broad, strongly tapering from middle posteriorly. No cornuti in examined specimens.

Female genitalia (fig. 15). Environs of ostium bursae membranous; antrum ovate, strongly sclerotized; ductus bursae short, transparent; ductus seminalis posterior; corpus bursae minutely spined throughout.

Distributed in Central Europe (Germany, Hungary, Poland, western Ukraina). Time of appearance: June, July. The caterpillar on *Scabiosa*-species.



Figs. 13—15. *Fulvoclysia fulvana* (F. R.): 13 — male genitalia, „Ustroń, Czantoria (450 m.), 22. VII. 1939, Hr. S. TOLL leg.“, G. Sl. 4810, 14 — aedeagus of same specimen, 15 — female genitalia, „Szerszeniowice p. Zaleszczyki, 28. VI. 1932, ROMANISZYN leg.“, G. Sl. 4811

***Fulvoclysia defectana* (LEDERER)**

Euxanthia defectana LEDERER, 1870, Ann. Soc. ent. Belge, 28: 25.

Labial palpus about 4; median joint broad, protruding posteriorly; terminal joint thin, short scaled. Palpus and head yellowish, antenna rather concolorous; thorax yellower; abdomen brownish. Forewing hardly dilated terminad; costa slightly curved outwards in basal third, then rather straight; apex short, pointed; termen tolerably straight, oblique. Ground colour dirty yellow (groups of pale brownish scales among yellow ones present), darkened at dorsum and costa anteriorly. Pattern indistinct consisting of diffused rusty spot near middle of dorsum and a fascia extending from disc to tornus slightly broadening at disc, accompanied by brownish shade in middle of wing. Fringes lemon-yellow. Hindwing broad with short, pointed apex, brownish in colour. Fringes whitish. Length of forewing 18 mm.

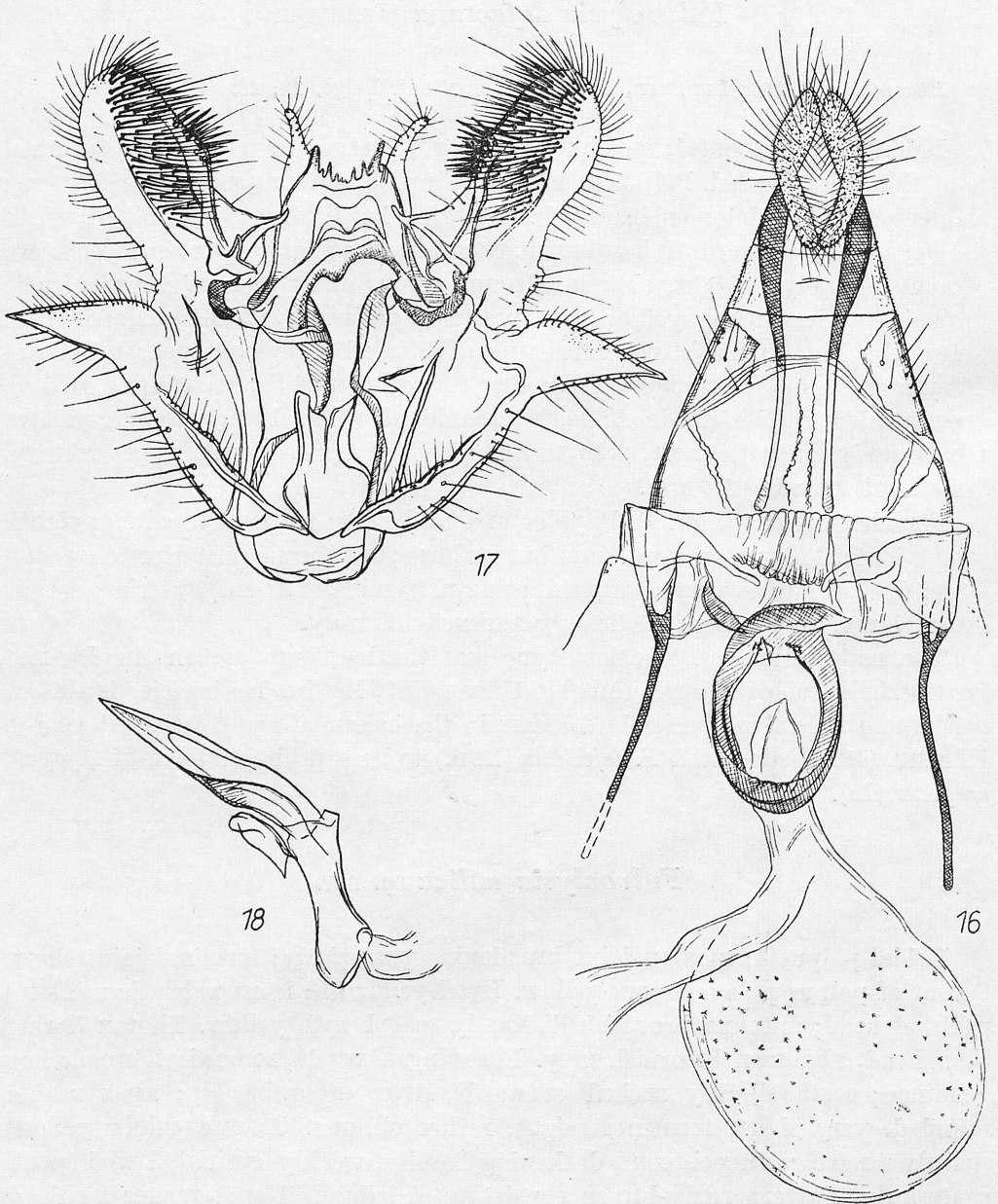
Female genitalia (fig. 16). Papillae anales slender; anapophyses long; eighth tergite large. Antrum ovate, ostium bursae large; membrane posterior to antrum large; ductus bursae very short, thin; ductus seminalis broad, anterior; corpus bursae large, transparent, delicately thorned laterally.

The male unknown. The lectotype and the lectoparatype in the Institut für Spezielle Zoologie der Humboldt Universität, Berlin. The species is similar to the two following species but differs in the colour of the fringes externally. KENNEL (1913) suggested *F. defectana* (LED.) to be a probable form of *Agapeta zoegana* (L.).

***Fulvoclysia aulica* sp. nov.**

Labial palpus 4; median joint broadening posteriorly; terminal joint short. Colour of palpus pale ochreous-yellow. Head yellowish; front paler than lateral parts of head; antenna brownish distinctly scaled with yellow. Thorax darker than head, abdomen brownish grey. Forewing elongate, somewhat broadening terminad; costa slightly arched outwards, stronger so basally; apex rather rounded, very short; termen straight, rather oblique. Ground colour yellow, slightly tinged with ochreous, darkening basally, weakly sprinkled with pearl posteriorly. Pattern rusty-brown consisting of subdorsal spot rather medially and narrow fascia extending from tornus to disc accompanied by small, ovate spot at the end. Fringes concolorous with ground colour at apex, rusty reddish in remaining portion, with distinct rusty colour in median and dorsal portions basally. Hindwing broad with short, rather pointed apex, cream brownish in colour, irregularly tinged and suffused with brown; veins brown suffused; fringes pale brownish cream. Length of forewing 15 mm.

Male genitalia (figs. 17, 18). Tegumen broad; socii broad anteriorly tapering terminad; vinculum arms slender. Valva very broad anteriorly with costal



Figs. 16—18. *Fulvoclysia* OBR.: 16 — female genitalia of *F. defectana* (LED.), lectotype, 17 — male genitalia of *F. aulica* sp. nov., type, 18 — aedeagus of same specimen

part elongate, rounded apically, provided with strong hair-like spines and a group of short thorns at costa near middle; sacculus very strong, curved outwards at base ventrally, slightly concave before end, with strong subtriangular, pointed free termination. Transtilla with small lateral parts and very

broad irregularly dentate apically median part; juxta elongate posteriorly. Aedeagus elongate, rather slender, tapering, pointed apically; ductus ejaculatorius anterior.

Type: „[Kasikoparan], 28. 7. CHRISTOPH coll.“, G.Sl. 6867.

Paratype: „Kasikoparan, CHRISTOPH coll., *C. honestana* CHR.“, G.Sl. 6867.

Both types in the coll. of the British Museum (N. H.). The species is very similar to large *Agapeta hamana* (L.) or *F. defectana* (LED.) but its fringes are distinctly different than the ground colour. The aedeagus is distinctly longer than in the remaining species of the genus in question.

Fulvoclysia arguta sp. nov.

Labial palpus 3, median joint subtriangular, terminal joint concealed in scales of the former joint. Colour of palpus yellow, rusty scales present. Head yellow; front cream; antenna yellowish; thorax concolorous with head; abdomen brownish grey. Forewing hardly dilated posteriorly in male, uniformly broad throughout in female; costa slightly curved outwards; apex short, rather pointed; termen straight, slightly oblique. Ground colour yellow, tinged with pale orange in male, costa suffused with orange-ochreous anteriorly. Pattern rusty-brown, dark brown scaled partially on the edges, consisting of ovate subdorsal spot, similar spot at disc and a stripe extending from middle of wing to tornus. Termen slightly suffused with brownish; fringes pale rusty, rusty-brown at tornus. Hindwing broad with apex slightly protruding, pointed, brownish in colour. Fringes pale brown. Length of forewing 12 mm.

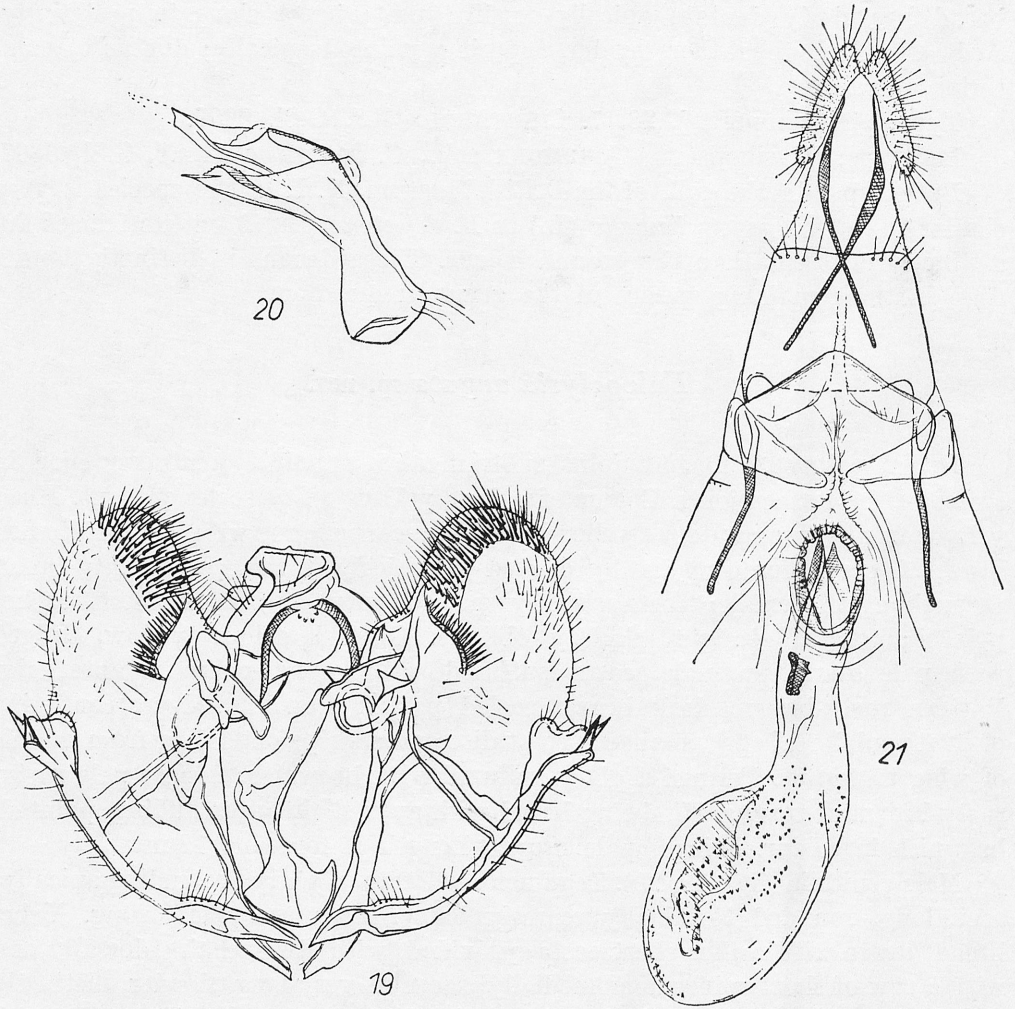
Male genitalia (figs. 19, 20). Tegumen moderate, slightly protruding apically; socii long, rounded terminally scarcely hairy; vinculum arm strong. Valva broad, ovate with rather short costa, provided with strong hairs dorsally and with a row of short spines dorsomedially; sacculus very long, slender, distinctly broadening posteriorly, marked with a pair of thorns apically. Transtilla with lateral parts broad and with large, strongly sclerotized median part; juxta enormously protruding dorsad. Aedeagus broad, tapering posteriorly, pointed apically; caulis large, minutely dentate dorsally.

Female genitalia (fig. 21). Papillae anales comparatively weak, small; anapophyses rather short; eighth tergite strongly elongate; antrum ring-shaped, placed in middle of large membrane; sterigma membranous; ductus bursae in comparison with the length of corpus bursae long, marked with elongate sclerite posteriorly; corpus bursae ovate, somewhat more strongly sclerotized laterally than in remaining area, provided with delicate (scattered) thorns.

Type: „Shar Devesy, Haleb (Nat. Coll.) LEECH, No. 61587“, G.Sl. 6868

Paratype, female: indentically labelled, no. 61586, G.Sl. 8820

This species differs from the preceding one in the shape of the forewing which is almost uniformly broad, and the colour of basal part of costa and fringes. The male genitalia are quite different.



Figs. 19—21. *Fulvoclysia arguta* sp. nov.: 19 — male genitalia of type, 20 — aedeagus of same specimen, 21 — female genitalia of paratype

Agapeta HÜBNER, 1822

Agapeta HÜBNER, 1822, Syst.-alph. Verz.: 58. Type species: *Phalaena Tortrix zoegana* LINNAEUS, 1767.

Venation: in forewing 4 radial veins rather parallel to each other, r_5 to termen, r_1-r_2 twice longer than r_2-r_3 , cu_2 rather opposite to r_2 , internal vein of median cell rather well developed. In hindwing sc long, r stalked with m_1 to before middle (in KENNEL drawing separate, so probably this feature is not constant), m_3-cu_1 short stalked.

Male genitalia. Sclerite of tuba analis distinct; socii well developed; vinculum except for that in *A. zoegana* (L.) not coalescent ventrally. Costal part of valva

elongate; sacculus strong, usually with posterior complicate projections. Aedeagus in *A. zoegana* (L.) bifurcate, simple in remaining species in which juxta is provided with large median process. Cornuti absent.

Female genitalia. Sterigma present, complicate, antrum well sclerotized; bursa copulatrix transparent, marked with delicate thorns.

Early stages little known; SWATSCHEK 1958: 229 described the chaetotaxy of *A. zoegana* (L.) only.

Distribution: Western part of Palaearctic Realm (to Pamirs).

Comments. The species of this genus, except for *A. zoegana* (L.), are very close to each other. The mentioned species differ in the shape of the aedeagus armature and the vinculum of the male genitalia and somewhat in the sterigma of the female genitalia.

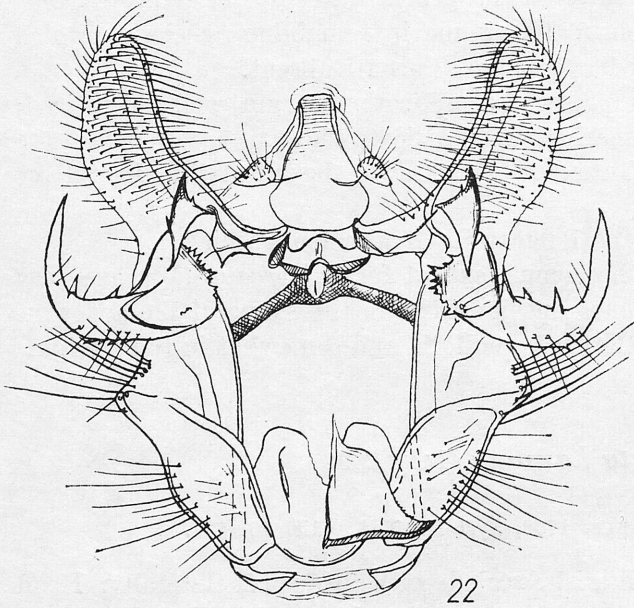
Agapeta hamana (LINNAEUS)

Phalaena Tortrix hamana LINNAEUS, 1758, Systema Nat., edit. 10: 530.

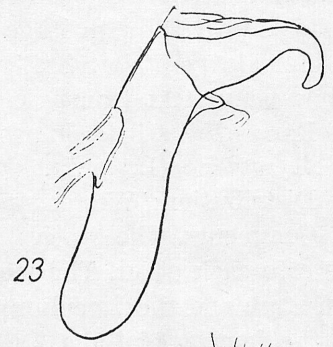
Labial palpus about 5, yellowish, scaled with brownish laterally. Head brownish yellow; front yellowish, scape of antenna brownish yellow; flagellum brownish. Thorax yellow; abdomen brownish grey with yellowish posterior tuft. Forewing, delicately expanding terminad in male, rather uniformly broad in female; costa gently curved to middle, then straight; apex pointed, short, somewhat expanding costad (scales) in male; termen almost straight, oblique. Ground colour yellowish, pattern brownish to ochreous rusty, variable in shape. Subapical spot extending in a line connected to tornal bar; subterminal line irregular, more or less distinct; median fascia atrophied except for subdorsal spot. In ab. *diversana* HBN. median fascia well developed, sometimes interrupted medially. In many specimens additional spot at costa before apex present. In ab. *depuncta* OBR. no median fascia. Fringes paler than ground colour, at tornus concolorous with pattern. Hindwing brownish grey, more or less dark; fringes whitish with brownish dividing line. Length of forewing 8—12 mm.

Male genitalia (figs. 22, 23). Sclerite of tuba analis broad anteriorly; socii proportionately small; vinculum arms broad terminally; costal portion of valva rather narrow; sacculus heavily sclerotized, bent ventrally, angulate posteriorly with large scarcely dentate hook projecting ventrad and accompanied by another subtriangular thorn more dorsally. Transtilla slightly prominent medially; juxta with strong median process posteriorly. Aedeagus with tapered, curved ventrad posterior portion.

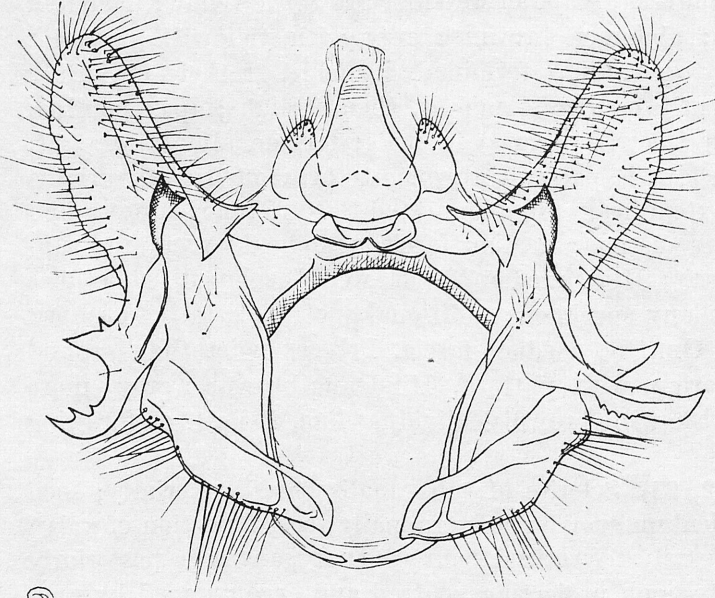
Female genitalia (fig. 24). Sterigma with small, heavily sclerotized postero-median portion connected to anapophyses, large, elongate lateral parts and elongate posteriorly median portion coalescent with strongly developed and sclerotized antrum. Ductus bursae short; corpus bursae large, elongate, both slightly spined laterally.



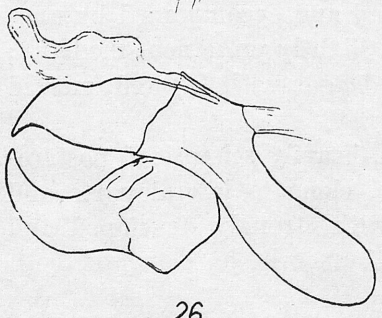
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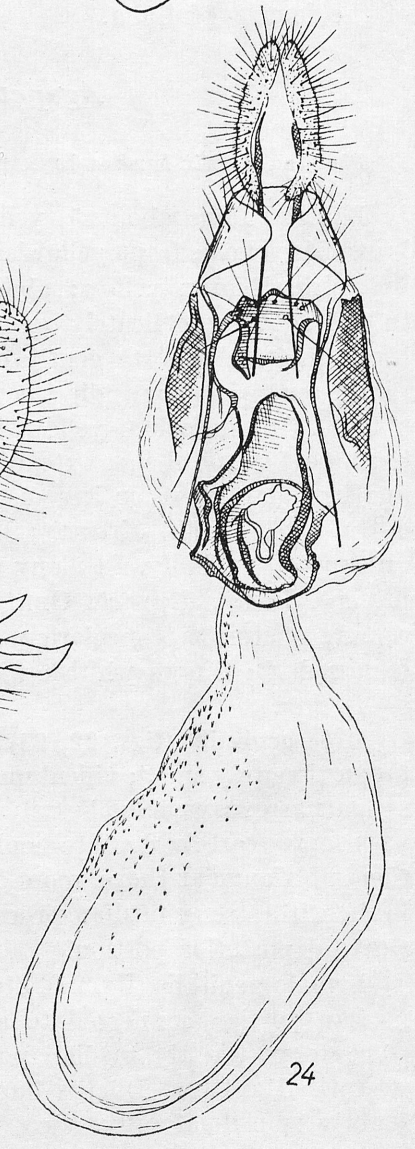
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25



26



24

Biology. Larva on *Ononis repens*, *Cirsium arvense* and *Trifolium*-species (SORHAGEN, KENNEL) rolling the leaves or boring the roots. Moth flies from May to mid-September in two generations. It appears in plains and high in the mountains (3000 m).

Distribution: Europe (except for Greece and Spain) Asia Minor and Central Asia (Pamirs, Dscharkent, Kuldsha).

Agapeta angelana (KENNEL)

Euxanthis angelana KENNEL, 1919, Mitt. münch. Ent. Ges., 8: 68, pl. 2, fig. 21, pl. 4, figs. 6c-d.

Externally very similar to the preceding species but the ground colour of the forewing is more intensely yellow and the pattern rusty-red consisting of a pair of basal spots, median fascia that is divided into some three differently shaped spots, postmedian pattern in shape of irregular fascia by connect ternal bar and subapical elongate spot, and two additional subapical spots. Subterminal line weak. This pattern is also variable probably, as in preceding species. Fringes and hindwing as in *A. hamana* (L.).

Male genitalia (figs. 25, 26). Similar to those in preceding species but posterior armature of the sacculus bifurcate. Aedeagus somewhat longer, with longer coecum and shorter, less curved posterior part.

Female unknown. Type in the coll. of the Institut für Spezielle Zoologie der Humboldt Universität, Berlin.

Type material collected in Murcia (Spain). Examined specimen from Noguera, Albaracin, collected at the altitude of 1600 m. in VII.

Agapeta largana (REBEL)

Euxanthis hamana v. *largana* REBEL, 1906, Berl. Ent. Ztg., 50: 305.

Agapeta vicolana CAPUSA, 1964, Deut. ent. Zeitschr., Neue Folge, 11: 43, figs. 1, 2.

Also similar to *A. hamana* (L.) in pattern and colouration, but forewing seemingly not dilated terminad. In two examined specimens, the ground colour was yellowish, pattern brown, consisting of basal spot at costa, median fascia, postmedian fascia formed by ternal bar connected to broad, elongate towards wing-middle subapical blotch. Additional spot at costa before apex. Remaining features as in mentioned species. Length of forewing 10 mm.

Male genitalia (figs. 27, 28). Socii large; sclerite of tuba analis proportionately small. Valva with costal portion elongate; sacculus strong, broad anteriorly, protruding, dull posteriorly, provided with additional armature similar to

Figs. 22—26. *Agapeta* HBN.: 22 — male genitalia of *A. hamana* (L.), „Dras, Ladak, 7000 ft, Kashmir, 20. VI. 1887, LEECH [No.] 60358“, G. Sl. 7219, 23 — aedeagus of same specimen, 24 — female genitalia of same species, „Baligród, Czarne, 29. VI. 1955, Dr. S. TOLL leg.“, G. Sl. 4822, 25 — male genitalia of *A. angelana* (KENN.), „18 — 22. VII. 1960, Noguera, Albaracin 1600 m., Hispania, VARTIAN leg.“, G. Sl. 4252, 26 — aedeagus of same specimen

that in preceding species, but instead of hook-shaped process broad, minutely dentate projection. Transtilla, with rather broad median portion; juxta with long, simple median process. Aedeagus very long, tapering terminad, minutely dentate ventrally beyond the end.

Female unknown to me.

The species came from Greece: its synonym *A. vicolana* CAP. from Transylvania, Roumania. The known specimens have been collected in July and August.

Agapeta zoegana (LINNAEUS)

Phalaena Tortrix zoegana LINNAEUS, 1767, Syst. Nat., edit. 12: 876.

Labial palpus longer than 3, ochreous yellow to brownish ochreous, head similarly coloured with yellowish front; antenna brownish; thorax yellow to ochreous, brownish anteriorly and posteriorly; abdomen brownish grey. Forewing scarcely expanding terminad; costa curved to middle then almost straight; apex short, pointed; termen fairly straight, oblique. Ground colour dark yellow, pattern dark brown to rusty-brown. Costa brown to before middle; postmedian pattern broad separating irregularly ovate blotch of ground colour which is bordered by brown termen posteriorly. Subdorsal spot usually distinct. Fringes somewhat paler than ground colour. Hindwing dark grey to brown-grey; fringes brownish or greyish. Length of forewing 10—12 mm.

In ab. *ferrugana* WOOD ground colour of the forewing dark orange-ochreous.

Ssp. *brunneocycla* RAZ. (*Agapeta zoegana brunneocycla* RAZOWSKI, 1961, Acta zool. cracov., 6: 5, fig. 1, pl. 3, fig. 9) characterizes by dark ground colour of forewing and very broad, dark brown posterior pattern leaving only small, ovate blotch of ground colour medially.

Male genitalia (figs. 29, 30). Socii elongate; costal portion of valva as in preceding species; sacculus very strong, broad basally, tapering terminad, pointed apically. Vinculum strong, broad. Median projection of transtilla provided with thorns. Aedeagus very long, bifurcate, dorsal arm expanding from beyond opening of ductus ejaculatorius.

Female genitalia (fig. 31). Sterigma strong, with distinct posterior arms coalescent with anapophyses. Anterior portion of sterigma bilobed, rounded. Ductus bursae broad; corpus bursae transparent, very scarcely spined in middle. Ductus seminalis anterior.

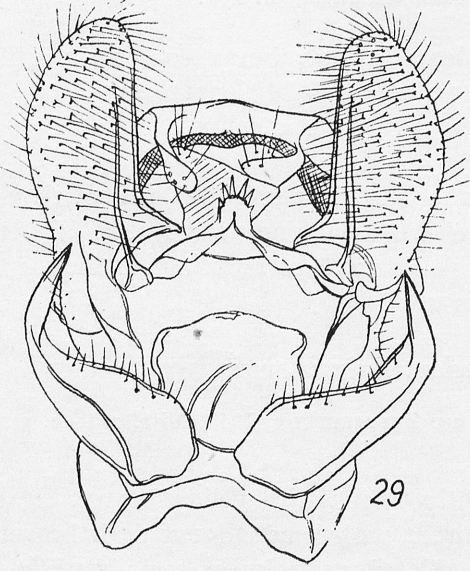
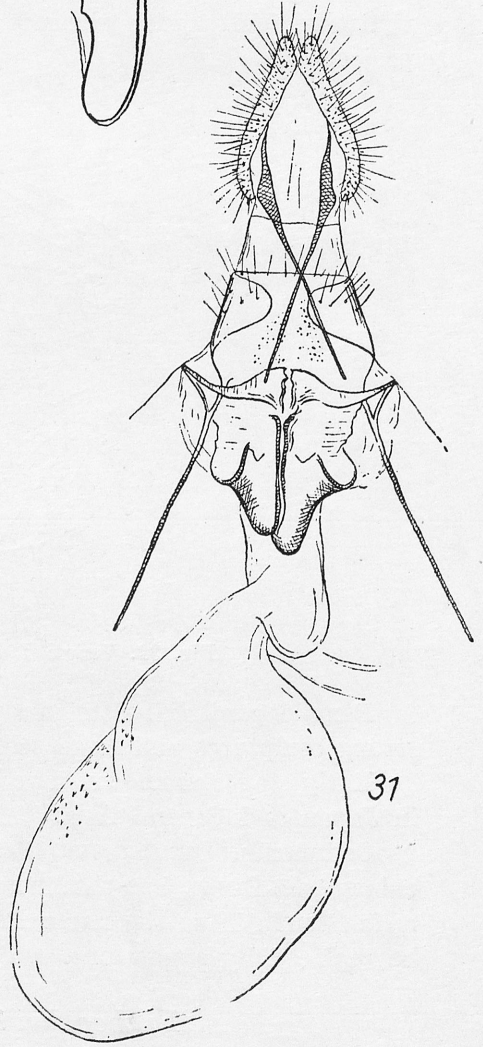
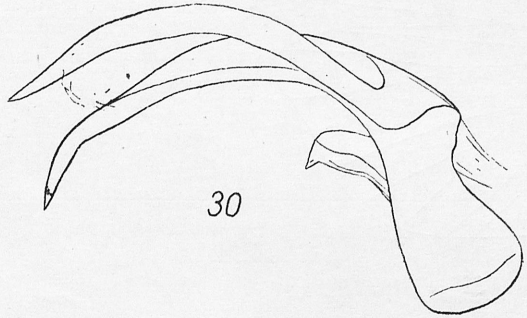
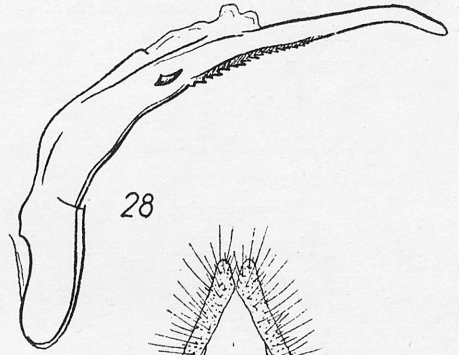
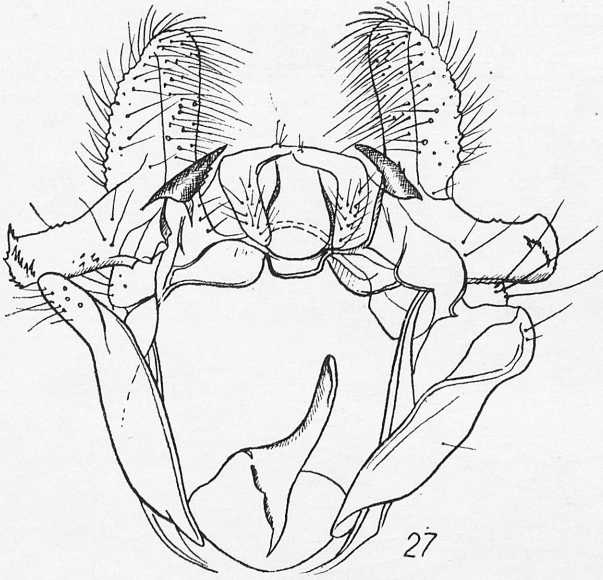
Early stages. Description of caterpillar in SWATSCHEK's paper (1958).

Biology. Caterpillar from October till May in roots of *Scabiosa columbaria* L., *Centaurea*-species and *Serratula*-species. Moth from mid-June till end of August.

Distribution: Europe (except for Greece) and Asia Minor.

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Figs. 27—31. *Agapeta* HBN.: 27 — male genitalia of *A. largana* (RBL.), type of *Agapeta vicolana* CAP., 28 — aedeagus of same specimen, 29 — male genitalia of *A. zoegana* (L.), „Baligród pow. Lesko, 3. VIII. 1961, Dr. S. TOLL leg.“, G. Sl. 4823, 30 — aedeagus of same specimen, 31 — female genitalia of same species, „Katowice, 9. VIII. 1940, Dr. S. TOLL leg.“, G. Sl. 4824

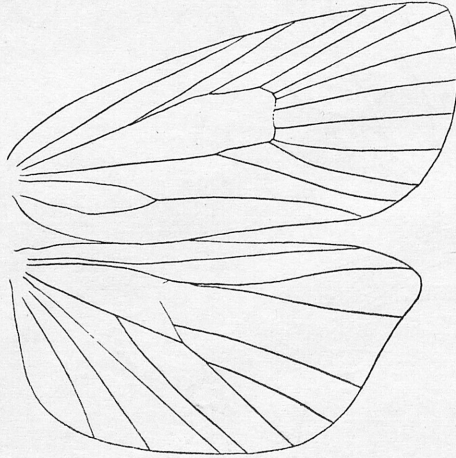


Phtheochroides OBRATSOV, 1943

Phtheochroides OBRATSOV, 1943, Mitt. münch. Ent. Ges., 33: 94. Type species: *Phtheochroides vulneratana* OBRATSOV 1943 nec ZETTERSTEDT 1840 = *Phtheochroides clandestina* nom. nov.

Labial palpus about 3. Venation (fig. 32): in forewing r_5 to termen, cu_2 opposite to r_2 ; in hindwing $r-m_1$ short stalked, m_3-cu_1 stalked to $1/4$. Remaining veins separate.

Male genitalia. Tegumen broad; socii well developed; vinculum not coalescent ventrally. Valva with elongate costal portion. Transtilla with short median projection.



32

Fig. 32. Venation of *Phtheochroides clandestina* n. nov.

Female genitalia. Sterigma more or less distinct; bursa copulatrix with strong sculptures and large sclerites, provided with additional sacs.

Early stages unknown. Two species belonging in this genus are distributed in Japan and Central Asia.

Comments. OBRATSOV (1943) created genus *Phtheochroides* for *Phalonia vulneratana* ZETT., but the mentioned species is belonging to the genus *Hysterosia* STEPH. Thus the name *Phtheochroides vulneratana* OBR. nec ZETT. must be replaced by a new one.

Phtheochroides clandestina nom. nov.

Phtheochroides vulneratana OBRATSOV, 1943, nec ZETTERSTEDT, 1943, Mitt. münch. ent. Ges., 33: 94, fig. 7.

Labial palpus 3, rather brownish, slightly tinged with yellow-brown. Head brown, front paler, antenna rather concolorous with head; thorax dark brown; abdomen brownish. Forewing broad, not dilated posteriorly; costa distinctly

curved, especially at base; apex very short, pointed; termen hardly oblique, almost straight. Ground colour brownish yellow preserved only beyond middle of costa in shape of large blotch and as delicate transverse stripes mainly in median part of wing dorsally. Remaining area yellow-brown to dark brown sometimes with vivid brown spots and strigulae. Rusty brown delicate fascias in posterior area obliquely from costa, bent before middle, atrophied medially. Delicate,

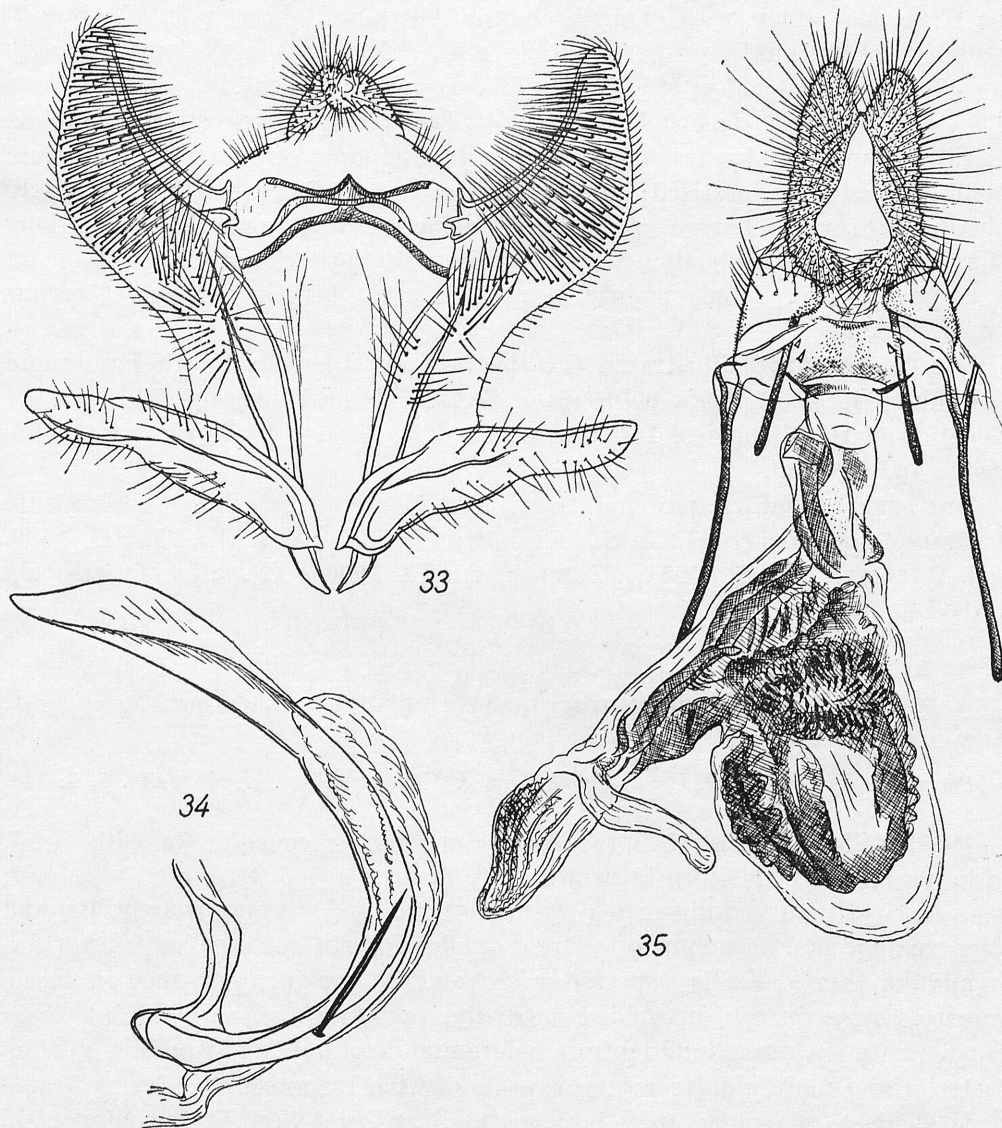


Fig. 33—35. *Phitheochroides clandestina* n. nov.: 33 — male genitalia, „Yoshino prov. Yamato, Honshyu 948 ft. 30. VII. 1899, A. E. WILEMAN“, G. Sl. 6854, 34 — aedeagus of same specimen, 35 — female genitalia, „Yoshino prov. Yamato, Honshyu 984 t. 23 VI. 1900, A. E. WILEMAN“, G. Sl. 6855

violet hue especially in posterior portion of wing present. Fringes brown. Hindwing broad, delicately rounded caudally; apex short. Colour of wing brownish; fringes a little paler. Female almost monochrome, brown, larger than male. Length forewing 11—13 mm.

Male genitalia (figs. 33, 34). Tegumen broad; socii broad, rounded apically; vinculum not coalescent ventrally. Valva very broad anteriorly, protruding in costal part posteriorly; sacculus very large, broad, with long free termination. Transtilla small with elongate lateral parts and short, pointed apically median portion; juxta proportionately small. Aedeagus very long, strongly curved, pointed apically; single spine-like cornutus present.

Female genitalia (fig. 35). Papillae anales large; anapophyses strong; sterigma delicate, connected by broad membrane to anapophyses anteriores; antrum broad, delicately sclerotized; ductus bursae rather short, partially strongly sclerotized; corpus bursae very large, elongate-ovate, provided with long lateral sac-shaped projection which is bifurcate posteriorly. Large sclerites in corpus bursae. Spines mainly in median part of main portion of corpus bursae present.

OBRAZTSOV (1943) illustrated the species from Ljanganar, South Pamir and determined it as *Phalonia vulneratana* ZETT. This specimen preserved in the collection of the Zoological Institute of the Kiev University is the type of the species in question.

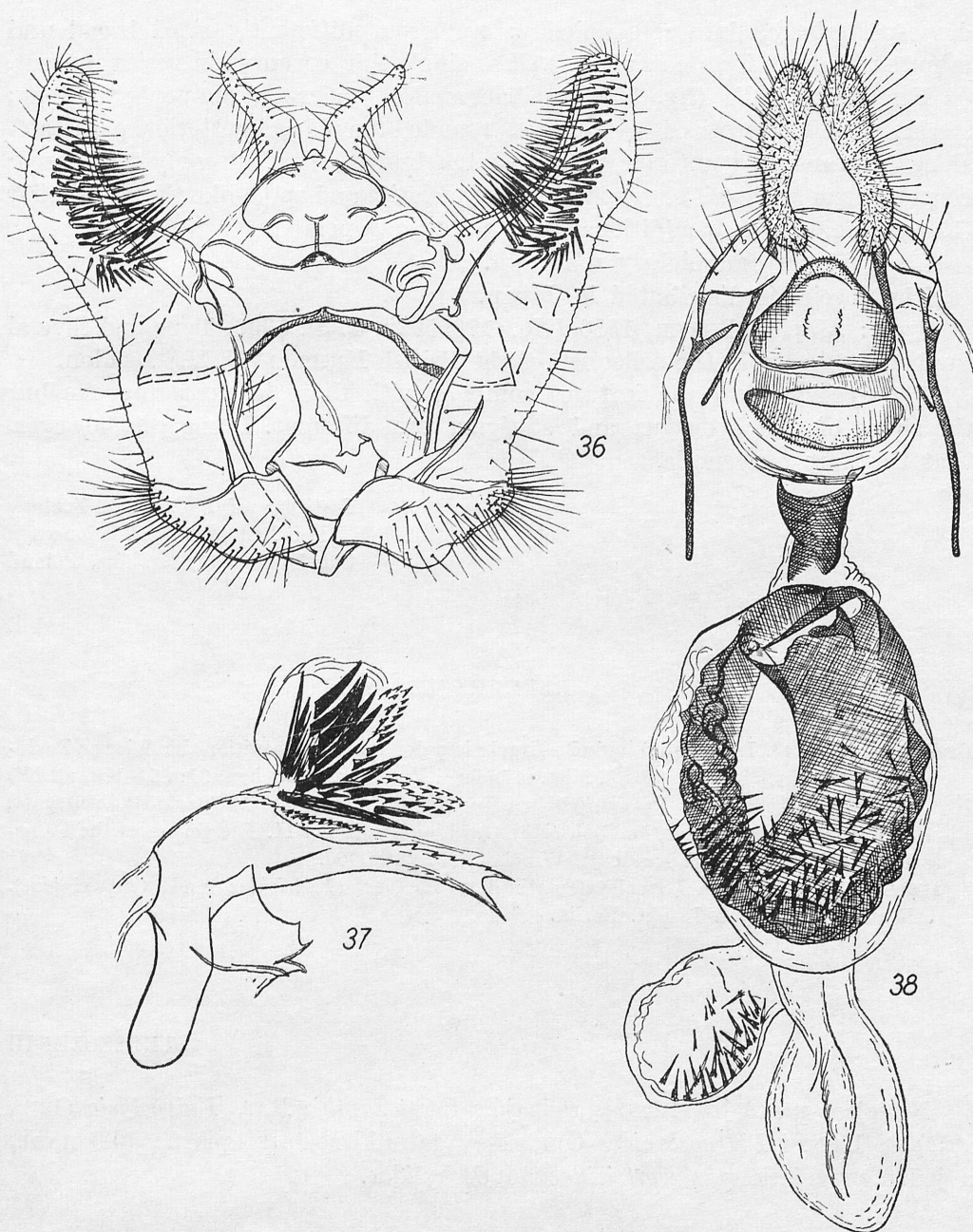
Further material: „Japan mer. Saga. 1889, Dtz.“ in the coll. of the Institute of Systematic Zoology P. A. S., Kraków; „Yamato 984 ft., 23. VII. 1899, A.E. WILEMAN“, G. Sl. 6854; „Yamato, 23. VI. 1900“; „Fushiki, Japan July 1881, LEECH“.

Phtheochroides apicana (WALSINGHAM) comb. nov.

Pharmacis apicana WALSINGHAM, 1900, Ann. & Mag. nat. Hist. London, Ser. 7, 5: 489.

Head yellowish, tinged brownish; thorax rather concolorous with head, darker anteriorly; abdomen brownish grey. Forewing slightly dilated terminad; costa distinctly curved outwards; apex short, pointed; termen convex. Ground colour pale yellowish cream to ochreous-yellow. Costa suffused with brownish to middle, then delicately spotted with same colour to apex; median fascia brown to rusty-brown, atrophied medially, preserved as a blotch at costa and elongate pattern extending from before middle of dorsum to middle of wing. Posterior and mainly dorso-posterior parts of wing brownish with brown transverse shades and spots; apex brown; small spot in disc. Fringes brownish, brown from apex to middle. Hindwing brownish grey with similar cilia. Length of forewing 10 mm.

Male genitalia (figs. 36, 37). Tegumen broad with strongly sclerotized posterior portion and small apical projection resembling uncus; socii large. Valva



Figs. 36—38. *Phtheochroides apicana* (WALSM.): 36 — male genitalia of paratype, „Japan, PRYER 1886“, G. Sl. 7245, 37 — aedeagus of same specimen, 38 — female genitalia, „Japan, PRYER, 1886, [No.] 70502“, G. Sl. 7260

numerous spines; saccus broad, rounded posteriorly, convex ventrally. Transstilla broad, protruding in middle of dorsal edge. Aedeagus long, bent, dentate broad basally, with costal portion rather narrow, elongate, provided with

dorso-posteriorly, bifurcate apically; numerous differently sized broad and minute rather uniform cornuti as well as single thin cornutus in vesica present.

Female genitalia (fig. 38). Papillae anales moderate; anapophyses long; sterigma well sclerotized with large, rounded on edges posterior plate and elongate transverse anterior plate. Ductus bursae short, strongly sclerotized; corpus bursae large with very large, heavy sclerite and spine-like thorns; similar thorns in one of two additional sacs of bursa copulatrix.

Early stages and biology unknown.

The species is distributed in Japan.

Type: „Japan, PRYER, 1886, [No.] 1705502“, G. Sl. 5306. Type and several further specimens in the collection of the British Museum (N. H.) London.

The species has some features common with those in preceding one but the shape of the aedeagus and sterigma are different. I suggest however, that they are congeneric.

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STRESZCZENIE

Niniejsza praca jest rewizją rodzajów *Ceratoxanthis* RAZ., *Fulvoclysia* OBR., *Agapeta* HBN. i *Phtheochroides* OBR. Trzy gatunki zostały opisane jako nowe, a jeden przeniesiony z *Tortricidae* do *Cochylidae*.

РЕЗЮМЕ

Настоящая работа является ревизией родов *Ceratoxanthis* RAZ., *Fulvoclysia* OBR., *Agapeta* HBN. и *Phtheochroides* OBR. Три вида описано, как новые, а один перенесено из *Tortricidae* в *Cochylidae*.

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