

Contributions to the knowledge of the Noctuidae (Lepidoptera) fauna of the NE Caucasus II.*

by B. HERCZIG, Tata, L. RONKAY, Budapest, A. M. BATHIEV, I. I. GIZATULIN,
T. S. KOROLJ, T. Y. TOCHIEV & D. I. UZAHOV, Groznyi

HERCZIG, B., RONKAY, L., BATHIEV, A. M., GIZATULIN, I. I., KOROLJ, T. S., TOCHIEV, T. Y. & UZAHOV, D. I.: Contributions to the knowledge of the Noctuidae (Lepidoptera) fauna of the NE Caucasus II. - *Annls hist.-nat. Mus. natr. hung.* 1990, 83: 000-000.

Abstract - An annotated list of 130 Noctuidae species, with the descriptions of *Cryphia uzahovi* sp. n. and *Amphipoea aslanbeki* sp. n. from the NE Caucasus are given. In some cases comments are made on their faunistical and zoogeographical importance. With 22 figures.

INTRODUCTION

Within the framework between the Tolstoy State University, Groznyi and the Plant Health and Soil Conservation Station, County Komárom, Tata, the third joint expedition was completed in September, 1990. We planned to investigate the less known autumnal fauna of this range, since only scarce data of the autumnal noctuid species had been published from the northern territories of the Caucasus, based on the collectings of RJABOV in Daghestan.

List of the localities; abbreviations:

F = USSR, CHIASSR, Furtoug, 1100 m, 17-21. IX. 1990.

T = USSR, CHIASSR, Torgim, 1180 m, 19. IX. 1990.

P = USSR, CHIASSR, Shkolniy pereval, 2100 m, 20. IX. 1990.

B = USSR, CHIASSR, Voskresenskoye, Budari Lakes, 23-25. IX. 1990.

A = USSR, CHIASSR, Kezenoy-am, 1700-2200 m, 11-14. IX. 1990.

SYSTEMATIC PART

Heliothis armigera (HÜBNER, [1803-1808]) A.

Heliothis peltigera ([DENIS ET SCHIFFERMÜLLER], 1775) F, T.

Protoschinia scutosa ([DENIS ET SCHIFFERMÜLLER], 1775) B.

Euxoa (Chorizagrotis) lidia adumbrata (EVERSMANN, 1842) A.

Euxoa (Euxoa) agricola (BOISDUVAL, 1829) T.

Euxoa (E.) distinguenda (LEDERER, 1857) F. - The specimens, similarly to the C Armenian ones, are very large, dark and contrastly marked. The subspecific segregation of the *distinguenda*-complex is not clear, the full revision of the group is needed.

Euxoa (E.) ochrogaster rosica STAUDINGER, 1881 A, F.

Euxoa (E.) segniliis cortii (F. WAGNER, 1930) B.

* Results of the Chechen-Ingous -- Hungarian Zoological expeditions, No.6.

Euxoa (E.) nigricans (LINNAEUS, 1761) F.

Euxoa (E.) cos (HÜBNER, [1823-1824]) F.

Euxoa (E.) decora ([DENIS et SCHIFFERMÜLLER], 1775) F, A.

Euxoa (E.) kuruschensis BOURSIN, 1940 F. (Fig. 16)

Euxoa (E.) sp. A. - The problem of the *decora-kuruschensis*-complex is introduced in the first part of our series. We were lucky to collect a good series of specimens of this taxon, which was formerly known by a single male. It occurs sympatrically with a real *decora* population since the *kuruschensis* (agreeing with the specimens from the Kurush Dagh) appears in this place in the summer period (end of July-beginning of August). It is not impossible that the dark, *kuruschensis*-like specimens from Furtoug belong also to this species as the structure of the antennae is exactly the same. The revision of the *decora-heringi* group is under preparation by Professor Z. VARGA, a more detailed analysis of the NE Caucasus material will be given in his work. A typical specimen of this taxon is illustrated on Fig. 15.

Euxoa (E.) recussa (HÜBNER, [1814-1817]) A, F, P.

Agrotis clavis (HUFNAGEL, 1766) ssp. A.

Agrotis ipsilon (HUFNAGEL, 1766) A, F, T.

Agrotis segetum ([DENIS et SCHIFFERMÜLLER], 1775) A, F, T.

Agrotis vestigialis (HUFNAGEL, 1766) B.

Dichagyris candelisequa ([DENIS et SCHIFFERMÜLLER], 1775) A.

Dichagyris musiva (HÜBNER, [1800-1803]) A, T.

Dichagyris flammatrix ([DENIS et SCHIFFERMÜLLER], 1775) F.

Dichagyris forcipula "amasina" (F. WAGNER, 1929) A. - The short series from the Kezenoy-am contains, besides the typical *amasina*, some specimens which are very similar to the C European, "normal" *forcipula*.

Actebia praecox (LINNAEUS, 1758) F.

Ochropleura plecia (LINNAEUS, 1761) F, T.

Parexarnis taurica STAUDINGER, 1879 A, B. - The specimens of the species, abundant in the NE part of the Caucasus, agree well with the holotype female of *taurica*. The configuration of the male genitalia of *taurica* from the Caucasus shows only minute differences as compared with the specimens of *pseudosollers* (BOURSIN, 1940). We think that the suspicion of BOURSIN about his newly described taxon is correct ("Es ist nicht ausgeschlossen, dass diese Art, die ich als neu beschreibe, nur eine Form der *Rh. taurica* STGR. ...") and we consider *pseudosollers* as the western subspecies of *taurica* (*Parexarnis taurica pseudosollers* BOURSIN, 1940, stat. n.).

Protexarnis squalida (GUENÉE, 1852) A.

Standfussiana lucerneae (BOISDUVAL, 1840) ssp. (?n.) A. (Fig. 17) - The collected material consists of four females in relatively good condition. The specimens differ from all the known races by a series of features: the very light and shiny, whitish-grey ground colour with some ochreous and bluish shade, the dark and narrow, moon-shaped reniform (the other markings are diffuse, pale grey). The hind wings are strongly suffused with grey-brown, the milk-white ground colour is restricted to an irregular patch at the inner margin and a narrow stripe at the outer edge; the cilia are clear white. The underside of both wings is clean ochreous-white, the cell of the fore wing, some parts of the postmedial line are darker greyish, the marginal area of the hind wing is scarcely irrorated with grey. This *lucerneae*-population significantly differs from the geographically nearest ones (*kuruschicola* BOURSIN, 1940, *elbursica* BOURSIN, 1963) and also from the Balkan races by both the colouration and markings. The most similar populations inhabit C Anatolia (vicinity of Ankara, Cappadocia), but they have also conspicuously darker colouration of both sides. As the collected material contains only females of this taxon, we desist to describe here this, very probably distinct race.

Rhyacia (Epipsilia) grisescens (FABRICIUS, 1794) A, F, P.

Rhyacia (Rhyacia) lucipeta ([DENIS et SCHIFFERMÜLLER], 1775) A.

Rhyacia (R.) nyctymerides (BANG-HAAS, 1922) A.

Rhyacia (R.) simulans (HUFNAGEL, 1766) F, T.

Chersotis (Chersotis) multangula (HÜBNER, [1800-1803]) A, F.

Chersotis (C.) anatolica (DRAUDT, 1936) A, F.

Chersotis (C.) alpestris ponticola (DRAUDT, 1936) A, F, T.

Chersotis (C.) serrana (PÜNGELER, 1906) A, F.

Chersotis (C.) capnitidis (LEDERER, 1871) A. - First record of this xerophilous W Palearctic species, distributed locally from Greece to the Ural Mts and Transcaspia, from the Caucasus range.

Chersotis (C.) cuprea ([DENIS et SCHIFFERMÜLLER], 1775) A.

- Chersotis (C.) fimbriola* (ESPER, [1803]) A. - This record refers to two fresh specimens (a pair), displaying close affinity with the ssp. *raddei* (CHRISTOPH, 1877).
- Chersotis (C.) margaritacea* (de VILLERS, 1798) F.
- Chersotis (Cyrebia) luperinoides* (GUENÉE, 1852) A.
- Ledereragrotis multifida* (LEDERER, 1870) A, F.
- Noctua orbona* (HUFNAGEL, 1766) F, T, B.
- Spaelotis ravida* ([DENIS et SCHIFFERMÜLLER], 1775) B.
- Peridroma saucia* (HÜBNER, [1821]) F, T.
- Eugnorisma depunctum* (LINNAEUS, 1761) F.
- Xestia ashworthii ?artvina* HACKER et DEFREINA, 1985 A.
- Xestia baja* ([DENIS et SCHIFFERMÜLLER], 1775) A, F, T.
- Xestia cohæsa* (HERRICH-SCHAEFFER, 1849) B. (Fig. 18.) - Two female specimens with very dark, blackish-brown ground colour and yellowish markings; the configuration of the genitalia shows no differences in comparison with the Balkan populations. (Slide No. 3774 Ronkay.)
- Xestia trifida* (FISCHER von WALDHEIM, 1820) B. - Two males.
- Anaplectoides prasina* ([DENIS et SCHIFFERMÜLLER], 1775) F, P, T.
- Eurois occulta* (LINNAEUS, 1758) T, P.
- Mesogona oxalina* (HÜBNER, [1800-1803]) T.
- Discreta stignosa* (CHRISTOPH, 1887) B.
- Lasionycta proxima* (HÜBNER, [1808-1809]) A, F, T, P.
- Polia serratilinea* (TREITSCHKE, 1825) A.
- Heliothis reticulata* (GOEZE, 1781) A.
- Mamestra (Lacanobia) oleracea* (LINNAEUS, 1758) B.
- Hadena clara* (STAUDINGER, 1901) A, F.
- Cerapteryx megalia tugani* RONKAY, 1990 A. - Further four males.
- Tholera cespitis armena* HACKER, 1986 A, F, B.
- Tholera hilaris* (STAUDINGER, 1901) B.
- Mythimna (Aletia) congrua* (HÜBNER, [1814-1816]) B.
- Mythimna (A.) conigera* ([DENIS et SCHIFFERMÜLLER], 1775) A.
- Mythimna (A.) l-album* (LINNAEUS, 1767) A.
- Mythimna (A.) vitellina* (HÜBNER, [1803-1808]) F, T, B.
- Pseudaletia unipuncta* (HAWORTH, 1809) T, F.
- Leucania zea* (DUPONCHEL, 1827) B.
- Acantholeucania loreyi* (DUPONCHEL, 1827) F, T.
- Cucullia* spp. larvae.
- Brachylomia viminalis* (FABRICIUS, 1776) F.
- Dasypolia templi armeniaca* RONKAY et VARGA, 1986 F. - A single male specimen.
- Aporophila lutulenta* ([DENIS et SCHIFFERMÜLLER], 1775) B.
- Dryobotodes eremita* (FABRICIUS, 1775) F.
- Antitype chi* (LINNAEUS, 1758) F.
- Ammoconia caecimacula* ([DENIS et SCHIFFERMÜLLER], 1775) F.
- Eupsilia transversa* (HUFNAGEL, 1766) F.
- Conistra rubiginea* ([DENIS et SCHIFFERMÜLLER], 1775) B.
- Agrochola (Sunira) circellaris* (HUFNAGEL, 1766) F.
- Agrochola (Alpichola) egorovi* (BANG-HAAS, 1934) F. - The westernmost known locality in the Caucasus; only one male specimen was collected.
- Agrochola (Anchoscelis) luteogrisea* (WARREN, 1911) F. - The species has recently been separated from the similar *A. litura* (LINNAEUS, 1761) and reported from the USSR only from "SU Transkaukasien" (HACKER, 1990).
- Xanthia (Xanthia) togata* (ESPER, 1788) A, F.
- Xanthia (Cirrhia) icteritia* (HUFNAGEL, 1766) F.
- Xanthia (Tiliacea) citrago* (LINNAEUS, 1758) F.
- Acronicta (Viminia) euphorbiae* ([DENIS et SCHIFFERMÜLLER], 1775) A, F.
- Cryphia (Bryophila) uzahovi* RONKAY et HERCZIG sp. n. A, F. - Described in the following chapter.
- Cryphia (Bryoleuca) raptricula* ([DENIS et SCHIFFERMÜLLER], 1775) F.
- Amphipyra tragopoginis* (CLERCK, 1759) F.
- Phlogophora meticulosa* (LINNAEUS, 1758) F, T.

- Mycteroplus puniceago* (BOISDUVAL, 1840) B. - A typical steppe-species, distributed from the Balkan area to Turkmenia and the Ferghana basin; a single female specimen came to the light.
- Enargia paleacea* (ESPER, 1788) P.
- Cosmia affinis* (LINNAEUS, 1767) B.
- Auchmis detersa* (ESPER, 1791) A.
- Apamea monoglypha* (HUFNAGEL, 1766) F.
- Apamea furva* ([DENIS et SCHIFFERMÜLLER], 1775) A, F, T.
- Apamea ferrago* (EVERSMANN, 1837) A.
- Apamea sordens* (HUFNAGEL, 1766) A.
- Apamea crenata* (HUFNAGEL, 1766) P.
- Mesoligia literosa* (HAWORTH, 1809) F.
- Luperina zollikoferi* (FREYER, 1836) B. - One male specimen.
- Amphipoea aslanbeki* RONKAY et HERCZIG sp. n. A. - Described in the following chapter.
- Gortyna flavago* ([DENIS et SCHIFFERMÜLLER], 1775) F.
- Calamia tridens* (HUFNAGEL, 1766) A, T.
- Nonagria typhae* (THUNBERG, 1784) B.
- Rhizedra lutosa* (HÜBNER, [1800-1803]) B.
- Sedina buettneri* (HERING, 1858) B. - A hygrophilous species, distributed sporadically in the northern steppe-forest steppe zone. It was found in relatively high numbers.
- Paradrina clavipalpis* (SCOPOLI, 1763) B, F.
- Eremodrina pertinax* (STAUDINGER, 1879) B. - The only species of the rich, xerophilous genus was surprisingly found not in the rocky slopes of the mountains but in the sandy steppe region northwards from the Caucasus.
- Spodoptera exigua* (HÜBNER, [1803-1808]) T, B.
- Oxytrychia orbiculosa* (ESPER, [1799]) B. - Three males, one female. The taxonomic relegation of *O. noctivolans* PINKER, 1980 is given by HACKER (1990) and RONKAY et al. (1990). Their distribution pattern is interesting, displaying some parallelism with the ranges of *Diachrysia chrysitis* (LINNAEUS, 1758) and *D. chrysitis generosa* (STAUDINGER, 1900). The true *orbiculosa* is a steppe species, inhabiting a wide but scattered zone in the northern steppe and forest steppe belt. It shows a tendency of expansion into the montane steppes (in the Balkans, the Middle East and the Far East), the peripheral populations may have some special morphological and life history characteristics (as the large size and very dark colouration of the Dalmatian and Albanian specimens, the well-known daytime-flying activity in the Carpathian Basin, etc.). The steppe-populations (Carpathian Basin, Crimea, the steppe zone from the NE Caucasus to Ural Mts, W Siberia, Minussinsk, N Mongolia) have darker colouration, earlier flying period (mainly the first half of September); the specimens come to the artificial light usually in late night. (The female specimen had been attracted by a small UV light trap and was found sitting on the edge of the funnel of the trap at dawn). The xeromontane (or semidesert) populations (ssp. *noctivolans*, C Anatolia, Armenia, N Iran, possibly also in other parts of C Asia, C and S Mongolia) have lighter ground colour, especially on the underside, the flying period is more variable but often in late autumn; the imagines usually fly continuously in the night.
- Eublemma purpurina* ([DENIS et SCHIFFERMÜLLER], 1775) B.
- Eublemma respersa* (HÜBNER, 1790) B.
- Panchrysia deaurata* (ESPER, [1787]) A.
- Plusia festucae* (LINNAEUS, 1758) B.
- Autographa bractea* ([DENIS et SCHIFFERMÜLLER], 1775) A, T.
- Autographa iota* (LINNAEUS, 1758) F, T.
- Cornutiplusia circumflexa* (LINNAEUS, 1758) F.
- Trichoplusia ni* (HÜBNER, [1800-1803]) A, F, T.
- Catocala fraxini* (LINNAEUS, 1758) F, T.
- Catocala elocata* (ESPER, 1786) F.
- Catocala nupta* (LINNAEUS, 1758) T.
- Grammodes bifasciata* (PETAGNA, 1788) B.
- Autophila asiatica* (STAUDINGER, 1888) F.
- Autophila ligaminosa* (EVERSMANN, 1851) A.
- Apopestes noe* RONKAY, 1990 A. - Further 4 males. The species was described partly from the material of the first two expeditions.
- Lygephila craccae* ([DENIS et SCHIFFERMÜLLER], 1775) T, F.

Calyptra thalictri (BORKHAUSEN, 1790) B.

Rivula sericealis (SCOPOLI, 1763) B.

Hypena rostralis (LINNAEUS, 1758) B.

Hypena obesalis TREITSCHKE, 1829 F.

Schränkia costaestrigalis (STEPHENS, 1834) B.

DESCRIPTIONS OF THE NEW TAXA

Cryphia (Bryophila) uzahovi RONKAY et HERCZIG sp. n. (Figs 19-20)

H o l o t y p e : male, USSR, Checheno-Ingousetia, NE Caucasus, vic. Lake Kezenoy-am, 2200 m, 11-14.09.1990, leg. HERCZIG et RONKAY, slide No. 3700 Ronkay. Deposited in coll. HNHM Budapest. - **P a r a t y p e s :** one female from the same locality and data; 6 males, USSR, Checheno-Ingousetia, NE Caucasus, Furtoug, 1100 m, 17-21.09.1990, leg. HERCZIG et RONKAY, coll. HERCZIG et HNHM Budapest. Slides Nos 3734, 3780 (males), 3779 (female).

D e s c r i p t i o n : wingspan 23-30 mm, length of fore wing 12-15 mm. Head and thorax light olive-grey, frons lighter, large and rounded; antennae of males finely ciliate. Abdomen grey, tufts of dorsal crest small. Forewing relatively wide, apex slightly pointed. Scaling of fore wings finely reticulate, ground colour light ochreous-grey, irrorated with olive-grey and greenish-grey, especially in medial and terminal fields. Wing pattern diffuse or obsolescent, transverse lines grey, diffuse and sinuous. Orbicular and reniform stigmata dark, without sharp outlines; claviform absent. Subterminal line deleted or a pale, interrupted ochreous line. Terminal line fine, dark grey, cilia ochreous-white, inner half spotted with brown-grey. Hindwings whitish, intensively and more or less uniformly irrorated with grey, marginal area a bit darker. Cellular lunule a dark shadow; terminal line grey, cilia ochreous. Underside of wings shiny ochreous-white, irrorated with grey. Cellular lunules present on both wings, large but diffuse.

M a l e g e n i t a l i a (Figs 1-5): uncus short, terminated in a small hook. Tegumen weak, fultura inferior or subdeltidial, vinculum wide and short. Valvae elongate, apically tapering, ventral margin with a more or less expressed triangular lobe at distal half. Apex pointed, slightly concave. Sacculus narrow, clavus reduced. Harpe long and slender, finely curved; apex rounded. Aedeagus short and small, carina weakly sclerotized. Vesica short, its proximal part globular, covered densely with short spiculi, distal part short, tubular.

F e m a l e g e n i t a l i a (Fig. 6): ovipositor short and wide, sclerotized, gonapophyses short but strong. Ostium bursae membranous, ductus bursae short and narrow, finely rugulose. Anterior part of ductus and apical edge of bursa copulatrix with elongated fields of small spicules. Cervix bursae less developed, corpus bursae very long and narrow, membranous with slightly granulose apical part.

The new species belongs to the subgenus *Bryophila* displaying some transitional features in its external and genital morphology between the *maeonis* and the *salomonis* groups; differing from all the related taxa by the configuration of the vesica: the lack of the single, large cornutus but with a great amount of small spinules covering the entire surface of the globular part of the vesica. A more or less similar structure can be found only of some *Victrix* (s.str.) species but the field of spinules is restricted to the basal, tubular part of the vesica and the big cornutus is present. (The male genitalia of the related species are illustrated in BOURGIN 1954 and HACKER 1989). The shape of the valva and the harpe of the new species resembles to the members of the *salomonis* group but the ventral lobe of the former is smaller. The specimens originating from Furtoug have a bit more intensive ochreous-yellowish ground colour in the basal and marginal fields and sharper dark pattern.

The habitats of the species in both localities are hot and dry rocky slopes in or near to steep rocky gorges, they came to the light in the second half of the night.

The new species is dedicated to Dr. DZHABRAIL I. UZAHOV, head of the Zoological Department of the Grozniy State University.

Amphipoea aslanbeki RONKAY et HERCZIG sp. n.
(Figs 21-22)

H o l o t y p e : male, USSR, Checheno-Ingousetia, NE Caucasus, vic. Lake Kezenoy-am, 1700-1800 m, 11-14. 09. 1990, leg. HERCZIG et RONKAY, slide No. 3741 RONKAY. Deposited in coll. HNHM Budapest. - **P a r a t y p e s :** 4 males from the same locality and data, coll. HERCZIG and HNHM Budapest. Slide No. 3732.

D e s c r i p t i o n : wingspan 30-31 mm, length of fore wing 14-15 mm. Head and thorax dark tobacco-brown with some lighter reddish-brown hairs; collar with ochreous basis and dark brown medial line. Antennae of males ciliate, abdomen grey with brownish anal tuft; hairs of clasping apparatus yellowish-brown. Forewing narrow, elongate with pointed apex and slightly concave outer margin. Ground colour tobacco-brown, basal and apical fields somewhat lighter. Transverse lines dark brown, fine and less conspicuous excepting wide and diffuse medial line. Orbicular spot small, rounded, filled with yellowish (or brownish). Reniform large, orange-yellow (in one specimen whitish), spots at inner edge usually darker, yellowish-brown. Terminal line dark, cilia tobacco-brown. Hindwings brown, marginal suffusion wide, darker, transverse line and cellular lunule absent. Terminal line fine, brown, cilia ochreous. Underside of wings light ochreous with some brownish, inner part of fore wing suffused with dark brown-grey. Transverse lines present, diffuse, cellular lunule large and orange-yellowish on fore wing, a minute spot on hind wing.

M a l e g e n i t a l i a (Figs 12-14): uncus relatively long and strong, medially slightly dilated. Tegumen wide, penicular lobes large and densely hairy. Fultura inferior small, vinculum strong, U-shaped, with two sclerotized inner extensions. Valvae elongated, narrow, cucullus long and slender, nearly entirely setose. Costa shallow with large, sclerotized crista. Sacculus large, clavus huge, double, forceps-like, inner processus longer than outer (dorsal) one. Harpe a flattened bar, ampulla reduced, costal processus (digitus) narrow, less strong. Aedeagus cylindrical, carina with a rounded, eversible sclerotized lamina. Vesica more or less reniform, ductus ejaculatorius situated at ventral edge; with a small bundle of spiculiform cornuti.

The new species is one of the most interesting discoveries within our research programme in the NE Caucasus. It belongs to the *asiatica* (BURROWS, 1911) - *crinanensis* (BURROWS, 1908) group. It is similar externally more so to *crinanensis* but it has longer and narrower wings and generally darker brown ground colour. The genital characteristics, with the exception of the very typical clavus, display a mixture of the two allied species as follows: the valvae and cuculli are longer and narrower than in the case of *crinanensis* but shorter than in *asiatica*. The fultura inferior is significantly smaller in both of *crinanensis* and *aslanbeki* than in *asiatica*; the new species has the strongest uncus. The most characteristic differences of the taxa of this group can be found in the structure of the clavus. It is simple, long and densely hairy in *asiatica* (Figs 7-8), double in the other two species. In case of *crinanensis* the inner processus is shorter and thicker, more or less quadrangular with acute apex while the outer processus is straight and about two times as long as the inner one (Figs 9-11). The new species has the strongest clavus, inner part huge, arcuate and dentated, outer processus shorter, curved; the whole apparatus is cheliform (Figs 12-14). The three species have a nearly entirely allopatric distribution as *crinanensis* occurs from the Atlantic NW Europe to the Baical area, the range of *asiatica* extends from the Tien Shan Mts to Japan, since *aslanbeki* is known only from the NE Caucasus (the old datum of "asiatica" from Daghestan (DRAUDT in SEITZ 1934) refers very probably to this species). The life history of the new species is very poorly known but it is the latest *Amphipoea* species in its locality. By the data of the previous expeditions *oculea*, *fucosa* and *lucens* appear more or less in the same time (middle of July) and their flying periods do not extend till September.

The new species is dedicated to Dr. ASLANBEK MAGOMEDOVICH BATHIEV, the leader of the field works of this expedition.

A c k n o w l e d g e m e n t s - The authors would like to express their thanks to Mr. VIKTOR KANKALIK, Dr. GYÖRGY BÜRGÉS, ANTAL SÁRKÖZI and GÁBOR KUSNYÉR for their support in the organization and the field works of the expeditions.

References

The detailed list of the references concerning to the knowledge of the fauna of the NE Caucasus was given in Part I. The additional and new literature are as follows:

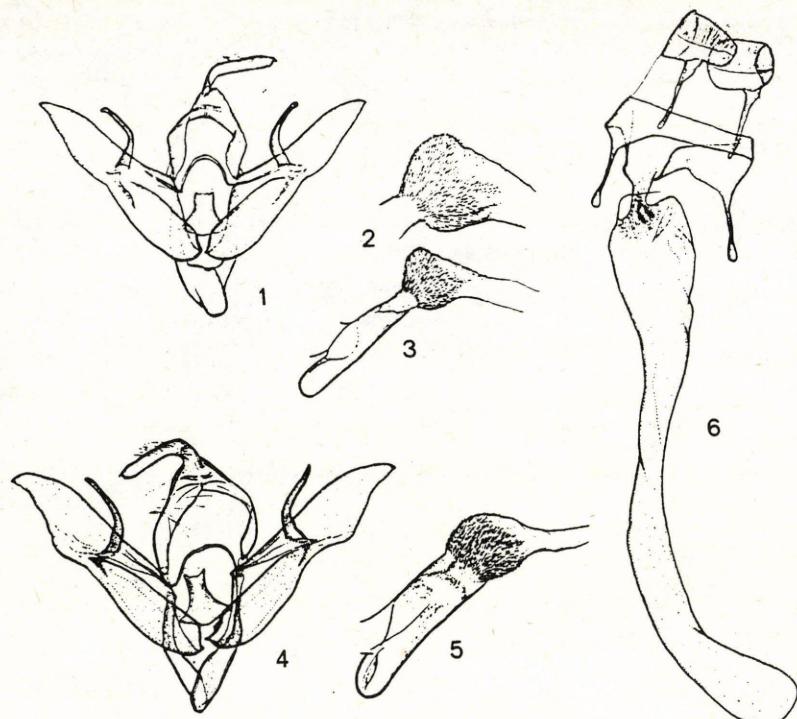
- BOURSIN, C. (1954): Zwei neue Cryphia Hb. (Bryophila)-Arten aus dem vorderasiatisch-mediterranen Faunenkreis. (Beiträge zur Kenntnis der "Agrotidae-Trifinae" 66). - *Z. wien. ent. Ges.* 39: 85-89.
- GYULAI, P. (1989): Amphipoea chodvica sp. nov. from Mongolia (Lepidoptera, Noctuidae). - *Entomofauna* 10 (7): 97-104.
- HACKER, H. (1989): Beiträge zur systematischen Erfassung der Noctuidae (Lepidoptera) des vorder- und zentralasiatischen Raumes. Neue taxonomische und faunistische Erkenntnisse zur Fauna Vorderasiens und Ägyptens. - *Atalanta* 19: 157-187.
- HACKER, H. (1990): Die Noctuidae Vorderasiens (Lepidoptera). - *Neue ent. nachr.* 27: 1-707.
- HERCZIG, B., RONKAY, L., BATHIEV, A. M., KOROLJ, T. S., MÉSZÁROS, Z., SZEÓKE, K., TOCHIEV, T. Y., UHERKOVICH, A. & UZAHOV, D. I. (1990): Contributions to the knowledge of the Noctuidae (Lepidoptera) fauna of the NE Caucasus. - *Annls hist.-nat. Mus. natn. hung.* 82: 163-174.
- HEYDEMANN, F. (1931-32): Die Arten der Hydroecia (Apamea) nictitans L.-Gruppe. - *Ent. Z. Frankf.* 44-45: 2-7, 18-22, 33-38, 49-54, 66-71, 77-79.
- HEYDEMANN, F. (1942): Die Arten der Apamea (Hydroecia) oculea L.-Gruppe. - *Ent. Z. Frankf.* 55: 205-208, 209-214, 220-224.
- MIKKOLA, K. & JALAS, I. (1977): Yökköset 1. Suomen Perhoset (Noctuidae 1. Finnish Lepidoptera). Helsinki: 256 pp. (in Finnish).

Authors' addresses: Dr. Béla Herczeg

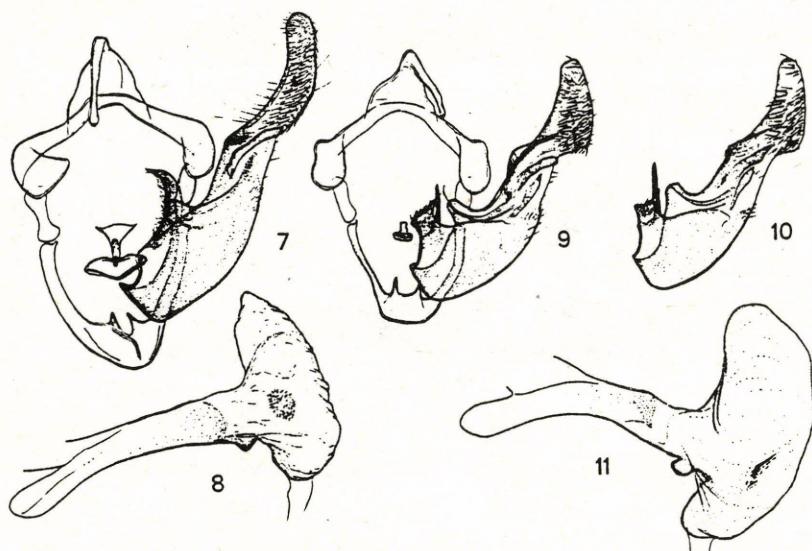
Plant Health and Soil Conservation
Station, County Komárom-Esztergom
H-2891 Tata, P. O. Box 50
Hungary

Dr. László Ronkay
Zoological Department
Hungarian Natural History Museum
H-1018 Budapest, Baross utca 13
Hungary

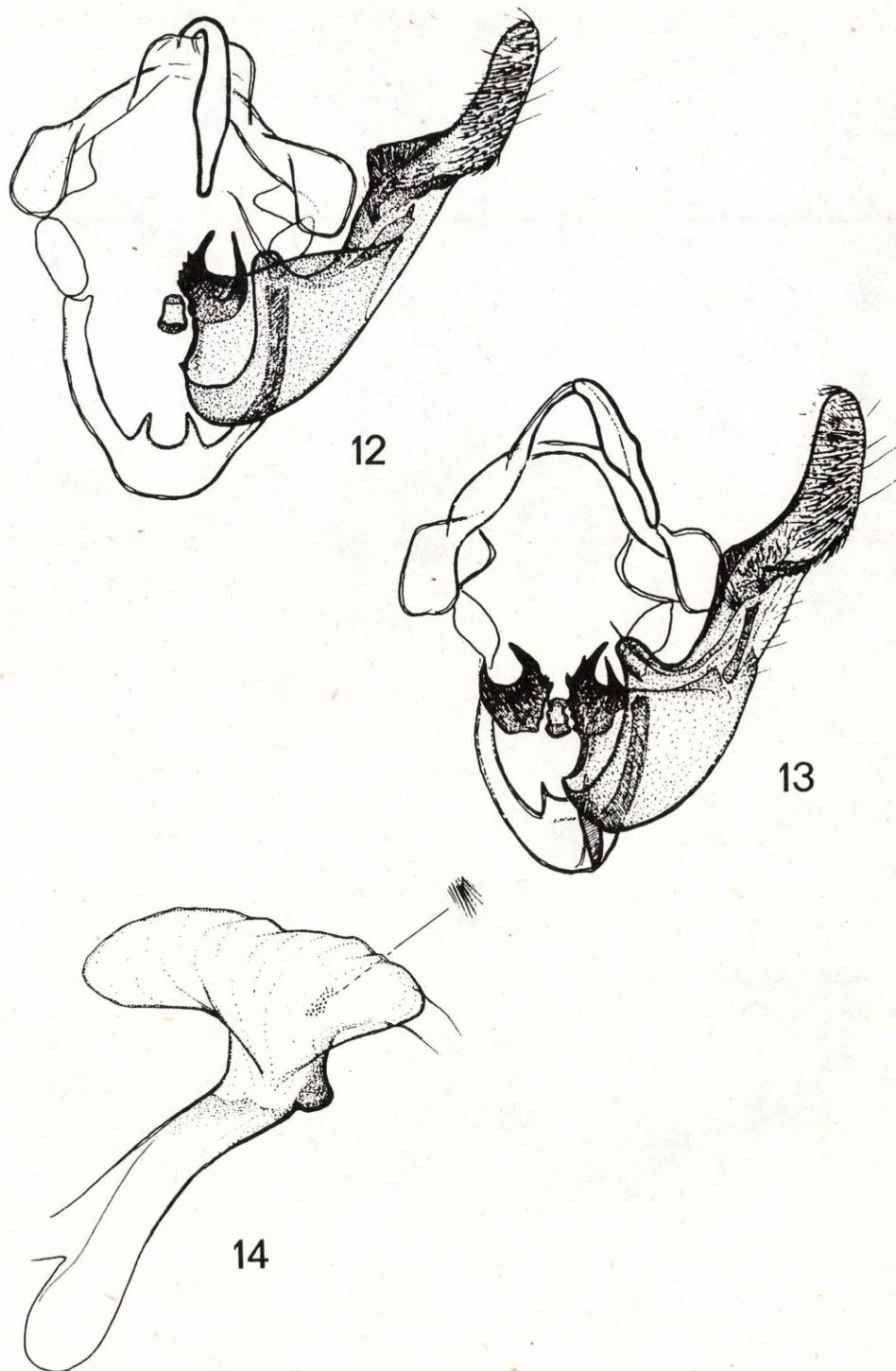
A. M. Bathiev, I. I. Gizatulin, T. S. Korolj, T. Y. Tochiev and D. I. Uzahov
Tolstoy State University
SU-364907 Groznyj, ul. Sheripova 32
CHIASSR, USSR



Figs 1-5. Male genitalia of *Cryphia uzahovi* sp. n. 1-3 = holotype, Kezenoy-am, 4-5 = paratype, Furtoug. - Fig. 6. Female genitalia of *Cryphia uzahovi* sp. n., paratype, Kezenoy-am



Figs 7-8. Male genitalia of *Amphipoea asiatica* BURROWS, Mongolia. - Figs 9-11. Male genitalia of *Amphipoea crinanensis* BURROWS, Sweden



Figs 12-14. Male genitalia of *Amphipoea aslanbeki* sp. n., Kezenoy-am. 12 = holotype, 13-14 = paratype

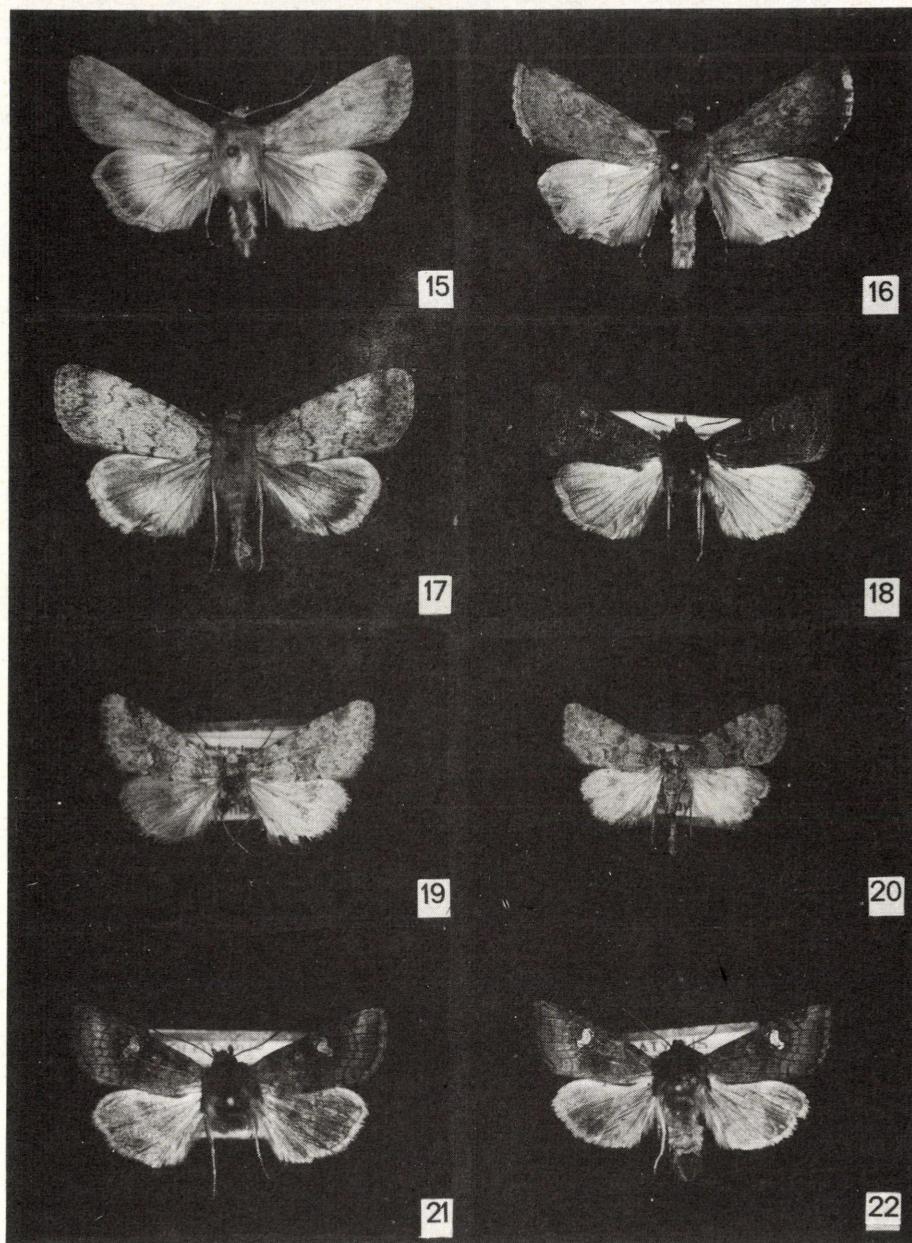


Fig. 15. *Euxoa* sp. prope *decora* HÜBNER, male, Kezenoy-am

Fig. 16. *Euxoa* ?*kuruschensis* BOURSIN, male, Furtoug

Fig. 17. *Standfussiana lucernea* ssp., female, Kezenoy-am

Fig. 18. *Xestia cohaesa* HERRICH-SCHAEFFER, female, Budari Lakes

Fig. 19. *Cryphia uzahovi* sp. n., holotype male, Kezenoy-am

Fig. 20. *Cryphia uzahovi* sp. n., paratype male, Furtoug

Fig. 21. *Amphipoea aslanbeki* sp. n., holotype male, Kezenoy-am

Fig. 22. *Amphipoea aslanbeki* sp. n., paratype male, Kezenoy-am