

ACTA ZOOLOGICA  
CRACOVENSIA

Tom VIII

Kraków, 15 XI 1963

Nr 5

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*Tortricoidea (Lepidoptera) from Iran*

*Tortricoidea (Lepidoptera) Iranu*

*Tortricoidea (Lepidoptera) Ирана*

[with 70 text-figs.]

Amongst *Tortricoidea* received for study from Dr. H. G. AMSEL of Karlsruhe I have found two very interesting groups. The first of these is the collection from Afghanistan (a paper on the results is sent to print in Beiträge naturk. Forschung Südwestdeutschland), the other includes material from Iran. I am obliged to thank to Dr. H. G. AMSEL for providing me with this valuable material.

The material was collected in localities listed below. I give at each locality the name of respective province, or mountain ridge. All localities are situated at very high altitudes, mostly over 1000 m. (altitudes are cited in the list of species).

Alvand (= Elvand = Mt. Alvend = Kuh Elvend), prov. Hamadan.

Ardekan, prov. Fars.

Barfkhaneh, nr. Yezd, prov. Fars.

Barm-i-Firuz (= Barm-e-Firuz), prov. Fars.

Binaloud (Kouh-i-Binaloud), mts. by Meched, prov. Khorassan.

Bushire, prov. Fars, at Persian Gulf shore.

Comehr (Comée), prov. Fars.

Dasht-i-Barm, prov. Fars.

Fars, prov. in South Iran.

Firuzabad, prov. Fars (northern part).

Gah-i-Sar, Elburz Mts.

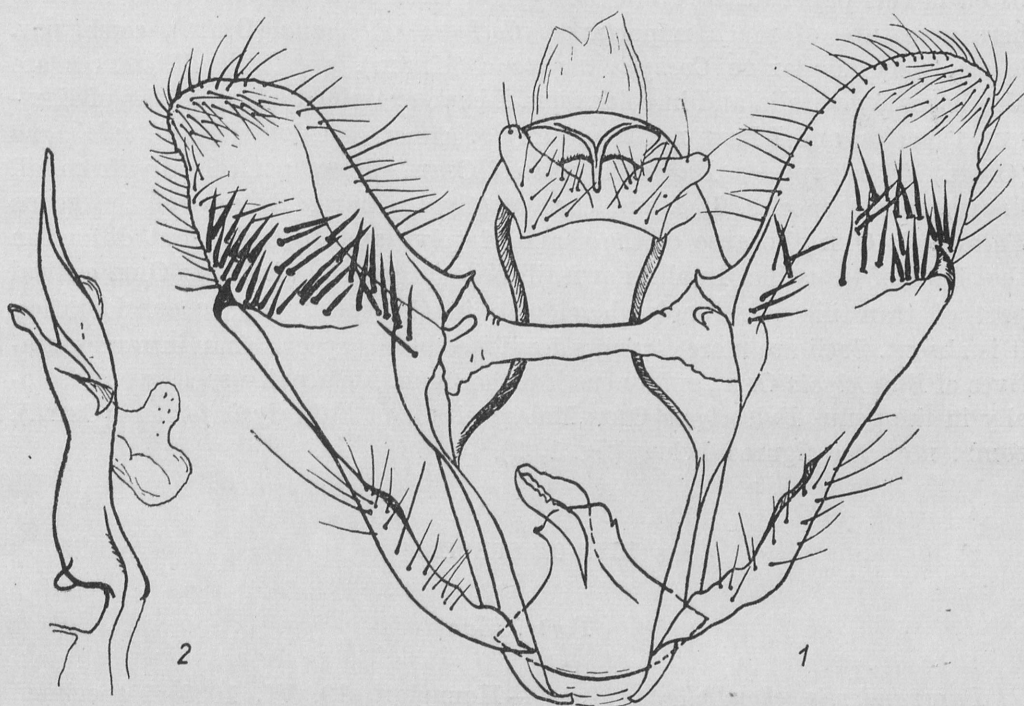
Hamadan, prov. in West Iran; a town in this province.

Isfahan, a city in prov. Isfahan, Central Iran.  
 Kendevan Pass, Elburz Mts., central part.  
 Keredj (= Karadj), Elburz Mts., by Tehran.  
 Khorassan, prov. in N.-E. Iran.  
 Kouh-i-Taftan (Kuh-i-Taftan), Baloutchistan.  
 Kuh-i-Binaloud (= Kouh-i-Binaloud), prov. Khorassan.  
 Lar Valley, Elburz Mts., N.-E. of Tehran.  
 Meched, prov. Khorassan.  
 Muk Pass, prov. Fars.  
 Nisa (= Nissa), Elburz Mts.  
 Pir-i-Zan, prov. Fars.  
 Pusht-i-Bam, prov. Fars.  
 Shiraz (= Schiraz), prov. Fars.  
 Sineh Safid (= Simeh-Sefid), prov. Fars.  
 Tehran (= Teheran), North Iran.  
 To-Chal, Elburz Mts., North Iran.

In the studied collection there are about 200 specimens collected from 1936 till 1938 by Fred BRANDT, and between 1938 and 1943 (except 1942) and in 1949—1950 by E. P. WILTSHIRE. The material includes 60 species: 34 species of *Tortricidae*, and 36 of *Cochylidae*. In comparison with the Palaearctic fauna of *Tortricidae* and *Cochylidae* this is a rather small number (about 3% of Palaearctic *Tortricidae* and about 10% of Palaearctic *Cochylidae*). However, in spite of such a small total number of species two genera of *Cochylidae* are rather numerously represented, which is interesting in studies on this family. Unfortunately I am unable to determine some species, however, I give their characteristics.

Several authors have dealt with *Lepidoptera* of Iran, and there are more than twenty publications treating lepidopterous fauna of this country. In these papers there are also notes on *Tortricoidea*, thus in papers of LEDERER (1870), CHRISTOPH (1873, 1876) or AMSEL (1959). These authors cited about 40 species of Tortricids from Iran. Unfortunately some older publications are of a rather little value as containing determinations based on external characters only. The accurate determination of species of some groups is possible only after a study of their genitalia. Thus the old determinations are in need of thorough revision. However, those old papers show some interesting species, the determination of which seems to be accurate. They are absent from studied collection, e. g. *Sparganothis pilleriana* SCHIFF. & DEN. or *Agapeta hamana* L. In some publications (especially of AMSEL, 1959) the authors listed some species of *Bactra* STEPH., which are also not represented in the collection under consideration. Another group of species includes those listed in nearly all publications on *Lepidoptera* of Iran. These are *Laspeyresia pomonella* L. (found in material of Afghanistan, moreover cited by OBRAZTSOV from Pamir [1943]), *Notocelia uddmanniana* L., *Acleris variegana* SCHIFF. & DEN. and *Euxanthoides straminea* HAW.

In steppes, deserts and other arid localities there are many xerothermophilous species, distributed in whole of Asia Minor and Mediterranean Area. However, there is a rather large percent of European or Palaearctic species, similarly as in the fauna of Tortricids of Afganistan. The genera characteristic of this terrain are *Stenodes* GUEN. and *Cochylis* TREIT. each represented by seven species. In the first of them dominates sgen. *Parastenodes* RAZ. represented by four species. The distribution of this group is very interesting, as it is recorded from Spain to Mongolia and appears in steppes and other arid localities. A large number of species of *Cochylis* TREIT. in Asia Minor shows that there is probably a centre of distribution of this genus. The majority of species of this genus belongs to the subgenus *Pontoturania* OBR. to the group of *Cochylis* (*Pontoturania*) *defessana* MANN.



Figs. 1, 2. *Fulvoclysia forsteri* (OSTH.): 1 — male genitalia of holotype, („Persia sept., Elburz Mts., s. c., Sardab Tal, [G. Sl., K. SATTLER], 161“), 2 — aedeagus

The group of species confined to deciduous trees is here chiefly represented by members of the genus *Laspeyresia* HBN., namely *L. pomonella* L., *L. grossana* HAW. and *L. semicinctana* KENN. They were collected near settlements.

All these data are very fragmentary and are too scant for any detailed analyze, however, they may be useful for explanation of some questions. The records on species: *Laspeyresia elongata* V. I. KUZN., *L. rjabovi* V. I. KUZN., *Cochylis subposterana* TOLL and *C. subdefessana* RAZ. are the only except the original ones. The occurrence of *Acleris napaea* MEYR. in Iran as well as the first note on pabula



of the larva of this species are given by E. P. WILTSHIRE. This species lives on *Salix* sp. It seems to be a rather variable species, showing many aberrations as *A. hastiana* L. In the present material there are three specimens differing in coloration from each other. All these forms have adequate ones in *A. hastiana* L. Other notes are given in comments for respective species in the systematic part of this paper.

During my study on this collection I have received through the kindness of Dr. Klaus SATTLER three types of *Cochylidae* described by OSTHELDER (1938) from Iran. Some notes on them are given below. The first species *Phalonia purissima* OSTH. (**synon. nov.**) is a synonym of *Hysterosia (Propira) durbonana* (LHOMME), **comb. nov.** The systematic position of *Euxanthis suleimana* OSTH. seems to be rather difficult to solve on basis of only two specimens. The specimen listed in this paper differs from the type of this species in coloration, which is here a feature of much importance. *Cochylis suleimana* (OSTH.), **comb. nov.** is also very similar to *Cochylis maestana* (KENN.), and little differences are also in male genitalia and in coloration. I have examined a large series of KENNEL'S species, and I have not found any specimen as coloured as *C. suleimana* (OSTH.). Third species *Euxanthis forsteri* OSTH. differs genitally from all known to me species. It approaches mostly to representatives of the genus *Fulvoclysia* OBR., because of the shape of valva and aedeagus, but differs on the shape of transtilla. In all known till now species of *Fulvoclysia* OBR. central part of transtilla is strongly developed; in the species under consideration it is absent. Socii are more strongly developed in this species than in representatives of *Fulvoclysia* OBR., and uncus is rather long. I place this species provisionally in the genus *Fulvoclysia* OBR. Male genitalia of *Fulvoclysia forsteri* (OSTH.), **comb. nov.** are figured below (fig. 1, 2).

#### LIST OF SPECIES<sup>1</sup>

##### *Tortricidae*

*Parapandemis chondrillana* H.-S. — Hamadan, 19. VI. 1938, 1 specimen

*Aphelia christophi* OBR. — Ardekan-Talochosroe, Comée (Barm-i-Firuz) Fars, 8750 m., 4—5. VIII. 1937 (BRANDT), 3 specimens; on 2600 m., (BRANDT) 3 specimens; Nisa, Elburz Mts. (BRANDT); To-Chal, Elburz Mts., 10—11000 ft., 24. VII. 1943, 5 specimens; Alvand, 9000 ft., 26. VII. 1938, 2 specimens, and 27. VII. 1938, 4 specimens.

Comments. *Aphelia christophi* OBRAZTSOV (a new name given by OBRAZTSOV for *Tortrix verbascana* CHRISTOPH, nom. praeoc.) was cited in the OBRAZTSOV catalogue as a subspecies of *Aphelia paleana* HBN. It seems, however, that this species is a distinct one as the shape of the forewing and the armature

<sup>1</sup> The listed specimens were collected by E. P. WILTSHIRE if otherwise not stated.



of the genitalia show. Unfortunately I am unable to compare my specimens with the type of *Tortrix verbascana* CHR., however, I have sent a drawing for kind comparison to Dr. M. I. FALKOVITSH of Leningrad, who agrees with my opinion in this problem. — There are two groups of specimens before me. One, from To-Chal, the specimens of which are darkly coloured, with yellow-brownish forewing, and the other, with pale yellowish forewing. In one specimen from Alvand there is a reddish median fascia in the forewing. I figure male genitalia of the species under consideration (fig. 3).

*Cnephasia constantinana* RAZ. — Hamadan, 19. VI. 1938, 1 specimen.

*Cnephasia* sp. — Bushire, 21. IV. 1950, 1 specimen. The only specimen is badly damaged. Female genitalia similar to those in *Cnephasia pumicana* ZELL. or *C. tremewani* RAZ.

*Cnephasia orientana* ALPHER. — Lar Valley, Elburz Mts., c. 8000 ft., VIII. 1939, 1 specimen.

*Oxypteron palmoni* AMS. — Shiraz gardens, Fars, 5000 ft., 8, 12, and 15. XI. 1950, 3 specimens; Shiraz, hilly steppe, 30. XI. 1950, 4 specimens.

*Tortrix viridana* L. — Pusht-i-Bam, Fars, c. 4000 ft., 4. V. 1950, 1 specimen.

*Acleris variegana* SCHIFF. & DEN. — Keredj, Elburz Mts., 17. V. 1936 (Brandt) 1 specimen; Tehran, 6. VI. 1939, 2 specimens, and 14. VI. 1939, 5 specimens.

*Acleris napaea* MEYR. — Shiraz, Fars, 8. XI. 1949, 1 specimen, and 20. IX. 1950, on altitude of 6000 ft., ex. 1. from *Salix* sp., 2 specimens.

*Laspeyresia elongata* V. I. KUZN.<sup>1</sup> — Barkhaneh nr. Yezd, 9—12000 ft., VI. 1940, 2 specimens.

*Laspeyresia rjabovi* V. I. KUZN. — Sineh Safid, Fars, c. 6500 ft., 19. V. 1950, 1 specimen; 15. IV. 1940, 1 specimen; 28. IV. 1940, 2 specimens; Shiraz, 25. IV. 1940, 1 specimen.

*Laspeyresia semicinctana* KENN. — Firuzabad, 2. V. 1941, from *Acer* sp., 2 specimens; Sineh Safid, Fars, 6500 ft., 19. V. 1950, 1 specimen.

*Laspeyresia grossana* H.-S. — Oak woods near. Pir-i-Zan, Fars, 7000 ft., 1. IX. 1950, 1 specimen.

*Laspeyresia pomonella* L. — Shiraz in gardens, ca 5000 ft., 21. V. 1950, 1 specimen.

*Thiodia citrana* HBN. — S. Elburz, 28. V. 1939, 1 specimen. It is a large sized, darkly coloured specimen. Female genitalia as in specimens from Central Europe, however, distal edge of ostium bursae resembles a little that in *Thiodia major* RBL.

*Thiodia sulphurana* CHR. — Hamadan, 19. VI. 1938, 1 specimen.

*Thiodia anatoliana* KENN. — Ardekan-Talachosroe Rd., Comée, Fars, ca 2600 m., 16. VII. 1937 (BRANDT), 1 specimen.

*Eucosma albidulana* H.-S. — Hamadan, 19. VI. 1938, 1 specimen.

<sup>1</sup> This and the three subsequent species were kindly determined by Dr. V. I. KUZNETZOV of Leningrad.

*Eucosma coagulana* KENN. — Nisa, Elburz Mts., 2500 m., 20. VII. 1936 (BRANDT), 1 specimen; Keredj, 1936 (BRANDT), 1 specimen; To-Chal, Elburz Mts., 10 000 ft., 24. VII. 1943, 4 specimens.

I am unable to compare these specimens with the type of *Eucosma coagulana* KENN., and therefore I figure the male genitalia of one of them (fig. 4).

*Eucosma persiae* sq. n., ♂, ♀.

Labial palpi (fig. 5) 1, 6 times as long as diameter of an eye. Palpi, head and upper part of thorax pale, yellow-brownish. Costal edge slightly bent; apex rounded; termen nearly straight, or convex (f. 6). Ground colour pale, yellow-brownish. Base paler than terminal portion of the wing. Brownish, more or less visible stripes in basal and median portions. Several white-yellowish, glossy strigulae on costa. Fringes concolorous with ground, or tinged with greyish. Hindwing brownish, fringes rather pale yellowish. Length of forewing in holotype and allotype 6 mm., in typoids 5—7 mm.

Male genitalia (fig. 7). Saccus well developed. Cucullus large arched outwards distally. Socii rather long; aedeagus broad.

Female genitalia (fig. 8). Lamella vaginalis elongate, well developed. Ductus bursae as long as the diameter of bursa, transparent, provided with a large sclerite. Bursa copulatrix faintly sculptured. Two very large, assymetric signa present.

Holotype (♂): „S. W. Persia, Shiraz, hilly steppe, 6000 ft., 5. VI. [19]50, FF. 68, E. P. WILTSHIRE“, G. Sl. 5725. Allotype (♀) labelled as holotype, G. Sl. 5726. Typoids (4 ♂♂, 3 ♀♀): 5 specimens labelled as holotype; „Shiraz, S. Persia, Fars, 6500 ft., 30. IV. [19]40, E. P. WILTSHIRE“, G. Sl. 5741, 1 specimen; „Persia, Fars, Dasht-i-Bam, 4. V. [19]50, 4000 ft. FF. 95“, G. Sl. 5752 and 5753, 2 specimens.

Holotype, allotype and 4 typoids in coll. of Dr. H. G. AMSEL, 3 typoids in author's coll.

Comments. This species a little resembles *Eucosma aemulana* SCHLÄG., however, it differs by coloration of forewing and on genitalia.

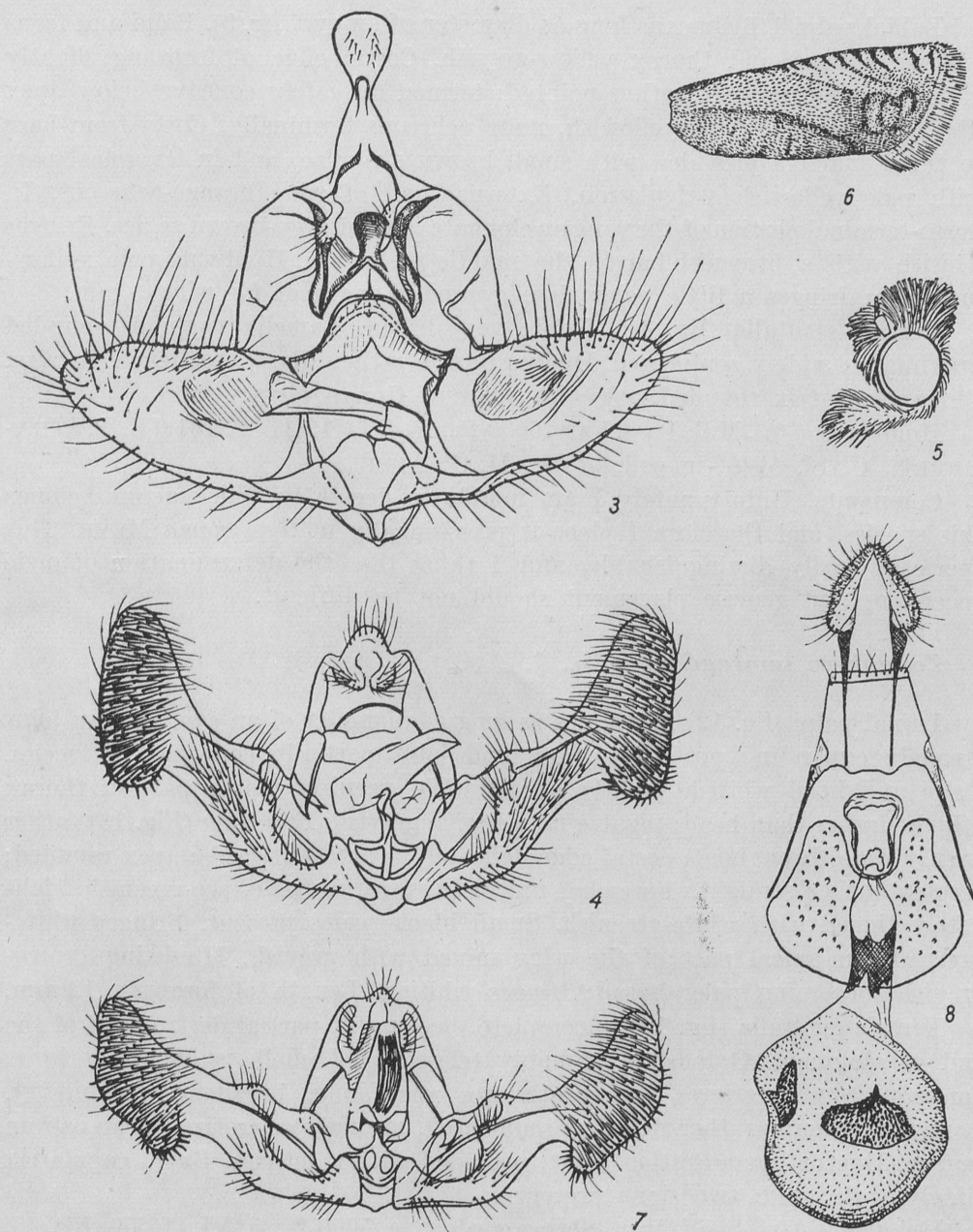
*Epiblema scutulana* SCHIFF. & DEN. — To-Chal, Elburz Mts., 10—11 000 ft., 24. VII. 1943. One rather darkly coloured and damaged specimen. Female genitalia as in *E. scutulana* SCHIFF. & DEN. from Europe.

*Pardia cynosbatella* L. — Kendeven Pass, 25. VI. 1939, 1 specimen.

*Notocelia uddmanniana* L. — Tehran, 5. VI. 1939, 4 specimens.

*Gypsonomoides couleruana* DUP. — Dasht-i-Bam, Fars, 4000 ft., 4. V. 1950, 1 specimen.

*Gypsonoma minutana* HBN. — Barfkhaneh nr. Yezd, 9000 ft., 3. VI. 1940, poplar, 2 specimens.



Figs. 3—9. 3 — *Aphelia christophi* OBR., male genitalia, Iran, Fars, Strasse Ardekan — Talachosroe, Comée (Barm-i-Firus), 3750 m., 5. VIII. 1937, leg. BRANDT, G. Sl. 5724); 4 — *Eucosma coagulana* (KENN.), male genitalia, („To- Chal, 10000 ft., Elburz Mts., N. Iran, 24. VII. [19]43, E. P. WILTSHIRE“, G. Sl. 5789); 5—8, *Eucosma persiae* sp. n.: 5 — head, 6 — forewing, 7 — male genitalia (holotype), 8 — female genitalia (allotype)



**„Gypsonoma“ ochrotona sp. n., ♀.**

Labial palpi 1, 6 times as long as diameter of an eye (fig. 9). Palpi and frons yellowish; head and thorax yellow-greyish. Costal edge of forewing slightly arched outwards; apex rather pointed; termen delicately concave below apex (fig. 10). Ground colour yellowish, more ochreous terminally. Costa from base to three-quarters provided with small brown strigulae, and in its apical part with pale yellowish strigulation. External half of wing orange-ochreous. In dorso-terminal portion of the wing an elongate area of grey-brown scales. Fringes whitish with a brownish bar in the middle of termen. Hindwing pale, yellow-brownish; fringes a little paler than ground. Length of forewing 8 mm.

Female genitalia (fig. 11). Labia very broad. Lamella vaginalis rounded proximally; widely sculptured. Ductus bursae rather short, broadened distally. Bursa copulatrix rounded, very transparent. Gonapophyses short.

Holotypus (♀): „Muk Pass, Fars, 6500 ft., 15. VI. [19]41, F. 131, [E. P. WILTSHIRE]“, G. Sl. 5746, in coll. of Dr. H. G. AMSEL.

Comments. Unfortunately I am unable to decide to which genus belongs this species, and therefore I place it provisionally in *Gypsonoma* MEYR. This species is easily distinguishable, and I think that the determination of male specimens and generic placement should not be difficult.

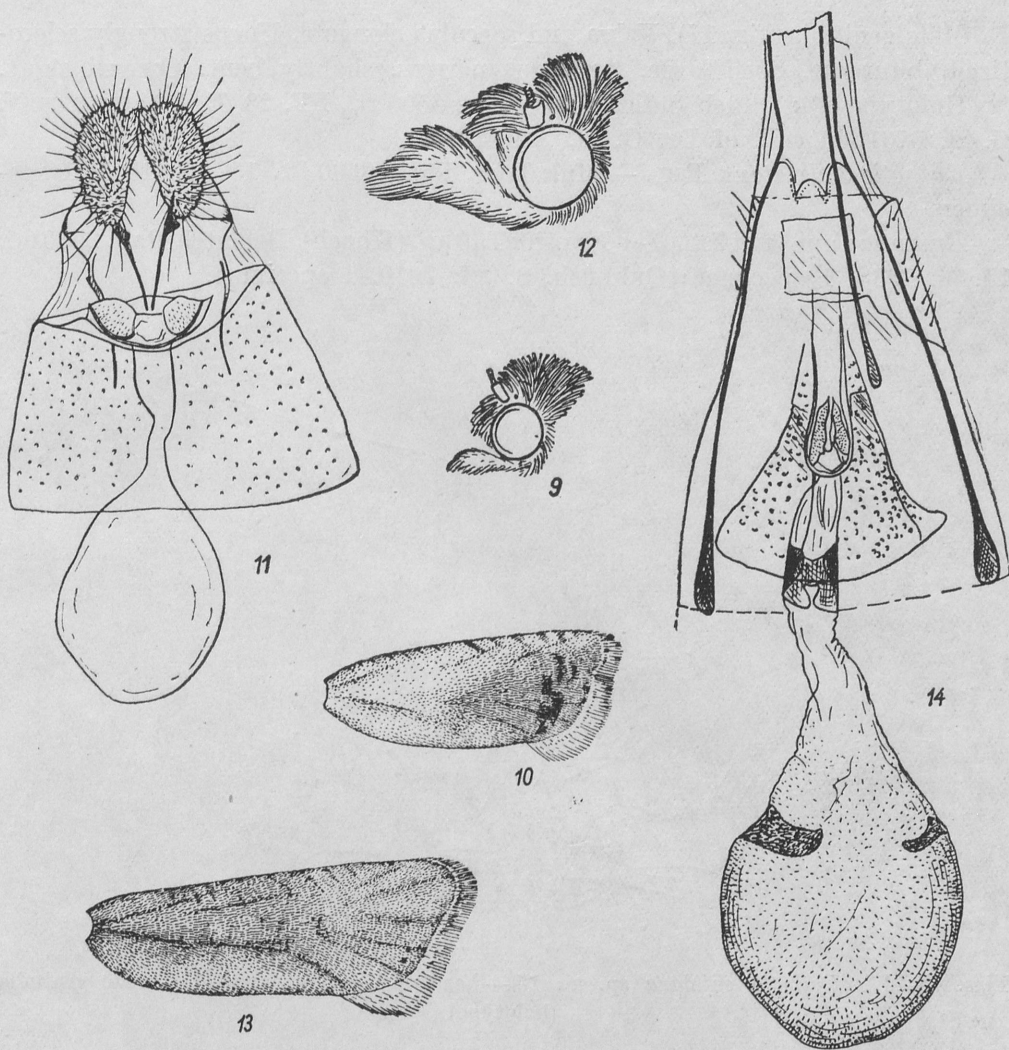
***Zeiraphera smaragdina* sp. n., ♀.**

Labial palpi (fig. 12) 2, 2 times as long as diameter of an eye. Median joint strongly expanding posteriorly, terminal joint partially concealed in scels. Palpi and head whitish slightly mixed with greenish. Upper part of thorax a little darker than head; tegulae mixed with greyish. Forewing (Fig. 13) rather evenly wide throughout; costal edge delicately arched outwards; apex rounded; termen rather straight. Forewing unicolorous, rather pale, sea-greenish, delicately tinged with white-greenish. Small black scales present. Fringes white-greenish, in apical part of the wing mixed with greyish. Hindwing brown-greyish, becoming paler basad; fringes whitish. Length of forewing 12 mm.

Female genitalia (fig. 14) uncomplete, because of partial destruction of the end of abdomen. Ovipositor probably telescopic. Lamella subgenitalis long; gonapophyses anteriores and posteriores very long, broadened terminally. Lamella vaginalis rather delicate, sculptured, strongly sclerotized near ostium bursae. Ductus bursae rather short, provided with a sclerite. Bursa copulatrix widely sculptured; two signa present.

Holotypus (♀): „S. W. Iran, Shiraz gardens, c. 5000 ft., 5. VI. [19]50, FF. 43, E. P. WILTSHIRE“, G. Sl. 5772, in the coll. of Dr. H. G. AMSEL.

I am not sure whether this species belongs to the genus *Zeiraphera* TREIT., as I have not any male for investigation. However, the comparison of female genitalia shows close relation between the two genera. In the shape of forewing the new species resembles rather *Z. diniana* GUEN., but the coloration is quite different.



Figs. 9—14. „*Gypsonoma*“ *ochrotona* sp. n.: 9 — head, 10 — forewing, 11 — female genitalia (holotype); *Zeiraphera smaragdina* sp. n.: 12 — head, 13 — forewing, 14 — female genitalia (holotype)

*Epinotia safidana* sp. n., ♂.

Labial palpi 2.5 times as long as diameter of an eye; median joint broad, terminal joint protruding (fig. 15). Front and palpi pale, grey-brownish; upper side of the head a little darker, more brownish. Thorax brownish. Forewing (fig. 16) expanding posteriorly; costal edge nearly straight; apex pointed; termen oblique, straight. Ground colour brownish; rather pale with intervenular streaks. Costa and termen white-brownish. External and apical areas brownish. Fringes white-brownish, interrupted by brownish bars. Hindwing broad, pale-brownish; fringes whitish. Length of forewing 12 mm.

Male genitalia (fig. 17). Valva and sacculus elongate. Uncus strongly sclerotized, bifurcate. Socii large. Aedeagus narrow, slightly bent. Cornuti short.

Holotype (♂): „Sineh Safid, Fars, Iran, 6500 ft., FF. 28, E. P. WILTSHIRE“, G. Sl. 5731, in coll. of Dr. G. H. AMSEL.

*Epinotia dalmatana* RBL. — Muk Pass, Fars, 6500 ft., 15. VI. 1941, 1 specimen.

*Epinotia thapsiana* ZELL. — Kouch i Taftan, (Khach), Beloutchistan, 2500 m., 15. V. 1938, 1 specimen; Qulikush, 8. VI. 1940, 1 specimen.



Figs. 15—17. *Epinotia safidana* sp. n.: 15 — head, 16 — forewing, 17 — male genitalia (holotype)

*Epinotia* sp. — Shiraz, c. 8000 ft., 12. V. 1940, 1 specimen.

Labial palpi, head and thorax brownish. Costal margin of the forewing slightly arched outwards; apex delicately rounded; termen convex. Ground colour light-brownish; pattern brown (median fascia and spots in terminal portion of wing are present). Dorsal edge greyish; praeternal patch whitish. Fringes brownish. Hindwing brownish, fringes a little paler than ground. Length of forewing 7 mm. I figure the female genitalia for comparison (fig. 18).

*Endothenia carbonana* DBLD. — Shiraz gardens, Fars, 5000 ft., 1. VII. 1950, 1 specimen; Isfahan, 9. VIII, 1940, 1 specimen.

*Lobesia* sp. — Tehran, 21. VI. 1939, 1 specimen.

This species belongs in the group of *Lobesia* (*Polychrosis*) *artemisiana* ZELL.; unfortunately it is damaged. I figure its female genitalia for comparison (f. 19).

*Olethreutes stibiana* GUEN. — Hamadan, ca 7000 ft., 16. VI. 1938, 1 male



specimen. It differs externally from, but is strikingly similar in genitalia to all known to me specimens of *Olethreutes stibiana* GUEN.

*Celyphoides cespitanus* HBN. — Tehran, 5. VIII. 1939, and 24. VIII. 1939; 2 specimens.

### *Cochylidae*

*Hysterosia variolosana* CHR. — Keredj, 12. V. 1930 (BRANDT), 1 specimen.

#### *Stenodes wiltshirei* sp. n., ♂.

Labial palpi twice as long as diameter of an eye (fig. 20). Upper side of palpi, front and vertex whitish. Head and palpi rather pale brownish laterally. Thorax and abdomen yellow-brownish. Fore wing (fig. 21) expanding terminad. Costal edge in basal portion convex, in median portion delicately concave, termen oblique, rather straight. Ground colour white mixed with brownish or yellowish, especially in basal and external areas of the wing. In 2/5 of dorsal edge a narrow, elongate spot. This spot is brown-yellowish, and more yellowish in terminal part. In external portion of costa two small, brownish spots. Fringes badly damaged (the only preserved part in dorsal portion of termen is brownish). Hind-wing transparent, white-yellowish, in apical portion on peripheries delicately tinged with brownish. Fringes concolorous with the central portion of the wing, however, in terminal part of the wing more brownish. Length of forewing 6.5 mm.

Male genitalia (fig. 22, 23). Valva in basal part broad, then decidedly narrowed, rounded terminally. Sacculus well developed, with protruding rounded end. Tegumen broad, socii elongate, poorly hairy. Apical part of tegumen in form of uncus, protruding, rounded terminally. Central part of transtilla well developed, broad. Aedeagus (fig. 23) narrow, rather long, and slightly bent; a long and thin terminal projection in its ventral edge.

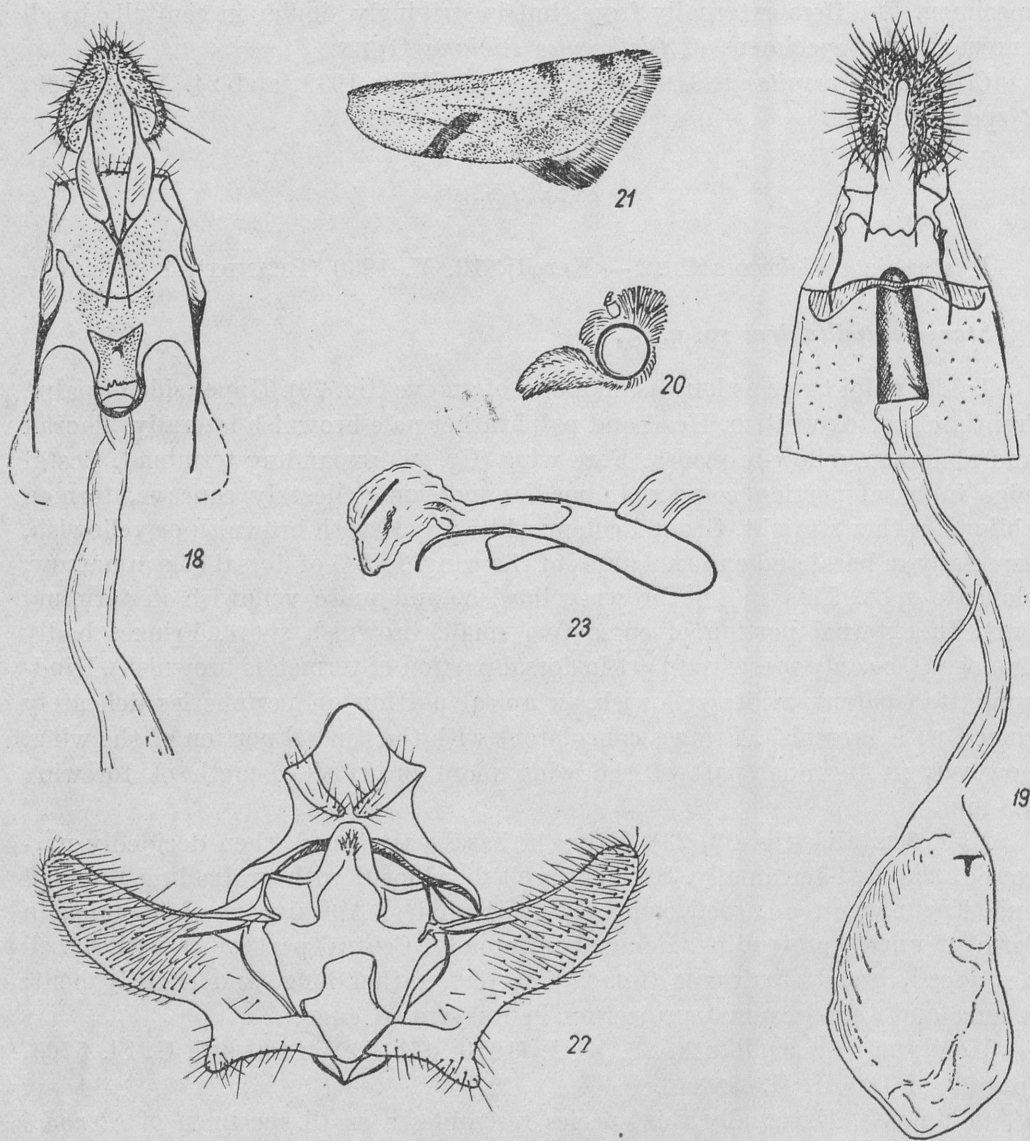
Holotype (♂): „Qulikush, 28. VIII. [19]40, [E. P. WILTSHIRE], G. Sl. 5765, in coll. of Dr. H. G. AMSEL.

Comments. Externally this species resembles a small specimen of *Stenodes armeniana* JOANN., however, in the latter the pattern is better developed than in the new species. In the male genitalia the new species is distinct on the shape of sacculus and aedeagus.

I name this species in honour of Mr. E. P. WILTSHIRE.

#### *Stenodes brandti* sp. n., ♂ ♀.

Labial palpi 2.5 times as long as diameter of an eye, creamy-yellowish. Lateral sides of palpi and sides of the head more yellow to yellow-brownish (fig. 24). Forewing (fig. 25) broadened towards the end. Costal edge in basal portion convex, in central portion straight, or slightly convex, oblique. Ground colour

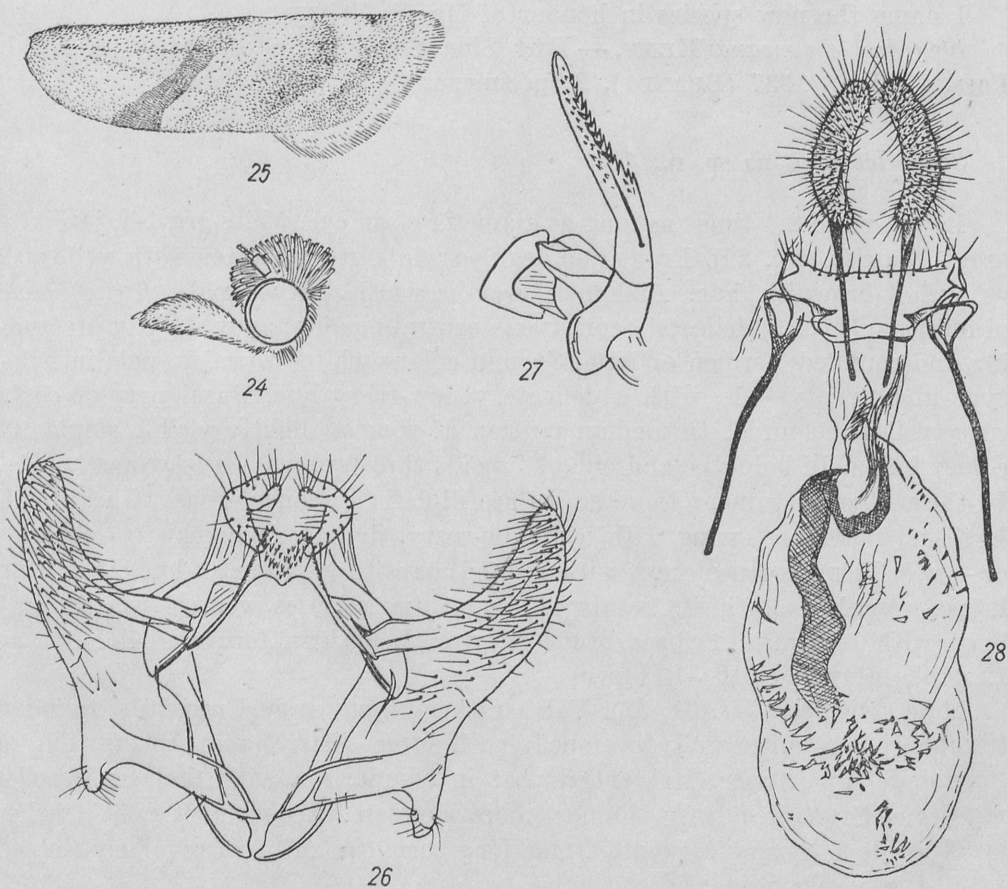


Figs. 18—23. *Epinotia* sp.: 18 — female genitalia („Shiraz, c. 8000 ft., 12. V. [19]40“, G. Sl. 5794); *Lobesia* sp.: 19 — female genitalia („Tehran, 21. VI. [19]39“, G. Sl. 5791); *Stenodes wiltshirei* sp. n.: 20 — head, 21 — forewing, 22 — male genitalia (holotype), 23 — aedeagus (holotype)

creamy-white mixed with brownish. Basal area darkened with yellow-brownish. Dorsal spot (in allotype and typoids a complete fascia, in dorsal part of the wing darker than in costal area) yellowish-brown in holotype, rusty-yellow in allotype. In terminal portion of the wing two broad fascias concolorous with the basal part of the wing. Fringes concolorous with ground, interrupted by yellow-brownish bars. In allotype costal edge darkened with yellow-brownish. In

external part of wing two small costal spots similar in colour. Hindwing in holotype white, yellow-white in peripheries. In allotype yellow-brownish spots in external area of the wing well visible. In typoids (two males) hindwings darker than in holotype, more yellowish slightly mixed with brownish. Length of forewing 8 mm.

Male genitalia (figs. 26, 27) very characteristic. Valva elongate, curved upwards, and slightly rounded terminally. Sacculus reaching end of ventral edge of valva, rather narrow, with a large ventral projection in distal portion. Tegumen proportionately smaller than in preceding species, delicately protruding terminally. Socii long, bilobed. Central part of transtilla broad, dentate. Aedeagus (fig. 27) rather narrow, slightly arched and narrowed towards the end; provided with numerous, small denticles in distal half. A single cornutus present.



Figs. 24—28. *Stenodes brandti* sp. n.: 24 — head, 25 — forewing, 26 — male genitalia (holotype), 27 — aedeagus (holotype), 28 — female genitalia (allotype)



Female genitalia (fig. 28). Lamella vaginalis rather narrow with well sclerotized arms. Ductus bursae short; bursa copulatrix very large. Numerous dentes and strongly sclerotized area in bursa present. In ductus bursae a rather small, more strongly sclerotized area. Gonapophyses anteriores longer than gonapophyses posteriores.

Holotype (♂): „Iran, Khorassan, Kouh-i-Binaloud (Meched), 2200 m. 15. VIII. 1938, leg. BRANDT“, G. Sl. 5719. Allotype (♀): „Iran, Elbursgebirge, Keredj, 1936, leg. BRANDT“, G. Sl. 5780. Typoids (2 ♂♂): „Labelled as holotype and taken on 15. and 19. VIII. 1938).

Holotype, allotype, and one typoid in coll. of Dr. H. G. AMSEL; one typoid (taken on 19. VIII) in author's coll.

Comments. *Stenodes brandti* sp. n. is very similar to the preceding species and *Stenodes armeniana* JOANN., however, differs in the shape of median fascia in the forewing and in the genitalia. The most characteristic of this species are socii and ventral projection of sacculus in male genitalia.

I name the new species in honour of Mr. F. BRANDT.

*Stenodes eburneana* KENN. — Fort Sine Sefid, Chiraz — Kazeroun Road, Fars, 2200 m., 1937 (BRANDT), 2 specimens.

### *Stenodes elegans* sp. n., ♂.

Labial palpi 2.4 times as long as diameter of an eye, white-greyish, laterally grey-yellowish (fig. 29). Front and tegulae white-greyish often with yellowish or yellow-brownish hue. Abdomen grey-brownish, rather pale. Costal edge of forewing (fig. 30) delicately concave in central portion; apex slightly protruding and rounded; termen oblique. Ground colour white-brownish, pale in holotype and two typoids, with a delicate yellow-rusty hue. Basal part of costa rusty-yellow coloured. In median portion of wing a slightly visible similar in colour fascia. In holotype and one of typoids three groups of rusty erect scales. In the rest of specimens these scales are ill-defined, concolorous with ground. External portion of wing with a yellow-rusty, delicate hue (chiefly on veins  $cu_1$ — $cu_2$ ). Fringes concolorous with ground, or with a yellowish hue. Hindwing brown-greyish, paler in its basal part than in peripheries, veins distinctly outlined with brownish. Fringes brown-greyish. Length of forewing in holotype 12 mm., in typoids 10—13 mm.

Male genitalia (figs. 31, 32). Valva rather broad, arched upwards, rounded terminally. Sacculus well developed; socii large. The shape of transtilla of taxonomic importance. Its central part in comparison with that in *Stenodes meridiana* STGR. decidedly thinner, more elongate. Aedeagus (fig. 32) rather evenly wide throughout; pointed. One long cornutus and an irregularly shaped sclerite in vesica present.

Comments. This species belongs to the subgenus *Parastenodes* RAZ., in which the differences in genitalia are very little. There are three groups of species according to the shape of transtilla, namely: 1. with large central part of trans-

tilla (e. g. *Stenodes meridiana* STGR.), 2. with narrow central part of transtilla (e. g. *S. mongolicana* RAG.), and 3. with well developed and elongated central part of transtilla as in the species in question. The coloration and shape of wings are characteristic of this group. The species under consideration resembles *S. mongolicana* RAG.

Holotype (♂): „Iran, Khorassan, Kouh-i-Binaloud (Meched), 2200 m., 15. VIII. 1938, leg. BRANDT“, G. Sl. 5769. Typoids (5 ♂♂) labelled as holotype (one of them genitally investigated, G. Sl. 5721).

Holotype and three typoids in the collection of Dr. H. G. AMSEL, two typoids in author's coll.

***Stenodes scrophulana* sp. n., ♂ ♀.**

Labial palpi 2.3 times as long as diameter of an eye, white, yellow-rusty laterally (fig. 33). Head and tegulae whitish, the rest of thorax white-yellowish. Forewing (fig. 34) rather evenly wide throughout. Costal edge almost straight, or slightly arched outwards; apex rounded; termen convex and oblique. Ground colour creamy-white, or (as in one typoid) white-yellow. Basal part of costa ochreous, median part from 1/5 to 3/4 provided with rusty-yellow spots. In external portion of this edge some similarly coloured, however, larger spots. Several large, brown-rusty coloured groups of erect scales on surface of the wing. A row of pale yellow-brownish spots (in holotype) on termen. Fringes concolorous with ground, with rusty ends. Hindwing semitransparent, white (in two typoids white-yellowish), fringes concolorous with ground colour of the wing. Length of forewing 9 mm. in holotype, 10.5 mm. in allotype, and 9—10 mm. in typoids.

Male genitalia (fig. 35, 36). Valva larger than in preceding species; sacculus also longer. Socii very large, poorly hairy. Central part of transtilla well developed, a little larger than in *Stenodes elegans* sp. n. Aedeagus (fig. 36) large, tapering terminad to a point. Cornutus small.

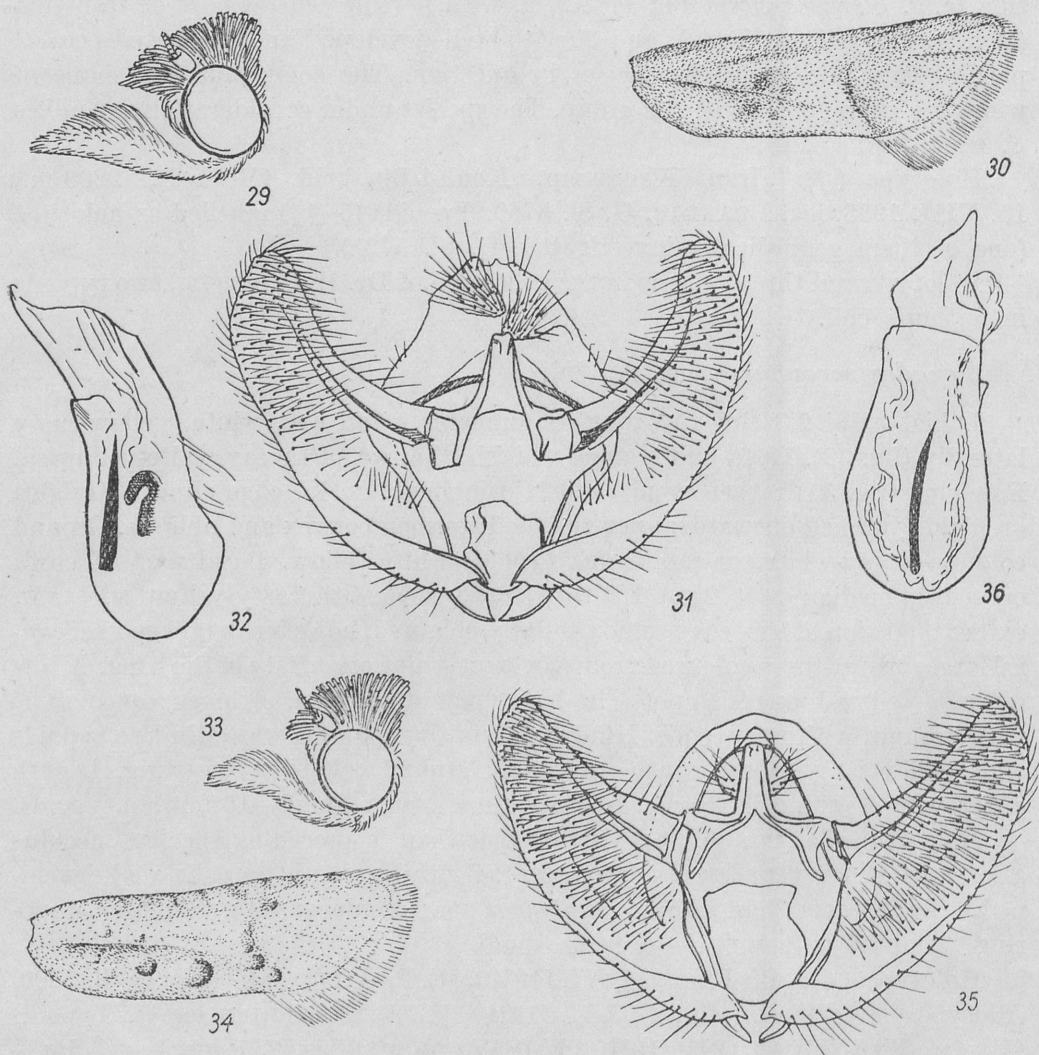
Holotype (♂): „Pir-i-Zan, 11. VI. [19]40, [E. P. WILTSHIRE leg.]“ G. Sl. 5800. Allotype (♀): „Sineh Safid, 27. VII. [19]40, [E. P. WILTSHIRE leg.]“. Typoids (5 ♂♂): „Pir-i-Zan, 11. VII. [19]40, [E. P. WILTSHIRE leg.]“, 1 specimen, „Pir-i-Zan, 15. VII. [19]40, [E. P. WILTSHIRE leg.]“, 3 specimens, and „Sineh Safid, 30. V. [19]40, [E. P. WILTSHIRE leg.]“, G. Sl. 5799, 1 specimen.

Types and 3 typoids in coll. of Dr. H. G. AMSEL; 2 typoids in author's coll.

Comments. This species is also referable to subgenus *Parastenodes* RAZ. It is genitally similar to the preceding species, however, different by the shape of wings and coloration.

***Stenodes pirizanica* sp. n., ♂ ♀.**

Labial palpi 1.5 times as long as diameter of an eye, pale-yellowish, yellow-brownish laterally (fig. 37). Front white-yellowish, the rest of the head and upper side of thorax more yellowish. Abdomen yellow-greyish. Forewing (fig. 38) slightly broadened towards the end. Costal edge delicately curved outwards;



Figs. 29—36. *Stenodes elegans* sp. n.: 29 — head, 30 — forewing, 31 — male genitalia (holotype), 32 — aedeagus (holotype); *Stenodes scrophulana* sp. n.: 33 — head, 34 — forewing, 35 — male genitalia (holotype) 36 — aedeagus (holotype)

apex rounded; temen oblique. Ground colour pale yellowish with a small addition of the ochre. In one of typoids ground colour intensively yellowish. Fringes concolorous with ground. Hindwing large, rounded, brown-greyish. Fringes whitish to white-greyish. Length of forewing in holotype 9.5 mm., in allotype 10.5 mm., and in typoids 9—11 mm.

Male genitalia (fig. 39, 40). Valva large; sacculus long. Socii elongate; central part of transtilla narrower than in both preceding species. Aedeagus (fig. 40) rather short, broad, and pointed terminally. One, long cornutus in vesica present.



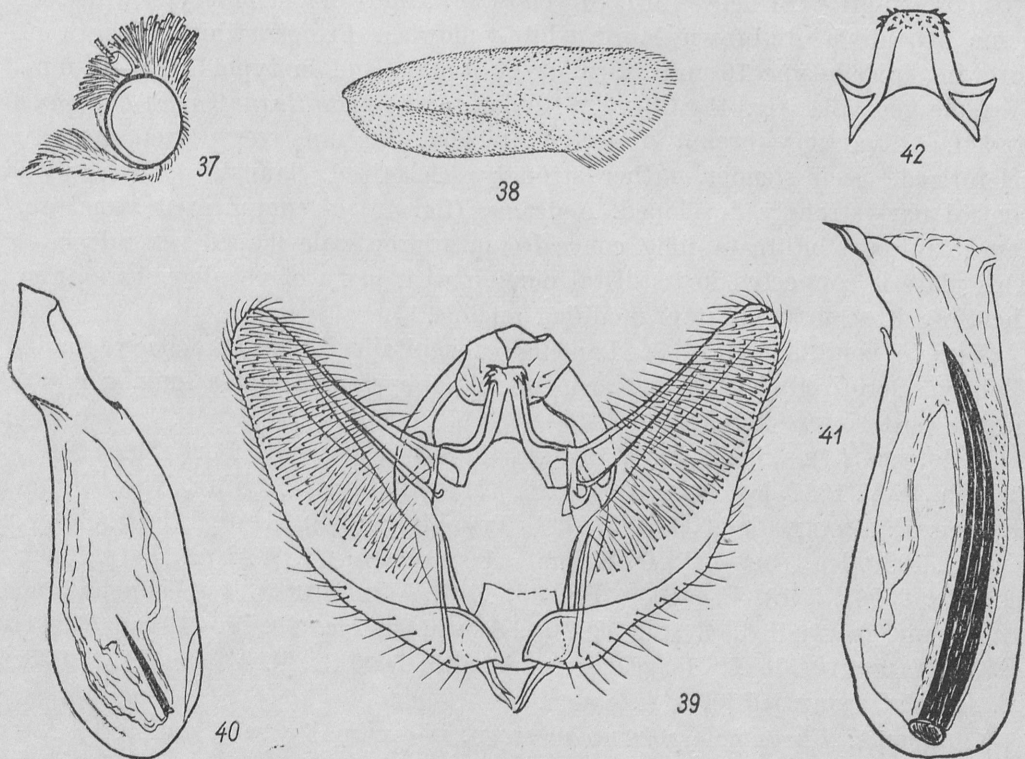
Holotypus (♂): „Pir-i-Zan, 28. V. [19]41, f. 106, [E. P. WILTSHIRE leg.]“, G. Sl. 5773. Allotypus (♀): „Muk Pass, Fars, 15. VI. [19]41, F. 118, [E. P. WILTSHIRE leg.]“. Typoids (3 ♂♂): „Pir-i-Zan, F. 106, 28. V. [19]41, [E. P. WILTSHIRE leg.]“, one of these with genitalia studied (G. Sl. 5774).

Holotype, allotype and one typoid in coll. of Dr. H. G. AMSEL, two typoids in author's coll.

Comments. This species in the shape of forewing resembles *Stenodes kurdistana* (AMSEL), **comb. nov.**, however, the two species differ in coloration and male genitalia. In *S. kurdistana* AMS. ground colour of the forewing is shiny ochreous, and in the aedeagus cornutus absent. I have not studied the female of this species and in *S. pirizanica* sp. n., as there are no differences in female genitalia in this group of species.

*Stenodes* sp. — Iran, Khorassan, Kouh i Binaloud (Meched), 1800 m., 1938, 1 specimen; Elburz Mts., Keredj, 4. IX. 1936, and 1. IX. 1936; two specimens also from Keredj dated 1936, all collected by BRANDT.

This species externally resembles *Stenodes meridiana* STGR., however, it is decidedly larger, and has different shape of wings. Forewing is more elongate



Figs. 37—42. *Stenodes pirizanica* sp. n.: 37 — head, 38 — forewing, 39 — male genitalia (holotype), 40 — aedeagus (holotype); *Stenodes* sp.: 41 — aedeagus („Iran, Elburs Gebirge, Keredj, 1. IX. 1936“, G. Sl. 5767), 42 — transtilla (the same specimen)

than in mentioned species, apex slightly rounded, termen decidedly oblique. In male genitalia aedeagus (fig. 41) in the species under consideration is larger than in *S. meridiana* STGR. and cornutus is three-quarters the length of aedeagus. I suppose that it is a distinct species, however, I am not able to solve this question until a revision of this subgenus is made. I figure aedeagus and transtilla of this species (fig. 41, 42).

*Euxanthoides iraniana* sp. n., ♂ ♀.

Labial palpi about as long as diameter of an eye (fig. 43). Head and palpi white, yellowish laterally. Upper side of thorax white-yellowish, sprinkled with brown-yellowish. Abdomen a little darker than thorax. Forewing (fig. 44) slightly broadened towards end. Costa rather straight, being concave in middle and before apex. Apex protruding, rounded. Termen straight, oblique. Ground colour white, however, base, costa and external portion of wing darkened with yellow or yellow-brownish. Dorsal margin paler than costa. Median fascia yellow-brownish, in costal area of the wing usually atrophied. In typoids small erect scales on median fascia, or at the end of median cell. Tornus often marked with brown-grey. Fringes white to yellowish. Hindwing in holotype white, in some typoids white-brownish, or white-yellowish. Fringes white. Length of forewing in holotype 10 mm., in allotype 9 mm., and in typoids 10—11 mm.

Male genitalia (fig. 45, 46) very similar to those in *Euxanthoides alternana* STEPH. Valva very broad, projected apically. Sacculus very large, heavily sclerotized. Socii slender, rather strongly sclerotized. Transtilla large, with central part strongly developed. Aedeagus (fig. 46) of complicated armature. Its central part bifurcate, long, concealed in a large scale-shaped ventral plate. This plate is connected in its distal portion with juxta of peculiar shape, and therefore it seems that it is modified anellus.

Female genitalia (fig. 47). Lamella subgenitalis large. Lamella vaginalis slightly sclerotized, with hairy arms. Gonapophyses anteriores long, gonapophyses posteriores short.

Holotype (♂): „Iran, Fars, Strasse Chiraz—Kazeroun, Fort Sine Sefid, 2200 m., 1. V. 1937, leg. BRANDT“, G. Sl. 5713. Allotype (♀): „Iran, Nisa, Elburs Gebirge, F. BRANDT leg.“, G. Sl. 5714. Typoids (7 ♂♂): „Iran, Elbursgebirge, Keredj, 1936, leg. BRANDT“, G. Sl. 5801, 1 specimen; „S. W. Iran, Fars, Sineh Safid, c. 6500 ft., 19. V. [19]50, FF. 53, E. P. WILTSHIRE“, 4 specimens (one with genitalia studied, G. Sl. 5802); „Tehran steppe, 20. V. [19]39, T. 14, [E. P. WILTSHIRE leg.]“ 1 specimen; „Alvand, 7000 ft., P. 37, 21. VI. [19]38, [E. P. WILTSHIRE leg.]“, 1 specimen.

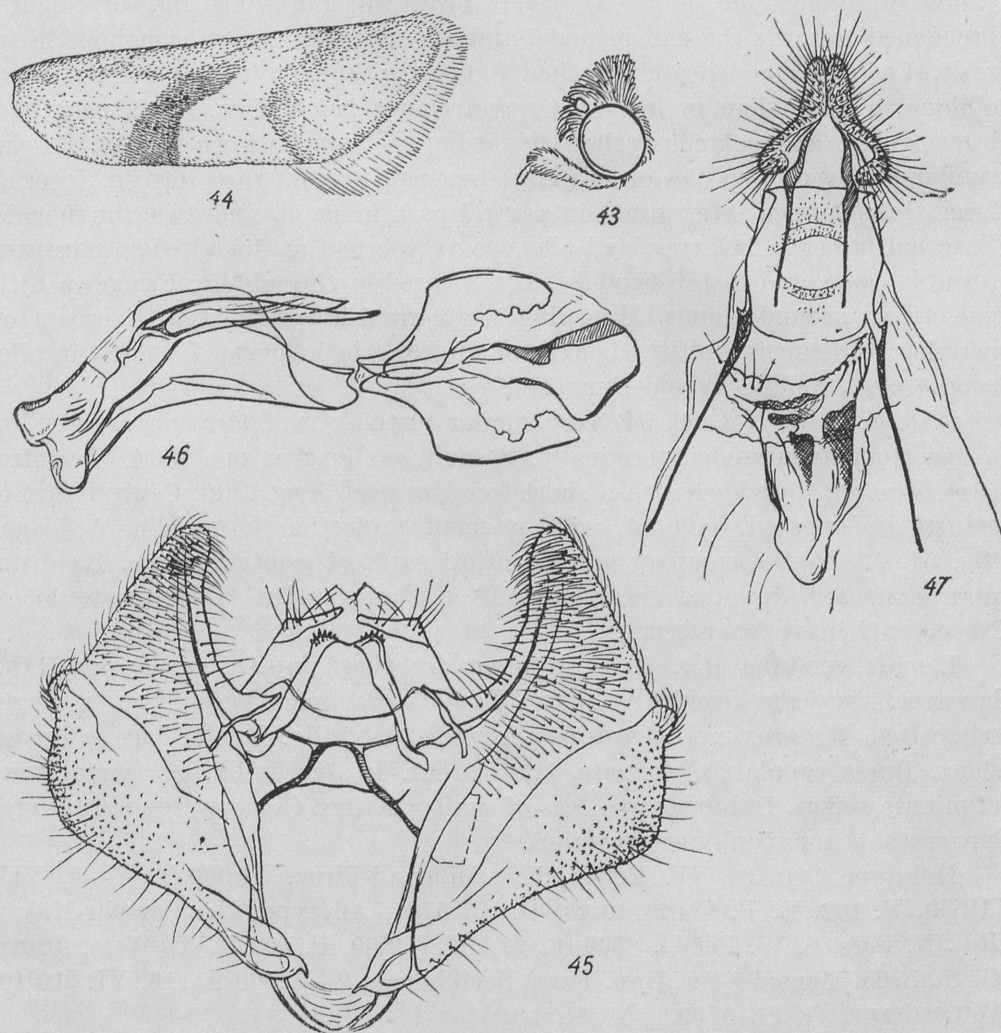
Comments. *Euxanthoides iraniana* sp. n. is externally very similar to *Euxanthoides anticiphys* (MEYRICK), **comb. nov.** and *Cochylis diana* KENNEL. The coloration of it agrees with a short description given by A. CARADJA (1916) for „*Euxanthis hilarana* var. *albidana* CARADJA“. However, it is genitally comparable with MEYRICK's species only. The differences between both species

are in the shape of aedeagus, which in mentioned species has central part not bifurcate, and cornuti are present. In female genitalia lamella vaginalis is differently shaped in this species, more strongly sclerotized, and narrower. In examined material of typoids there are two groups according to the length and sclerotization of socii. This question might be solved after a study of a larger material.

*Euxanthoides straminea* HAW. — Keredj, Elburz Mts., 8. V. 1936 (BRANDT), 1 specimen.

*Aethes moribundana respirantana* STGR. — Alvand, ca 7000 ft., 20. VII. 1938, 1 specimen; Muk Pass, Fars, ca 6500 ft., 9. VI. 1950, 1 specimen.

*Aethes margarotana* DUP. — Kouh-i-Taftan (Khach), 2500 m., 1938 (BRANDT), 1 specimen.



Figs. 43—47. *Euxanthoides iraniana* sp. n.: 43 — head, 44 — forewing, 45 — male genitalia (typoid, G. Sl. 5802), 46 — aedeagus with juxta (the same specimen), 47 — female genitalia (allotype)



*Aethes spirana* KENN. — Kouh-i-Taftan (Khach), 2500 m., 15. V. 1938, (BRANDT), 1 specimen.

?*Aethes pardaliana* KENN. — Khorassan, Kouh-i-Binaloud (Meched), 2200 m. 15. VIII. 1938 (BRANDT), 1 specimen.

This species differs from the known to me specimens of *Ae. pardaliana* KENN. by yellow-brownish, slightly contrasted pattern of forewing. Ground colour of forewing white; hindwing transparent, white.

*Aethes persica* sp. n., ♂ ♀.

Labial palpi twice as long as diameter of an eye, pale yellowish coloured (fig. 48). Sides of labial palpi and head a little darker, yellow-brownish. Front yellowish; upper side of thorax yellow-brownish. Forewing (fig. 49) slightly broadened towards the end in male, and about evenly wide throughout in female. Costal edge delicately arched outwards; apex rounded; termen more oblique in male than in female. Ground colour pale-yellow. Costa near base brown-rusty, and ochreous-yellow in median portion between fascias. Fascias similar to those in species of subgenus *Lozopera* STEPH., rusty-brown. Internal fascia broad, once interrupted in central part in male, and twice in female. External fascia in holotype and allotype very broad at dorsal edge, narrowed towards costa, and in the typoid it is narrowed in the middle. Fringes a little paler than ground colour. Hindwing white-greyish sprinkled with brown on peripheries. Fringes whitish. Length of forewing in holotype 7.5 mm., in allotype 8 mm., and in typoid 5 mm.

Male genitalia (fig. 50, 54) very similar to those in *Aethes cremonana* RAG. Valva elongate, rounded terminally. Sacculus as long as one third of ventral edge of valva, provided with a short free tip. Socii long, thin. Central part of transtilla elongated, pointed, with a small projection in middle. Aedeagus (fig. 51, 53) in the comparison with other parts of genitalia large. Its distal part elongated, rounded terminally. In central portion two dentate lobes. No cornuti in vesica present.

Female genitalia (fig. 55) also resembles those in *Ae. cremonana* RAG., however, they are decidedly larger. Lamella vaginalis very large, strongly sclerotized. Its proximal edge broad, rounded laterally. Ductus bursae broad, short. Bursa copulatrix elongate, transparent. In ductus bursae several rows of minute spikes. In bursa two areas of similar dentes. Gonapophyses anteriores longer than gonapophyses posteriores.

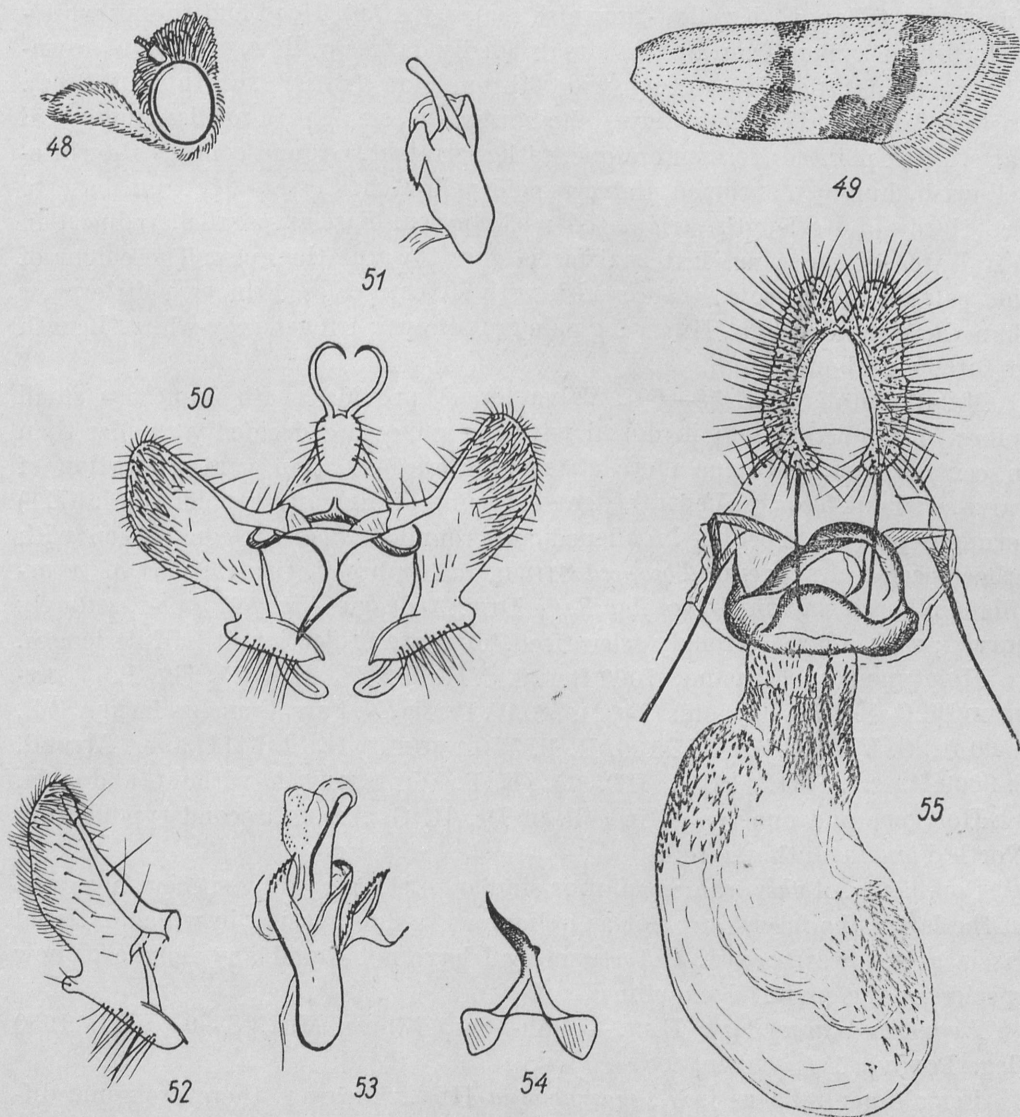
Holotype (♂): „S. W. Persia, Fars, Barm-i-Firuz, 10000 ft., 8—9. VII. [19]50, F. 102, E. P. WILTSHIRE“, G. Sl. 5704. Allotype (♀): „Comehr-Kakan Rd., N. Fars, S. W. Persia, 8500 ft., 9. VII. [19]50, F. 102, E. P. WILTSHIRE“, G. Sl. 5705. Typoid (♂): „Iran, Fars, Barfkhaneh, 9—12000 ft., 16. VI. [19]40, WILTSHIRE“, G. Sl. 5709.

Holotype and allotype in coll. of Dr. H. G. AMSEL, typoid in author's coll.

Comments. Externally this species resembles *Aethes* (*Lozopera*) *flagellana* DUP., or other species of this group. Genitally it differs from this subgenus

by the shape of transtilla and aedeagus in male genitalia, and by lamella vaginalis and dentation of ductus bursae and bursa in female genitalia. However, coloration of forewing in this species and in *Aethes cremonana* RAG. is different, the male genitalia of the two being very similar to each other. In female genitalia the differences between both species are in shape of proximal edge of lamella vaginalis.

*Aethes flagellana* DUP. — Pir-i-Zan, 11. Vi. 1940, 2 specimens; Sineh Safid, 27. VII. 1940, 1 specimen.



Figs. 48—55. *Aethes persica* sp. n.: 48 — head, 49 — forewing, 50 — male genitalia (holotype), 51 — aedeagus (holotype), 52 — valva (typoid), 53 — aedeagus (typoid), 54 — transtilla (typoid), 55 — female genitalia (allotypus)

*Aethes kasyi* RAZ. — Shiraz Mts., Fars, 7000 ft., 8. IX. 1950, 1 specimen; Shiraz gardens, 5000 ft., 24. IV. 1950, 1 specimen.

I found this species in the material received from Dr. H. G. AMSEL from Afghanistan, where it has been collected at altitude of 950 m. in second half of March. The above mentioned specimen collected in September belongs to second generation.

*Aethes iranica* sp. n., ♂.

Labial palpi twice as long as diameter of an eye, white-yellowish. Lateral sides more yellow with yellow-brownish scales (fig. 56). Head and thorax white-yellowish, in typoid from North Fars decidedly darker, yellow, or yellow-brownish. Forewing (fig. 57) evenly wide throughout (with exception of base). Costa in basal portion delicately arched outwards, straight in median and apical parts. Apex pointed; termen oblique, rather straight. Ground colour pale white-yellowish, but in mentioned above typoid yellowish. Costal edge from base to two thirds of its length strigulated with brown. Fascias parallel, reduced in costal area of the wing. External fascia goes towards the apex. The colour of this pattern rusty-brown to brownish with silvery scales. Fringes a little paler than the ground colour. Hindwing pale grey-brown; fringes grey-white. Length of forewing about 9 mm.

Male genitalia (fig. 58—60). Valva broad, provided with numerous small spikes in subdistal area; in dorsal part the spikes are decidedly smaller than in central part. Sacculus more strongly sclerotized than ventral portion of valva, without free tip. Ventral edge of sacculus straight. In typoid (G. Sl. 5711) terminal part of sacculus broadened and rounded. Socii in comparison with other species of subgenus *Lozopera* STEPH. rather broad. Central part of transstilla similar to that in *Aethes flagellana* DUP. Aedeagus (fig. 59) broad, strongly curved; with a large, strongly sclerotized, bifurcate projection at half its length.

Holotype (♂): „Alvand, 7000 ft. 20. VII. [19]38, HP. 75, [E. P. WILTSHIRE]“, G. Sl. 5703. Typoids (2 ♂♂): „S. W. Persia, N. Fars, Comehr- Kakan Rd., 8500 ft., 9. VII. [19]50, FF. 106, E. P. WILTSHIRE“, G. Sl. 5711, and „Alvand, c. 9000 ft., 27. VII. [19]38, HP. 75, [E. P. WILTSHIRE]“, without abdomen.

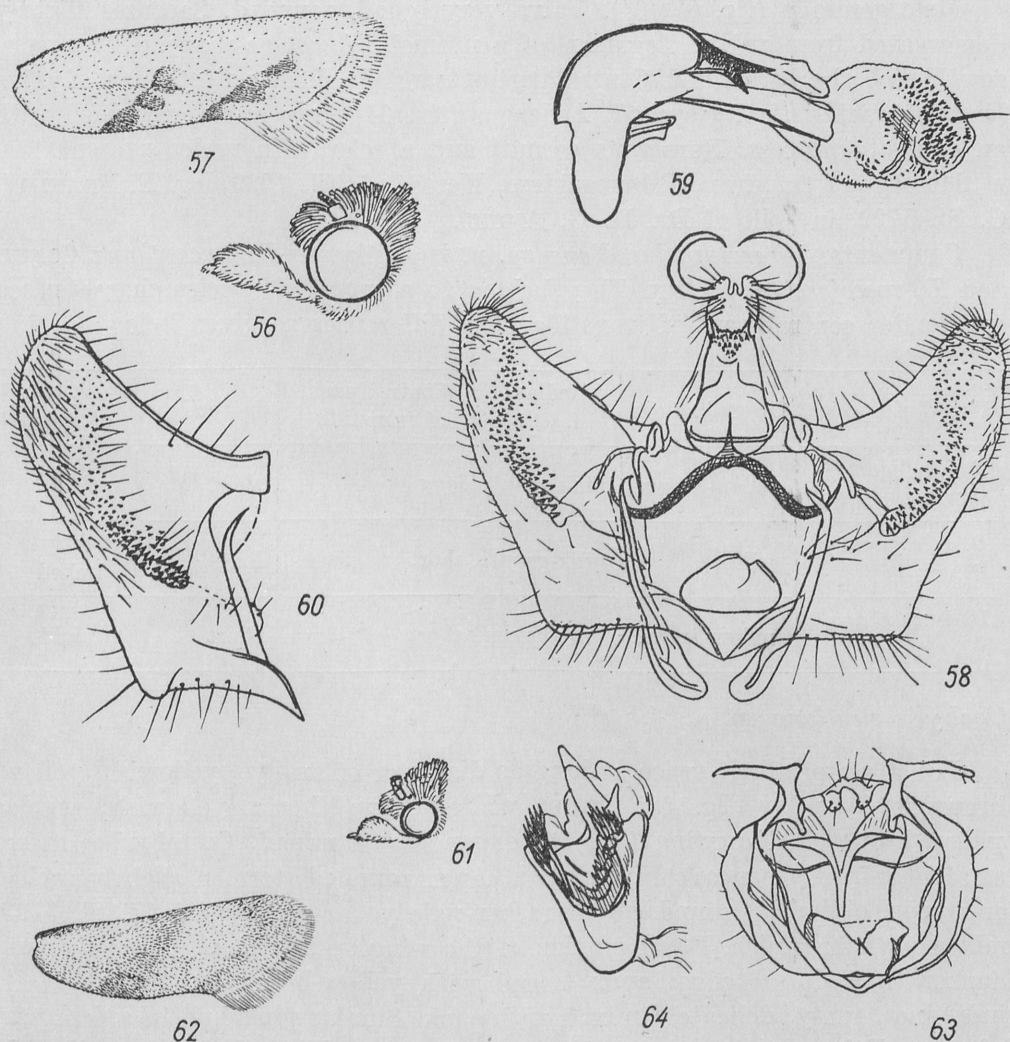
Holotype and one typoid in coll. of Dr. H. G. AMSEL, second typoid from North Fars in author's coll.

Comments. *Aethes iranica* sp. n. is similar to the preceding species, however, in the latter the fascias are not as oblique as in new species, in which external fascia goes towards apex. Unfortunately I have not found any female of new species in the material examined.

*Eugnosta margaritana* HBN. — Gah-i-Sar, Elburs Mts., 8—9. VIII. 1950 (leg. POPOV), 1 specimen.

Female genitalia as in *E. margaritana* HBN., however, there are some differences in forewing. Unfortunately in this very large-sized specimen the pattern of forewing is partially wiped, and therefore I cannot compare it with that in other species.





Figs. 56—64. *Aethes iranica* sp. n.: 56 — head, 57 — forewing, 58 — male genitalia (holotypus), 59 — aedeagus (holotypus), 60 — valva (typoid, G. Sl. 5811); *Diceratura keredjana* sp. n.: 61 — head, 62 — forewing, 63 — male genitalia (holotype), 64 — aedeagus (holotype)

***Diceratura keredjana* sp. n., ♂.**

Labial palpi 2.3 times as long as diameter of an eye, white-brownish, darker laterally than in upper side (fig. 61). Front white; thorax pale brown-white. Costa of forewing usually straight, apex rounded; termen oblique. Ground colour rather pale, yellow-brownish. Costa sprinkled with pink-grey at base. Median fascia pink, diffuse. External portion of wing with slight pink hue. Fringes pale yellowish. Hindwing brown-greyish, pale basally. Fringes white-grey. Length of forewing 5 mm.

Male genitalia (fig. 63, 64). Valva very broad, rounded. Sacculus slightly demarcated from valva. Tegumen of a normal *Diceratura*-shape. Uncus very small; socii short, rounded. Central part of transtilla slender. Costal part of valva long, characteristically arched. Aedeagus (fig. 64) very broad, provided with an elongate process. Numerous cornuti and a sclerite in vesica present.

Holotype (♂): „Iran, Elbursgebirge, Keredj, 6. VI. 1939, leg. F. BRANDT“, G. Sl. 5722, in coll. of Dr. H. G. AMSEL.

Comments. *Diceratura keredjana* sp. n. is similar to *D. leucanthana* CONST. and *D. roseofasciana* MANN. They belong to a group of species characterized by slender central part of transtilla. The differences as given below:

Name of species	Ground colour	Median fascia	Central part of transtilla	Socii	Cost. part of valva
<i>D. keredjana</i> sp. n.	yellow-brown	pink-grey	long	short	arched
<i>D. roseofasciana</i> MANN	yellow	pink-grey	short	long	slightly arched
<i>D. leucanthana</i> CONST.	yellow-brown	grey-brown	short	short	straight

***Cochylis similana* sp. n., ♂.**

Labial palpi about twice as long as diameter of an eye, yellowish, yellow-brownish laterally (fig. 65). Front white-yellow; thorax yellowish; tegulae yellow-brownish. Forewing (fig. 66) expanding terminad. Costal edge rather straight, slightly concave before apex. Apex rounded; termen slightly arched outwards, oblique. Ground colour rather pale yellow; in typoid (G. Sl. 5793) mixed with brownish. Basal portion of the wing sprinkled with brown; costa darker than dorsal edge; apex tinged with yellow-brownish. Median fascia indistinct, rusty, delicately mixed with pink. Similar pink hue in apical part of wing. Fringes a little paler than ground colour. Hindwing white-yellowish, darker on peripheries than in central area. Fringes concolorous with ground colour in central part of the wing. Length of forewing 10 mm.

Male genitalia (fig. 67, 68). Valva elongate; sacculus large, strongly sclerotized, provided with a small terminal projection. Tegumen broad; in membranous scaphium large, thickly hairy socii. Transtilla slender with an elongated and pointed central part. Aedeagus (fig. 68) long, tapering terminated to a point. Numerous cornuti in vesica present.

Holotype (♂): „Iran, Barfkhaneh nr. Yezd, 9—12 000 ft., VI. [19]40, E. P. WILTSHIRE“, G. Sl. 5766. Typoids (4 ♀♂): „Barfkhaneh nr. Yezd, Sunset 12 000 ft., 5. VI. [19]40“, 3 specimens without abdomens, and one specimen as labelled as the holotype, G. Sl. 5793.

Holotype and three typoids in coll. of Dr. H. G. AMSEL, one typoid (G. Sl. 5793) in author's coll.

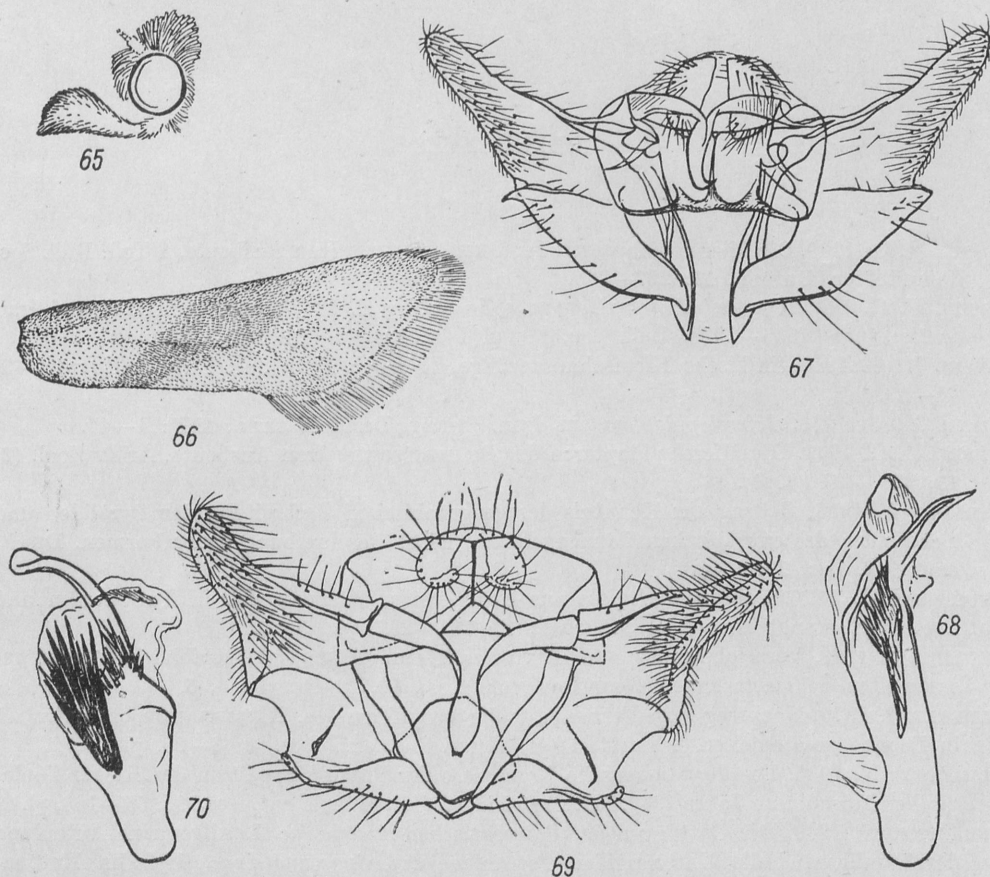
Comments. This species is externally nearly identical with *Cochylis amoenana* KENNEL, especially with some examples of BRANDT's collection from Iran. It differs from the mentioned species by the pale yellow colour of the head and by the genitalia. In *Cochylis amoenana* KENN. the central part of transtilla is very large, strongly sclerotized, and the aedeagus is shorter than in the new species and rounded terminally.

*Cochylis amoenana* KENN. — Kouh-i-Binaloud (Meched), Khorassan, 2200 m., 15. VII. 1938, 5 specimens, and 8. VIII. 1938, 1 specimen (BRANDT).

*Cochylis subposterana* TOLL — Kouh-i-Binaloud (Meched), Khorassan, 2200 m., 15. VII. 1938, 2 specimens, and 15. VIII. 1938, 1 specimen (BRANDT).

*Cochylis pseudefessana* RAZ. — Pir-i-Zan, 15. VII. 1941, 27. VII. 1941, and 28. V. 1941; Alvand, c. 7000 ft., 20. VII. 1938, 4 specimens; Khan-i-Zinian, 20. IX. 1940, 4 specimens.

*Cochylis defessana* MANN — S. Elburz, 28. V. 1939, 4 specimens.



Figs. 65—70. *Cochylis similana* sp. n.: 65 — head, 66 — forewing, 67 — male genitalia (holotypus), 68 — aedeagus (holotypus); *Cochylis suleimana* (OSTH.): 69 — male genitalia („Iran, Elbursgebirge, Nissa, 4000 m., 10. VII. 1939, coll. BRANDT“, G. Sl. 5715), 70 — aedeagus (the same specimen)



*Cochylis* sp. — Barfkhaneh nr. Yezd, 12000 ft., sunset, 5. VI. 1940, 2 specimens.

Genitalia as in *C. defessana*-group; in coloration resembling rather *Cochylis posterana* ZELL., however, the shape of forewing is a little different. The bad condition of the two studied specimens does not allow an accurate determination.

*Cochylis suleimana* Osth. — Elburz Mts., Nisa, 4000 m., 10. VII. 1936 (BRANDT), 1 specimen.

The studied specimen seems to be a rather intermediate one between *Cochylis maestana* KENN. and the type of *C. suleimana* Osth. I figure its genitalia for comparison (fig. 69).

*Cochylis posterana hyrcana* TOLL — Chiraz — Kazeroun Rd., Ford Sineh Safid, Fars, ca. 2200 m., 3. V. 1937 (BRANDT), 1 specimen; Alvand, ca. 9000 ft., 30. VI. 1938, 1 specimen; Alvand, 27. VII. 1938, 4 specimens; To-Chal, Elburz Mts., 10000 ft., 24. VII. 1943, 1 specimen.

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## STRESZCZENIE

Autor wykazuje 60 gatunków zwójkówek (*Tortricidae* i *Cochylidae*) znajdujących się w zbiorze dra H. G. AMSEL'A, łowionych przez E. P. WILTSHIRE'A i F. BRANDTA w Iranie. Jako nowe dla nauki zostały opisane następujące gatunki: *Eucosma persiae* sp. n., *Zeiraphera smaragdina* sp. n., *Epinotia safidana* sp. n., „*Gypsonoma*“ *ochrotona* sp. n., *Stenodes wiltshirei* sp. n., *S. brandti* sp. n., *S. elegans* sp. n., *S. scrophulana* sp. n., *S. pirizanica* sp. n., *Euxanthoides iraniana* sp. n., *Aethes persica* sp. n., *Ae. iranica* sp. n., *Diceratura keredjana* sp. n. i *Cochylis similana* sp. n. Ponadto zostały omówione typy trzech gatunków *Cochylidae* opisanych z Iranu przez L. OSTHELDERA.

## PEZIOME

Автор представляет 60 бидов (*Tortricidae* и *Cochylidae*) находящийся в сборе др. X. Г. АМСЕЛА (H. G. AMSEL), пойманных Вильтширом (E. P. WILTSHIRE) и Брандтом (F. BRANDT) в Иране. Как новые для науки описаны следующие виды: *Eucosma persiae* sp. n., *Zeiraphera smaragdina* sp. n., *Epinotia safidana* sp. n., „*Gypsonoma*“ *ochrotona* sp. n., *Stenodes wiltshirei* sp. n., *S. brandti* sp. n., *S. elegans* sp. n., *S. scrophulana* sp. n., *S. pirisanica* sp. n., *Euxanthoides iraniana* sp. n., *Aethes persica* sp. n., *Ae. iranica* sp. n., *Diceratura keredjana* sp. n., *Cochylis similana* sp. n. Кроме того поданы типы трёх бидов *Cochylide*, описанные Л. Остелбером (L. OSTHELDER) из Ирана.

Redaktor zeszytu: doc. dr S. Bleszyński

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Nakład 800+100 egz. — Ark. wyd. 2,25 — Ark. druk. 1 <sup>12</sup>/<sub>16</sub> — Papier ilustr. kl. III 80 g 70×100  
Zam. 175/63

Cena zł 12,—

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DRUKARNIA UNIWERSYTETU JAGIELLOŃSKIEGO W KRAKOWIE