

Results of a lepidopterological expedition to North and Northwest Iran in summer 2007 with new records for Iran (Lepidoptera) (plates 19-22)

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Abstract: The results of a joint lepidopterological expedition to North and Northwest Iran, provinces of Tehran, Mazandaran, Guilan, Ardabil and Azerbaijan-e-Sharqi, from 20 July to 1 August are presented. More than 508 species of Macrolepidoptera (sensu SEITZ) could be recorded, among them *Idaea sericeata* (HÜBNER, 1813), *Cinglis humifusaria* EVERSMANN, 1837, *Aplocera uniformata* (URBAHN, 1971), *Scotopteryx chenopodiata* (LINNAEUS, 1758), *Triphosa dubitata* (LINNAEUS, 1758), *Abraxas grossulariata* (LINNAEUS, 1758), *Kemtrognophos ciscaucasica* (RJABOV, 1964), *Furcula danieli* SCHINTLMEISTER, 1998, *Eilema lurideola* ([ZINCKEN], 1817), *Zethes propinquus* CHRISTOPH, 1885, *Meganola togatalalis* (HÜBNER, 1796), *Meganola kolbi* (DANIEL, 1935), *Pseudluperina pozzii* (CURÓ, 1883), *Mythimna sicula scirpi* (DUPONCHEL, 1836) and *Noctua interposita* (HÜBNER, 1790) new for the fauna of Iran. Additionally, the species of two light traps in the Elburs Mts., province Mazandaran, from the beginning of June, collected by A. PÜTZ, are listed. The genitalia of 16 species, typical habitats, and some living and spread specimens are figured.

Zusammenfassung: Die Ergebnisse einer gemeinsamen lepidopterologischen Expedition in den Nord- und Nordwestiran, Provinzen Teheran, Mazandaran, Guilan, Ardabil und Azerbaijan-e-Sharqi, vom 20. Juli bis 1. August 2007 werden präsentiert. Dabei konnten über 508 Großschmetterlingsarten (sensu SEITZ) festgestellt werden, darunter *Idaea sericeata* (HÜBNER, 1813), *Cinglis humifusaria* EVERSMANN, 1837, *Aplocera uniformata* (URBAHN, 1971), *Scotopteryx chenopodiata* (LINNAEUS, 1758), *Triphosa dubitata* (LINNAEUS, 1758), *Abraxas grossulariata* (LINNAEUS, 1758), *Kemtrognophos ciscaucasica* (RJABOV, 1964), *Furcula danieli* SCHINTLMEISTER, 1998, *Eilema lurideola* ([ZINCKEN], 1817), *Zethes propinquus* CHRISTOPH, 1885, *Meganola togatalalis* (HÜBNER, 1796), *Meganola kolbi* (DANIEL, 1935), *Pseudluperina pozzii* (CURÓ, 1883), *Mythimna sicula scirpi* (DUPONCHEL, 1836) and *Noctua interposita* (HÜBNER, 1790) neu für den Iran. Zusätzlich werden die Arten zweier Lichtfänge im Elburs, Provinz Mazandaran, Anfang Juni 2008, gesammelt von A. PÜTZ, aufgeführt. Die Genitalapparate von 16 Arten, typische Habitate und einige Falter werden abgebildet.

Introduction

After getting to know each other personally at the annual Entomological Meeting of the Zoologische Staatssammlung in Munich in 2005, the authors kept in contact and considered a joint expedition to Iran to collect Noctuidae and other Macrolepidoptera. The plan was put into practice in summer 2007. Taking into consideration the holiday time of the senior author in the second half of July, visits to the Elburs Mountains, the Caspian Sea, the Sabalan Mountains of East Azerbaijan and the North Zagros Mountains near Hamadan were scheduled. Due to organizational reasons the visit to Hamadan was deleted during the trip and collecting at the Aras River and the nearby Arasbaran Mountain Forest was made instead.

The results will be presented below with 508 recorded species of the "Macrolepidoptera" (sensu SEITZ)-group, including a few species reported as new for the Iranian fauna. The material was collected by lighthtrapping at night, netting by day, and looking for caterpillars in the daytime. During each of the 11 collecting nights, except one, we used three different light traps located nearby and often two or three portable electronic light traps. Animated by this trip, the coleopterologist Andreas PÜTZ, a good friend of the senior author, made a collecting trip to the Elburs Mts. in the first half of June, organized by the coleopterological staff of the Iranian Insect Taxonomy Research Department. During this trip moths were collected two nights by lighthtrapping near our localities on the north and south side of the mountain, respectively and presented to us. The recorded species are included in the results (material in coll. LEHMANN).

The organization, realization and food supply was carried out by experienced staff of the Insect Taxonomy Research Department (ITRD) of the Iranian Research Institute of Plant Protection (IRIPP formerly PPDR)

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in Tehran. Members of the expedition were (their special interests in brackets): Oliver BITTNER and Lutz LEHMANN from Germany (Macrolepidoptera), Helen ALIPANAH (Microlepidoptera), Reza ZAHIRI (Heterocera) and Dr. Alimorad ZARAFRAZI (Heteroptera) as well as Hossein FALSAFI (Lepidopteran technician), Ali KHORSAND and Mahmoud MOMENI (drivers) (pl. 22, fig.27).

List of the visited Iranian localities

Explanation of the locality abbreviations (see plate 21, figs 21-26)

First trip (LEHMANN, ZAHIRI, etc.):

Tochal	Prov. Tehran, Elburs(Alborz) Mts., N Tehran, Kuh-e- Tochal , N 35° 49' 91,5, E 51° 24' 28,7, 2000-2400m, 20. VII. 2007
Yush	Prov. Mazandaran, Elburs(Alborz) Mts., W Baladeh, vic. Yush , N 36°13' 87,8, E 51° 24' 78,3, 2650m (night), 2600-2670m (day), 21./22. VII. 2007
Ramsar	Prov. Mazandaran, Elburs(Alborz) Mts. N-slopes, SW Ramsar , Ramsar road to Javaherdeh, N 36° 54' 49,4, E 50° 35' 22,1, 585m, 23. VII. 2007
Astara	Prov. Gilan, Talesh, SW Astara , Astara road to Namin (Heyran Pass), N 38° 26' 03,7, E 48° 46' 77,4, 110m, 24. VII. 2007
Sabalan	Prov. Ardabil, Kuhha-ye- Sabalan , S Meshginshar, N 38° 21' 90, 6, E 47° 51' 89,4, 2285m, 25./26. VII. 2007
Ghotour sui	Prov. Ardabil, Kuhha-ye-Sabalan, S Meshginshar, Ghotour sui , N 38° 18' 94,4, E 47° 50' 04,6, 3050-3100m (day and night), 2550-2600m (day), 26.VII. 2007
Al Hord	Prov. Azerbaijan-e-Sharqi, W Kaleibar, Arasbaran Forest, Al Hord , N 38° 55' 0,20, E 46° 47' 6,31, 1400-1500m, 28.VII. 2007
Turkey Res. Station	Prov. Azerbaijan-e-Sharqi, N Asheqlu, Turkey Research Station , N 39° 03' 11,3, E 46° 46' 97,6, 345m, 27./28. VII. 2007
Aras I	Prov. Azerbaijan-e-Sharqi, N Asheqlu, Aras River , N 39° 01' 20,2, E 46° 44' 46,6, 330m, 29. VII. 2007 (light traps)
Aras II	Prov. Azerbaijan-e-Sharqi, N Asheqlu, Aras River , N 39° 01' 64,7, E 46° 45' 34,8, 330m, 29. VII. 2007 (day and portable light traps)
Gate Dehh	Prov. Tehran, Elburs(Alborz) Mts., vic. Savojbolagh, Gate Dehh , N 36° 10' 39,6, E 51° 02' 20,9, 2260m (night), 2250-2300m (day), 31. VII. / 1. VIII. 2007

second trip (A. Pütz):

Baladeh	Prov. Mazandaran, Elburs(Alborz) Mts., 3km E Baladeh , N 36°14' 24,8, E 51° 50' 68,0, 2034m, 2. VI. 2008
Eshkatechal	Prov. Mazandaran, Elburs(Alborz) Mts. N-slopes, Ramsar county, Eshkatechal , N 36° 51' 14,2, E 50° 33' 22,0, 1055m, 6. VI. 2008

The faunistic investigations concerning butterflies and moths in Iran have increased considerably since the late 1990s with a lot of publications broadening the knowledge of the distribution of the species in the country (for the history of faunistic investigations in Iran see DUBATOLOV & ZAHIRI 2005). There are current faunistic revisions of the country's fauna for the butterflies (NAZARI 2003), the *Arctiinae* (DUBATOLOV & ZAHIRI 2005), *Lasiocampidae* (DUBATOLOV & ZAHIRI 2008), the *Heliiothinae* (MATOV, ZAHIRI & HOLLOWAY 2008), the *Plusiinae* (ZAHIRI & FIBIGER 2008), and the *Noctuidae* (HACKER 1990, EBERT & HACKER 2002), and in preparation for the *Sphingidae* (KITCHING & ZAHIRI) and *Cossidae* (YAKOVLEV & ALIPANAH). For most of the other families of the "Bombyces and Sphinges" (in the sense of SEITZ) information about the Iranian fauna can be obtained from the standard literature, e.g. de FREINA & WITT (1987, 1990), de FREINA (1997, 2001), NAUMANN, et al. (1999), LASZLO et al. (2007) and others. Unfortunately, there is no overview of the Geometrid fauna of Iran, so information about the faunistic inventory and distribution of the species have to be collected from the vast amount of literature, the most important ones by BRANDT (1938, 1941b), and from museums collections, especially from the Hayk Mirzayans Insect Museum (HMIM in ITRD, Teheran). For that reason it was difficult for us to find out if a Geometrid species is new for the country.

Climate

The climate of Iran is one of great extremes. Owing to its southerly position, adjacent to Arabia and near the Thar Desert, the summer is extremely hot, with temperatures in the interior exceeding 55°C. Winters are often very cold, mainly due to the relatively high altitude of the country and its continental positioning.

The lowest winter temperature at $-30\text{ }^{\circ}\text{C}$ was measured in the north-west Zagros and $-20\text{ }^{\circ}\text{C}$ is common in many places. Most of Iran is arid, however, parts of the Caspian provinces and the area north of the Alborz Mountains receive more rain (1300–2000 mm or more per annum) resulting in a hot and humid climate there in the summer, resembling that of the lower Himalayas. Rainfall and winter snow in the mountainous regions amount to 500–1000 mm on average. Annual precipitation in the central plateau is 100–400 mm. The innermost territory and the extreme east and south of Iran are the driest, receiving less than 100 mm rain in a year (HANGAY *et al.* 2005).

Elburs(Alborz) Mountains

These mountains stretch from the borders of the Republic of Azerbaijan towards Turkmenistan. Its highest peak is Damavand (5671 m). The northern slopes, up to 2500 m above sea level, are densely vegetated, mainly by broadleaved deciduous forests, dominated by oaks (*Quercus* spp.) maple (*Acer* spp.), pines (*Pinus* spp.) and elms (*Ulmus* spp.). Deforestation, erosion and overgrazing are evident on the southern slopes and in the lowland areas (HANGAY *et al.* 2005).

Results

The nomenclature follows that of the current standard literature, mentioned above and other, that for the Geometridae mainly VIIDALEPP (1996).

The abundance of the recorded species is indicated as following:

s = single, only one or two specimens

r = rare, only 2-9 specimens

f = frequent, 10 and more specimens

c = common, more than 30 specimens

Tineoidea

Psychidae

Apterona spec.

Gate Dehh, r

Zygaenoidea

Zygaenidae

Zygaena dorycnii OCHSENHEIMER, 1808

Al Hord, r

Cossoidea

Cossidae

Catopta kendevanensis DANIEL, 1937

Yush, s

Cossus cossus (LINNAEUS, 1758)

Ramsar, r; Astara, s; Al Hord, s

Dysspessacossus fereidun (GRUM-GRSHIMAILO, 1895)

Gate Dehh, r

Cossulus lignosus BRANDT, 1938

Sabalan, r

Cossulus irani (DANIEL, 1956)

Yush, s

Dysspessa hethitica DANIEL, 1932

Sabalan, s

Dysspessa elbursensis DANIEL, 1964

Yush, s

Phragmacossia albida (ERSCHOV, 1874)

Turkey Res. Station, s; Aras I, s; Gate Dehh, f

Zeuzera pyrina (LINNAEUS, 1758)

Ramsar, r; Astara, r

Hesperioidea

Hesperiidae

Eogenes alcides (HERRICH-SCHÄFFER, [1852])

Gate Dehh, r (fig.?)

Thymelicus sylvestris syriacus (TUTT, [1905])

Tochal, r; Yush, r; Al Hord, r; Gate Dehh, r

Thymelicus lineola (OCHSENHEIMER, 1808)

Yush, r

Erynnis tages elbursina (BYTINSKI-SALZ, 1937)

Gate Dehh, s

Carcharodus alceae (ESPER, [1780])

Tochal, r; Ghotour sui (2550-2600m), s; Al Hord, r; Gate Dehh, s

Carcharodus orientalis (REVERDIN, 1913)

Yush, s

Spialia orbifer (HÜBNER, [1823])

Tochal, s; Ghotour sui (2550-2600m) s

Muschampia (tessellum) tersa EVANS, 1949

Yush, s; Gate Dehh, s

Pyrgus jupei (ALBERTI, 1967)

Ghotour sui (3050-3100m), r

Pyrgus cf. armoricanus persicus (REVERDIN, 1913)

Al Hord, r

Papilionoidea

Papilionidae

Iphiclides podalirius (LINNAEUS, 1758)

Tochal, r; Al Hord, r; Gate Dehh, s

Papilio machaon syriacus ELLER, 1936

Tochal, s; Yush, s; Ramsar, 20m, 23.VII. 2007, s; Gate Dehh, r

Papilio demoleus LINNAEUS, 1758

Ramsar, 20m, 23.VII. 2007, s

This Oriental butterfly species, distributed in southernmost Iran, was first introduced by men to the Teheran area and spread there in the last two decades (NAZARI 2003). In the mean time it was also brought by *Citrus* fruits to the Caspian Sea shore area and is spreading there along the settlements, especially in gardens (Naderi pers. comm.).

Pieridae

Aporia crataegi iranica FORSTER, 1939

Yush, r

Pieris brassicae (LINNAEUS, 1758)

Al Hord, s

Pieris rapae (LINNAEUS, 1758)

Tochal, r; Ghotour sui (2550-2600m) r; Turkey Res. Station, r

Pieris ergane detersa VERITY, [1908]

Gate Dehh, r

Pieris (napi) pseudorapae suffusa (VERITY, [1908])

Al Hord, f; Gate Dehh, r

Pontia (daplidice) edusa (FABRICIUS, 1777)

Tochal, f; Yush, r; Ghotour sui (3050-3100m), r; Ghotour sui (2550-2600m), r; Al Hord, r; Gate Dehh, r

Pontia chloridice (HÜBNER, [1813])

Tochal, s

Colias crocea (GEOFFROY, 1785)

Tochal, r; Yush, r; Ghotour sui (3050-3100m), r; Ghotour sui (2550-2600m), r; Sabalan, s; Al Hord, f; Gate Dehh, f

Colias thisoa shakuhensis SHELJUZKO, 1935

Ghotour sui (3050-3100m), s

Colias alfacariensis RIBBE, 1905

Ghotour sui (2550-2600m), r; Al Hord, r; Gate Dehh, r

Gonepteryx rhamni transiens VERITY, 1913

Yush, s

Leptidea sinapis (LINNAEUS, 1758)

Al Hord, r

Leptidea duponcheli lorkovici (PFEIFFER, 1932)

Ghotour sui (2550-2600m), r; Al Hord, r

Lycaenidae

Lycaena phlaeas (LINNAEUS, 1761)

Tochal, r; Al Hord, r; Gate Dehh, r

Lycaena tityrus (PODA, 1761)

Tochal, r; Al Hord, r; Gate Dehh, r

Lycaena alciphron melibaeus (STAUDINGER, 1878)

Yush, r

Lycaena thersamon (ESPER, [1784])

Tochal, s

Lycaena thetis KLUG, 1834

Yush, s

Favonia quercus (LINNAEUS, 1758)

Al Hord, s

Satyrrium w-album (KNOCH, 1782)

Al Hord, s

Lampides boeticus (LINNAEUS, 1767)

Gate Dehh, r

Leptotes pirithous (LINNAEUS, 1767)

Yush, r; Gate Dehh, s

Tarucus balkanicus (FREYER, [1844])

Turkey Res. Station, s; Aras II, s

Celastrina argiolus (LINNAEUS, 1758)

Al Hord, f; Turkey Res. Station, s

Maculinea arion (LINNAEUS, 1758)

Yush, s

Plebeius argus orientaloides (VERITY, 1931)

Yush, s

Plebeius alcedo (CHRISTOPH, 1877)

Yush, r; Gate Dehh, s

Plebeius eurypilus (FREYER, [1851])

Yush, r

Plebeius agestis ([DENIS & SCHIFFERMÜLLER], 1775)

Tochal, s

Polyommatus thersites (CANTENER, [1835])

Yush, r; Gate Dehh, s

Polyommatus aedon (CHRISTOPH, 1877)
Yush, r

Polyommatus eros delessei CARBONELL, [1994]
Ghotour sui (3050-3100m), f (fig.?)

Polyommatus icarus (ROTTEMBURG, 1775)
Tochal, f; Yush, r; Ghotour sui (3050-3100m), r; Ghotour sui (2550-2600m), f; Al Hord, c; Gate Dehh, r

Polyommatus daphnis versicolor (HEYNE, [1895])
Al Hord, r

Polyommatus daphnis brandti (PFEIFFER, 1938)
Tochal, r; Gate Dehh, r

Polyommatus marcidus (LEDERER, 1870)
Yush, r; Gate Dehh, s

Polyommatus bellargus ([DENIS & SCHIFFERMÜLLER], 1775)
Al Hord, r

Polyommatus corydonius (HERRICH-SCHÄFFER, [1852])
Al Hord, s

Polyommatus demavendi (PFEIFFER, 1938)
Gate Dehh, r

Polyommatus alcestis (ZERNY, 1932)
Al Hord, r

Polyommatus elbursicus (FORSTER, 1956)
Yush, f; Gate Dehh, r

Polyommatus phyllis (CHRISTOPH, 1877)
Yush, s

Nymphalidae

Limenitis reducta STAUDINGER, 1901
Al Hord, r

Vanessa atalanta (LINNAEUS, 1758)
Ramsar, 20m, 23.VII. 2007, r; Ghotour sui (3050-3100m), r

Vanessa cardui (LINNAEUS, 1758)
Tochal, r; Yush, r; Ghotour sui (3050-3100m), r; Ghotour sui (2550-2600m), r; Sabalan, r; Al Hord, r; Gate Dehh, r

Aglais urticae turcicae (STAUDINGER, 1861)
Ghotour sui (3050-3100m), r; Ghotour sui (2550-2600m), r

Polygonia egea (CRAMER, 1775)
Ghotour sui (2550-2600m), s

Melitaea phoebe ([DENIS & SCHIFFERMÜLLER], 1775)
Yush, s

Melitaea interrupta kendevana GROSS & EBERT, 1975
Yush, c

Argynnis paphia paphia (LINNAEUS, 1758)
Al Hord, f

Argynnis pandora ([DENIS & SCHIFFERMÜLLER], 1775)
Yush, s; Ghotour sui (3050-3100m) s; Gate Dehh, s

Argynnis alexandra MÉNÉTRIÉS, 1832
Al Hord, f

Argynnis niobe orientalis ALPHÉRAKY, 1881
Yush, f

Issoria lathonia (LINNAEUS, 1758)
Tochal, r; Ghotour sui (2550-2600m) r; Al Hord, r

Brenthis daphne (BERGSTRÄSSER, 1780)
Al Hord, r

Brenthis mofidii WYATT, 1969
Tochal, s

Esperarge climene (ESPER, [1783])
Yush, f

Coenonympha leander leander (ESPER, [1784])
Ghotour sui (2550-2600m), r

Coenonympha leander wagneri GROSS & EBERT, 1975
Yush, s

Coenonympha saadi (KOLLAR, 1849)
Tochal, r; Gate Dehh, s

Coenonympha pamphilus (LINNAEUS, 1758)
Al Hord, r

Maniola jurtina phormia (FRUHSTORFER, 1909)
Tochal, r; Al Hord, r; Gate Dehh, r

Hyponephele cadusia (LEDERER, 1869)
Tochal, s

Hyponephele lycaon (ROTTEMBURG, 1775)
Tochal, r; Yush, r; Gate Dehh, r

Hyponephele lupina intermedia (STAUDINGER, 1886)
Gate Dehh, r

Erebia graucasica savalanica DE LESSE, 1956
Ghotour sui (3050-3100m), r

Melanargia russiae (ESPER, [1783])
Yush, f

Melanargia galathea satnia FRUHSTORFER, 1917
Al Hord, f

Melanargia hylata (MÉNÉTRIÈS, 1832)
Tochal, r; Yush, f

Satyrus amasinus iranicus SCHWINGENSCHUSS, 1939
Al Hord, s

Hipparchia syriaca (STAUDINGER, 1871)
Al Hord, r

Hipparchia pellucida (STAUDER, 1924)
Al Hord, r

Hipparchia parisatis (KOLLAR, 1849)
Tochal, r (fig.?); Aras II, c

Brintesia circe (FABRICIUS, 1775)
Al Hord, f

Chazara briseis meridionalis (STAUDINGER, 1886)
Tochal, f; Sabalan, r; Al Hord, r; Gate Dehh, r

Chazara persephone transiens (ZERNY, 1932)
Sabalan, s

Chazara bischoffi (HERRICH-SCHÄFFER, [1846])
Gate Dehh, s

Pseudochazara schahrudensis (STAUDINGER, 1881)
Tochal, r; Gate Dehh, s

Pseudochazara pelopea persica (CHRISTOPH, 1877)
Tochal,

Bombycoidea
Lasiocampidae

Malacosoma neustria (LINNAEUS, 1758)

Al Hord, s

Malacosoma castrensis kirghisicum (STAUDINGER, 1879)

Yush, s; Al Hord, r

Malaosoma parallela iranica ZOLOTUHN & ZAHIRI, 2008

Baladeh, s

Phyllodesma glasunowi (GRUM-GRSHIMAILO, 1895)

Ramsar, r; Aras I, s; Gate Dehh, r

Phyllodesma farahae LAJONQUIÈRE, 1963

Ramsar, r (fig.1)

Brahmeidae

Brahmaea ledereri christophi STAUDINGER, 1878

Ramsar, s; Eshkatechal s (fig.?)

Sphingidae

Sphinx ligustri (LINNAEUS, 1758)

Al Hord, s

Akbesia davidi (OBERTHÜR, 1884)

Turkey Res. Station, s

Marumba quercus ([DENIS & SCHIFFERMÜLLER], 1775)

Gate Dehh, s

Mimas tiliae (LINNAEUS, 1758)

Astara, r

Smerinthus kindermanni LEDERER, 1853

Yush, s

Smerinthus ocellatus (LINNAEUS, 1758)

Astara, r

Laothoe populi populeti (BIENERT, 1870)

Yush, s; Astara, s; Al Hord, s; Aras I, r; Gate Dehh, r

Hemaris fuciformis (LINNAEUS, 1758)

Al Hord, s

Daphnis nerii (LINNAEUS, 1758)

Tehran-Evin (PPDR), 1600m, 20. VII. 2007, 1 specimen

Sphingonaepiopsis gorgoniades (HÜBNER, [1819])

Yush, s

For the distribution of *Sphingonaepiopsis* in Iran see KITCHING & ZAHIRI (2007).

Macroglossum stellatarum (LINNAEUS, 1758)

Tochal, s; Yush s; Sabalan, s

Hyles euphorbiae conspicua (ROTHSCHILD & JORDAN, 1903)

Sabalan, f

Hyles nicaea libanotica (GEHLEN, 1932)

Yush, r; Gate Dehh, f

Hyles hippophaes bienerti (STAUDINGER, 1874)

Yush, s; Aras I, s

Hyles livornica (ESPER, 1779)

Yush, r;

Deilephila elpenor (LINNAEUS, 1758)

Yush, s

Deilephila porcellus suellus STAUDINGER, 1878

Gate Dehh, r; Baladeh, s

Theretra alecto (LINNAEUS, 1758)

Astara, r

Geometroidea

Thyatiridae

Thyatira hedemanni CHRISTOPH, 1885

Ramsar, c; Astara, r

Habrosyne pyritoides (HUFNAGEL, 1766)

Ramsar, f

Tethea ocellaris osthelderi (BYTINSKI-SALZ & BRANDT, 1937)

Astara, r

There are only four species of Thyatiridae recorded from Iran, the above mentioned three species in the subfamily Thyatirinae and *Polyploca korbi* REBEL, 1901 in the subfamily Polyplocinae (LASZLO et al. 2007).

Drepanidae

Watsonalla binaria (HUFNAGEL, 1767)

Ramsar, r

Cilix glaucatus (LINNAEUS, 1758)

Astara, r; Al Hord, s

Cilix asiatica BANG-HAAS, 1907

Gate Dehh, r

Geometridae

Thetidia persica HAUSMANN, 1996

Yush, s

Hemithea aestivaria (HÜBNER, 1789)

Al Hord, s; Gate Dehh, s

Chlorissa cloraria (HÜBNER, 1813)

Aras I, r

Chlorissa asphaleia WILTSHIRE, 1966

Ramsar, s; Eshkatechal, s

Phaiogramma etruscaria (ZELLER, 1849)

Turkey Res. Station, r; Aras I, r; Gate Dehh, r

Microloxia herbaria (HÜBNER, [1813])

Turkey Res. Station, s

Idaea rufaria (HÜBNER, 1799)

Yush, f

Idaea ossiculata (LEDERER, 1870)

Sabalan, r

Idaea sericeata (HÜBNER, 1813)

Sabalan, s

New record for Iran.

Idaea ochrata (SCOPOLI, 1763)

Al Hord, r

Idaea rusticata ([DENIS & SCHIFFERMÜLLER], 1775)

Gate Dehh, s

Idaea elongaria (RAMBUR, 1833)

Turkey Res. Station, s

Idaea obsoletaria rufularia (HERRICH-SCHÄFFER, 1847)

Aras I, s; Gate Dehh, r

Idaea mancipiata repagulata (PROUT, 1934)

Turkey Res. Station, s; Aras I, s

Idaea straminata (BORKHAUSEN, 1794)

Al Hord, r

Idaea degeneraria erschoffi (CHRISTOPH, 1872)

Ramsar, f; Astara, r; Eshkatechal, s

Cinglis humifusaria EVERSMANN, 1837

Aras I, s

New record for Iran.

Scopula ornata enzela PROUT, 1935

Al Hord, r; Astara, s

Scopula orientalis ALPHÉRAKY, 1876

Yush, s

Scopula decorata ([DENIS & SCHIFFERMÜLLER], 1775)

Gate Dehh, s

Scopula transcaspica PROUT, 1935

Yush, r; Aras I, s

Scopula rubiginata (HUFNAGEL, 1767)

Al Hord, r

Scopula turbulentaria steinbacheri PROUT, 1935

Turkey Res. Station, r; Aras I, s

Scopula beckeraria LEDERER, 1853

Sabalan, s; Baladeh, s

Scopula marginepunctata terrigena PROUT, 1935

Yush, r; Astara, r; Sabalan, r; Turkey Res. Station, f; Aras I, r; Aras II, r; Gate Dehh, r

Scopula immistaria (HERRICH-SCHÄFFER, 1852)

Yush, s

Scopula sacraria ariana EBERT, 1965

Turkey Res. Station, s

Rhodostrophia auctata STAUDINGER, 1879

Ghotour sui (2550-2600m), s; Sabalan, s

Rhodostrophia terrestraria (LEDERER, 1869)

Baladeh, s

Rhodostrophia bahara BRANDT, 1938

Ghotour sui (3050-3100m), s

Rhodostrophia peripheres PROUT, 1938

Baladeh, s

Cyclophora annularia (FABRICIUS, 1775)

Ramsar, s; Al Hord, s

Cyclophora quercimontaria elbursica (PROUT, 1938)

Ramsar, r

Cyclophora linearia (HÜBNER, 1799)

Ramsar, f; Astara, r

Rhodometra sacraria (LINNAEUS, 1767)

Gate Dehh, s

Ochodontia adustaria (FISCHER DE WALDHEIM, 1840)

Aras I, s; Aras II, s

Lythria purpuraria (LINNAEUS, 1758)

Aras I, s

Aplocera uniformata (URBAHN, 1971)

Yush, s

New record for Iran.

Scotopteryx chenopodiata (LINNAEUS, 1758)

Sabalan, s

New record for Iran.

Scotopteryx vicinaria hyrcanaria (STAUDINGER, 1892)

Sabalan, r; Baladeh, s

Scotopteryx decolor (SCHWINGENSCHUSS, 1939)

Ghotour sui (2550-2600m), r

The taxon was raised to species rank by REZBANYAI-RESER (2003). In the male genitalia very difficult to separate from *S. aelptes* (PROUT, 1937), while the females are better distinguishable by the shape of the vaginal plate. The genital preparation (fig.2) of one of the two caught male specimens (LEHMANN 2/2007) shows the costal projection of the valvae more typical of *decolor* (Rezbanayi-Reser pers. comm.). The distribution of *S. decolor* is thus expanded from the Elburs Mts. to Mt. Sabalan in NW Iran, while *S. aelptes* is distributed from central and eastern Turkey, Georgia, the Russian central and northern part of Caucasus to Armenia.

Xanthorhoe designata (HUFNAGEL, 1767)

Ramsar, r; Eshkatechal, s

Xanthorhoe cf. *rectifasciaria* (LEDERER, 1853)

Ramsar, s; Eshkatechal, r

The specimens are not identical with East Turkish ones (fig.3).

Xanthorhoe fluctuata (LINNAEUS, 1758)

Al Hord, s

Catarhoe putridaria (HERRICH-SCHÄFFER, 1852)

Yush, r

Epirrhoe alternata (MÜLLER, 1764)?

Eshkatechal, s

Camptogramma bilineata (LINNAEUS, 1758)

Ghotour sui (2550-2600m), r; Gate Dehh, s

Stamnodes depeculata symmora PROUT, 1938

Ghotour sui (3050-3100m), s

Cidaria fulvata distinctata STAUDINGER, 1892

Yush, s

Triphosa dubitata (LINNAEUS, 1758)

Yush, r; Al Hord, r

New record for Iran.

Philereme transversata (HUFNAGEL, 1767)

Al Hord, s

Euphyia frustata (TREITSCHKE, 1828)

Yush, r; Ghotour sui (3050-3100m), r

Gymnoscelis rufifasciata (HAWORTH, 1809)

Ramsar, r; Al Hord, s

Chloroclystis v-ata (HAWORTH, 1809)

Ramsar, r; Eshkatechal, r

Pasiphila hyrcanica VIDALEPP & MIRONOV, 2006

Ramsar, s; Eshkatechal, s

The species was recently described from Talysh Mts., Azerbaijan and the northern side of Elburs Mts., North Iran. It is closely related to *Pasiphila chloerata* (MABILLE, 1870) but can readily be distinguished by the male and female genitalia which is figured here (fig.4). The altitudinal range was given as 150-500m and the flight time from mid-May to late June. Now it can be added that the species also occurs above 1000m and flies to late July.

Eupithecia linariata ([DENIS & SCHIFFERMÜLLER], 1775)

Al Hord, r

Eupithecia silenicolata soultanabadi BRANDT, 1941

Gate Dehh, r (fig.5)

Eupithecia subtilis DIETZE, 1910

Sabalan, s (fig.6)

Eupithecia laterata DIETZE, 1904

Gate Dehh, s (fig.7)

Eupithecia centaureata ([DENIS & SCHIFFERMÜLLER], 1775)

Yush, s; Baladeh, r

Eupithecia limbata STAUDINGER, 1879 (= ? *irritaria* STAUDINGER, 1892)

Gate Dehh, f

Eupithecia gueneata MILLIÈRE, 1862

Baladeh, s

Eupithecia vulgata (HAWORTH, 1809)

Sabalan, s

Eupithecia icterata iranata SCHÜTZE, 1960

Yush, s; Al Hord, s

Eupithecia lithographata CHRISTOPH, 1887

Sabalan, s (fig.8)

Eupithecia fuscicostata CHRISTOPH, 1887

Gate Dehh, s

Asthenes percandidata CHRISTOPH, 1893

Ramsar, s

Asthenes chionata LEDERER, 1870

Ramsar, s

Ennomos quercinaria (HUFNAGEL, 1767)

Yush, s; Ramsar, r; Al Hord, s

Selenia lunularia (HÜBNER, 1788)

Ramsar, s

Selenia forsteri WEHRLI 1941

Ramsar, s

Eilicrinia cordiaria (HÜBNER, 1790)

Tochal, s

Eilicrinia subcordiaria (HERRICH-SCHÄFFER, 1850)

Aras I, s

Cabera pusaria (LINNAEUS, 1758)

Ramsar, r; Astara, r; Eshkatechal, s

Abraxas grossulariata (LINNAEUS, 1758)

Al Hord, s

New record for Iran.

Stegania dilectaria (HÜBNER, 1790)

Astara, s

Opisthograptis luteolata (LINNAEUS, 1758)

Ramsar, r

Therapis flavicaria ([DENIS & SCHIFFERMÜLLER], 1775)

Ramsar, s; Eshkatechal, s

Ourapteryx persica (MÉNÉTRIÉS, 1832)

Yush, s; Al Hord, s. Typical specimens of *O. persica* described by Ménétré from Lenkoran, Talysh area of Azerbaijan. The validity of *Ourapteryx falciformis* INOUE, 1993 as a good species is very doubtful (Dr. STÜNING pers. comm.). Further specimens, but with pronounced yellow groundcolour, from Gate Dehh. The identity of this form occurring in the upper parts of the Elburs Mts. is not clarified (Dr. STÜNING pers. comm.).

Tephрина arenacearia ([DENIS & SCHIFFERMÜLLER], 1775)

Turkey Res. Station, s; Al Hord, r

Macaria notata (LINNAEUS, 1758)

Ramsar, f; Eshkatechal, s

Specimens from the north side of the Elburs Mts. differ from the main stock of this Holarctic species by slightly larger wingspan, better defined dark markings, and dark bar marking costal end of postmedial line touching squarish subapical spot (characteristics reminding of the recently described ssp. *appalachiata* FERGUSON, 2009 from the Southern Appalachian Mts.). Unique are the enlarged reddish brown subapical spot and especially the longitudinally enlarged cluster of three dark brown extramedial spots nearly touching the subapical spot. They could represent a subspecific unit, but no distinctive differences in male genitalia (fig. 9) were found.

Digrammia rippertaria (DUPONCHEL, 1826)

Aras I, s

Chiasmia aestimaria sareptanaria (STAUDINGER, 1871)

Aras II, r

Chiasma clathrata (LINNAEUS, 1758)

Aras I, s

Neognopharmia stevenaria (BOISDUVAL, 1840)

Aras I, s

Phaselia serrularia shurensis WEHRLI, 1941

Aras II, s

Synopsidia phasidaria jodes (WEHRLI, 1936)

Baladeh, s. The subspecific division of this locally variable species in the North Iranian-Transcaucasian area needs revision.

Synopsia sociaria (HÜBNER, 1799)

Al Hord, s

Dyscia negrama WEHRLI, 1950

Baladeh, s

Nychiodes divergaria fallax WEHRLI, 1941

Aras II, s

Nychiodes divergaria elbursica WEHRLI, 1937

Yush, s

Both taxa were described as subspecies of *N. divergaria* STAUDINGER, 1892 (described from Mardin, SE Turkey), which is distributed in southern Turkey, Iraq and the Near East. Probably both taxa represent species of their own, as already mentioned by WEHRLI (1941) (fig. 10).

Biston betularia (LINNAEUS, 1758)

Yush, s

Peribatodes rhomboidaria saerdabensis WEHRLI, 1943

Ramsar, r; Eshkatechal, r

Ascotis selenaria ([DENIS & SCHIFFERMÜLLER], 1775)

Turkey Res. Station, s; Aras I, s; Aras II, s

Ectropis crepuscularia ([DENIS & SCHIFFERMÜLLER], 1775)

Ramsar, r

Eumannia oppositaria obscuraria (STAUDINGER, 1901)

Ramsar, s

Ematurga atomaria orientaria STAUDINGER, 1871

Al Hord, s

Euchrognophos dubitaria (STAUDINGER, 1892)

Yush, s

Kemtrognophos ciscaucasica (RJABOV, 1964)

Al Hord, s

New record for Iran.

Dysgnophos pollinaria (CHRISTOPH, 1887)

Sabalan, s

Noctuoidea
Notodontidae

Clostera pigra (HUFNAGEL, 1766)

Al Hord, s

Notodonta ziczac derbendica DANIEL, 1965

Baladeh, s

Pheosia teheranica DANIEL, 1965

Gate Dehh, s

Pterostoma palpina ponticum (STAUDINGER & REBEL, 1901)

Gate Dehh, r

Ptilodon capucina (LINNAEUS, 1758)

Ramsar, r

Ptilodon cucullina saerdabensis (DANIEL, 1938)

Ramsar, r; Al Hord, r

Cerura intermedia (TEICH, 1896)

Eshkatechal, s female. Suspected as distinct by WATKINS & BUXTON (1921) and raised to species rank mainly because of differences in the egg morphology in comparison to *C. vinula* by SCHINTLMEISTER et al. (1987). The larvae is figured (pl. 20, fig. 15).

Furcula furcula persica (GAEDE, 1933)

Ramsar, r

Furcula danieli SCHINTLMEISTER, 1998

Al Hord, r

New record for Iran. Described from Tadjikistan, Turkmenistan and NE Iran. One specimen from Azerbaijan was not included in the type series by SCHINTLMEISTER (1998) because he doubted the locality.

Phalera bucephala (LINNAEUS, 1758) (?ssp. *persica* DANIEL)

Ramsar, 20m, 23.VII. 2007, s

Stauropus fagi (LINNAEUS, 1758)

Astara, r;

Harpyia milhauseri (FABRICIUS, 1775)

Al Hord, r

Arctiidae

Lithosia quadra (LINNAEUS, 1758)

Ramsar, r; Astara, r

Eilema lurideola ([ZINCKEN], 1817)

Sabalan, r

New record for Iran.

Eilema complana (LINNAEUS, 1758)

Yush, r; Al Hord, r

Eilema sororcula (HUFNAGEL, 1766)

Ramsar, r; Astara, r; Eshkatechal, s

Amata nigricornis (ALPHÉRAKY, 1883)

Al Hord, f (pl. 20, fig. 13)

Recently reorded as new for Iran, also from the vicinity of Kaleibar by de FREINA (2004).

Dysauxes famula (FREYER, 1836)

Al Hord, r; Aras I, s

Utetheisa pulchella (LINNAEUS, 1758)

Yush, s

Nebrarctia semiramis elbursi (DANIEL, 1937)

Baladeh, c

Chelis reticulata (CHRISTOPH, 1887)

Yush, s

Spilosoma urticae (ESPER, 1789)

Aras I, s

Hyphantria cunea (DRURY, 1773)

Astara, r; Sabalan, s; Turkey Res. Station, s; Gate Dehh, s

Phragmatobia fuliginosa paghmani LÉNEK, 1966

Ramsar, r; Aras I, s

Lymantriidae

Lymantria dispar (LINNAEUS, 1758)

Ramsar, s; Astara c; Turkey Res. Station, r; Al Hord, s; Aras II, r; Gate Dehh, r

Euproctis chrysorrhoea (LINNAEUS, 1758)

Al Hord, r

Arctornis l-nigrum (MÜLLER, 1764)

Astara, s

Leucoma salicis (LINNAEUS, 1758)

Yush, r; Ramsar, s

Orgyia spec.

Aras I, s

Noctuidae

Rivula sericalis (SCOPOLI, 1763)

Ramsar, r; Astara, r

Odice arcuinna argillaceago (TAUSCHER, 1809)

Yush, r; Gate Dehh, s

Eublemma aureola FIBIGER & HACKER, 2002

Yush, s; Gate Dehh, r

Eublemma ostrina (HÜBNER, [1813])

Sabalan, r

Eublemma parva (HÜBNER, [1808])

Yush, s; Astara, r; Sabalan, s; Gate Dehh, r

Eublemma debilis (CHRISTOPH, 1884)

Aras I, s

Eublemma panonica lenis (EVERSMANN, 1844)

Gate Dehh, s

Eublemma chlorotica (LEDERER, 1858)

Yush, r; Gate Dehh, r

Eublemma polygramma (DUPONCHEL, 1836)

Yush, r

Eublemma straminea (STAUDINGER, 1892)

Yush, s

Eublemma compuncta (LEDERER, 1872)

Yush, r

Eublemma cf. munda (CHRISTOPH, 1884)

Yush, r; Gate Dehh, r

Rhypagla lacernaria (HÜBNER, [1813])

Yush, s

Idia calvaria ([DENIS & SCHIFFERMÜLLER], 1775)

Ramsar, s

Paracolax tristalis (FABRICIUS, 1794)

Ramsar, r; Al Hord, s

Herminia tarsipennalis (TREITSCHKE, 1835)

Ramsar, s

Herminia tarsicrinalis (KNOCH, 1782)
Ramsar, r

Zekeliita ravalis (HERRICH-SCHÄFFER, 1851)
Turkey Res. Station, s

Hyperna proboscidalis (LINNAEUS, 1758)
Ramsar, r; Eshkatechal, s

Dichromia opulenta (CHRISTOPH, 1877)
Ramsar, r; Astara, s

Phytometra viridaria (CLERCK, 1759)
Al Hord, s; Aras I, s

Colobochyla platizona (LEDERER, 1870)
Turkey Res. Station, r; Aras I, r; Aras II, f

Trisateles emortalis ([DENIS & SCHIFFERMÜLLER], 1775)
Ramsar, r; Astara, s

Laspeyria flexula ([DENIS & SCHIFFERMÜLLER], 1775)
Ramsar, s; Astara, r
First report for the country recently by EBERT & HACKER (2002).

Calyptra thalictri (BORKHAUSEN, 1790)
Gate Dehh, s
First report for the country recently by EBERT & HACKER (2002).

Scoliopteryx libatrix (LINNAEUS, 1758)
Al Hord, s

Lygephila cracca ([DENIS & SCHIFFERMÜLLER], 1775)
Al Hord, r; Gate Dehh, r

Lygephila procax (HÜBNER, [1813])
Al Hord, s

Autophila libanotica osthelderi BOURSIN, 1940
Yush, s; Sabalan, s; Gate Dehh, s

Autophila luxuriosa nigromarginata SCHWINGENSCHUSS, 1938
Sabalan, s

Autophila asiatica (STAUDINGER, 1888)
Sabalan, s

Autophila ligaminosa (EVERSMANN, 1851)
Baladeh, s

Plecoptera inquinata (LEDERER, 1857)
Aras I, r

Acantholipes regularis (HÜBNER, [1813])
Aras I, r

Drasteria caucasica (KOLENATI, 1846)
Gate Dehh, r; Aras I, r; Gate Dehh, r

Drasteria cailino (LEFEBVRE, 1827)
Yush, r; Gate Dehh, r

Drasteria saisani (STAUDINGER, 1882)
Aras I, s; Gate Dehh, r; Baladeh, s

Euclidia munita (HÜBNER, [1813])
Aras I, s

Catephia alchymista ([DENIS & SCHIFFERMÜLLER], 1775)
Ramsar, r; Astara, r

Zethes propinquus CHRISTOPH, 1885
Turkey Res. Station, s; Aras I, r; Aras II, f

New record for Iran. This Caspian species was described from Transcaucasia, Lagodekhi and was reported from Armenia, Azerbaijan and Turkmenistan. In Iran it is supposedly distributed along the Aras River and the Caspian Sea. The species *Z. brandti* JANZON, 1977, known from southeasternmost Turkey, Zagros Mts. and Iranian Baluchistan is possibly only a subspecies of *Z. propinquus* (see HACKER 1987).

Zethes insularis RAMBUR, 1833

Aras I, r

Pericyma squalens LEDERER, 1855

Turkey Res. Station, r; Aras I, r

Pandesma robusta (WALKER, [1858])

Yush, s; Gate Dehh, s

Clytie gracilis (BANG-HAAS, 1907)

Aras I, s

Clytie terrulenta (CHRISTOPH, 1893)

Aras I, r

Dysgonia algira (LINNAEUS, 1767)

Ramsar, r; Astara, r; Turkey Res. Station, s; Aras I, r

Grammodes stolidia (FABRICIUS, 1775)

Turkey Res. Station, f; Aras I, r

Catocala hymenaea ([DENIS & SCHIFFERMÜLLER], 1775)

Astara, r; Aras I, s; Gate Dehh, r

First report for the country recently by EBERT & HACKER (2002).

Catocala nymphagoga kurdistana HACKER, 1999

Ramsar, r

Catocala puerperoides ZAHIRI et al., 2008

Gate Dehh, s

This freshly emerged specimen is a paratype of this newly described species from the Elburs and Zagros Mts. (MÜLLER et al. 2008).

Catocala promissa (DENIS & SCHIFFERMÜLLER, 1775)

Al Hord, s

Catocala lupina kastshenkoi SHELJUZKO, 1943

Gate Dehh, s

Eutelia adalatrix (HÜBNER, [1813])

Turkey Res. Station, r

Abrostola hyrcanica HACKER, 2002

Ramsar, r

Recently described species from the northern parts of Elburs Mts. Sister species of *A. agnorista* DUFAY, 1956 but externally also very similar to *A. triplasia* (LINNAEUS, 17589).

Abrostola triplasia (LINNAEUS, 1758)

Sabalan, r

Trichoplusia ni (HÜBNER, [1808])

Yush, r; Ramsar, s; Astara, r; Turkey Res. Station, f; Aras I, r; Aras II, r

Chrysodeixis chalcites (ESPER, [1789])

Yush, s; Ramsar, r; Astara, r

Macdunnoughia confusa (STEPHENS, 1850)

Astara, r; Turkey Res. Station, r

Diachrysia generosa (STAUDINGER, 1900)

Ramsar, r; Sabalan, s; Eshkatechal, s

Euchalcia chalcophanes DUFAY, 1963

Yush, r

Euchalcia taurica (OSTHELDER, 1933)

Yush, s; Baladeh, s

Euchalcia emichi (ROGENHOFER, 1873)

Sabalan, f

Desertoplusia colomata VARGA & RONKAY, 1991

Baladeh, s

Autographa gamma (LINNAEUS, 1758)

Yush, s; Ghotour sui (2550-2600m), s; Astara, s; Al Hord, s; Aras I, s

Cornutiplusia circumflexa (LINNAEUS, 1767)

Yush, r

Plusia festucae (LINNAEUS, 1758)

Astara, s

Acronicta megacephala ([DENIS & SCHIFFERMÜLLER], 1775)

Astara, s

Acronicta psi tehrana WILTSHIRE, 1946

Yush, s; Astara, r; Sabalan, s; Turkey Res. Station, r; Al Hord, r; Aras I, r

Acronicta solimana DRAUDT, 1938

Ramsar, r; Aras I, s

Acronicta aceris taurica (STAUDINGER, 1901)

Ramsar, r; Astara, r

Acronicta euphorbiae ([DENIS & SCHIFFERMÜLLER], 1775)

Yush, s; Al Hord, s

Acronicta rumicis (LINNAEUS, 1758)

Gate Dehh, r

Craniophora ligustri hyrcanica HACKER & EBERT, 2002

Ramsar, f; Ramsar, 20m, 23.VII. 2007, s; Astara, r

Phyllophila obliterated (RAMBUR, 1833)

Astara, r; Turkey Res. Station, s; Al Hord, s

Deltote pygarga (HUFNAGEL, 1766)

Ramsar, f; Astara, r; Aras I, r; Aras II, s

Acontia lucida (HUFNAGEL, 1766)

Turkey Res. Station, s; Aras I, r; Aras II, r

Acontia titania (ESPER, [1798])

Baladeh, s

Acontia trabealis (SCOPOLI, 1763)

Ramsar, 20m, 23.VII. 2007, s; Turkey Res. Station, s; Aras I, s

Aedia funesta (ESPER, [1786])

Ramsar, r; Astara, r

Aedia leucomelas (LINNAEUS, 1758)

Ramsar, r; Astara, f

Meganola togatalalis (HÜBNER, 1796)

Al Hord, s

New record for Iran.

Meganola kolbi (DANIEL, 1935)

Ramsar, r

New record for Iran. The specific distinctness from *M. strigula* was recently confirmed by FIBIGER et al. (2009). The genitalia of a female (gen. prep. LEHMANN 46/2007) (fig.11) proved to be this species distributed from SE Europe to Turkey.

Nola cuculatella (LINNAEUS, 1758)

Yush, s

Arcyophora dentula (LEDERER, 1870)

Aras I, s; Aras II, f

Earias clorana (LINNAEUS, 1761)

Turkey Res. Station, s; Al Hord, s; Gate Dehh, s

Nycteola revayana (SCOPOLI, 1772)

Eshkatechal, s

Nycteola asiatica (KRULIKOVSKY, 1904)

Aras I, s

Nycteola spec.

Gate Dehh, s.

The specimen belongs either to *N. eremostola* DUFAY, 1961 or to *N. gandzhana* OBRAZTSOV, 1953, described after one specimen from Armenia, which we could not check. Both species are not reported from Iran.

Haemosia renalis (HÜBNER, [1813])

Gate Dehh, r

Mycteroplus puniceago (BOISDUVAL, 1840)

Gate Dehh, s

Tyta luctuosa ([DENIS & SCHIFFERMÜLLER], 1775)

Turkey Res. Station, s; Al Hord, r; Aras II, s

Cucullia umbratica clarior FUCHS, 1904

Yush, s; Sabalan, s

Cucullia maracandica STAUDINGER, 1888

Yush, s

Shargacucullia anceps (STAUDINGER, 1882)

Sabalan, s

Oncocnemis confusa persica EBERT, 1978

Yush, r; Gate Dehh, r

Aedophron phlebophora LEDERER, 1858

Yush, r

Periphanes delphinii (LINNAEUS, 1758)

Yush, s

Pyrrhia umbra (HUFNAGEL, 1766)

Astara, r

Heliothis viriplaca (HUFNAGEL, 1766)

Yush, s

Heliothis nubigera HERRICH-SCHÄFFER, 1951

Yush, s

Heliothis peltigera ([DENIS & SCHIFFERMÜLLER], 1775)

Yush, f; Turkey Res. Station, s

Heliothis incarnata (FREYER, 1838)

Yush, s

Helicoverpa armigera (HÜBNER, [1808])

Yush, f; Sabalan, s; Turkey Res. Station, s; Aras I, s; Gate Dehh, r

Amphipyra pyramidea (LINNAEUS, 1758)

Yush, s; Ramsar, s; Al Hord, s

Amphipyra tragopoginis turcomana STAUDINGER, 1888

Yush, r; Al Hord, r; Gate Dehh, r

Amphipyra boursini HACKER, 1998

Gate Dehh, r

Amphipyra stix HERRICH-SCHÄFFER, 1850

Gate Dehh, s

First report for the country recently by EBERT & HACKER (2002).

Male specimens from SE Europe and Turkey have two cornuti in the aedeagus. In Iranian examples examined by us this character state is variable. A male from Gate Dehh (gen. prep. LEHMANN 07/2007) has only one while others from Iran (investigated by the junior author from North Iran, gen. prep. ZAHIRI 540, 541, 542)

(fig. 12) have two or even three.

Calloplistria juvenina (STOLL, 1782)

Ramsar, f; Astara, f

Calloplistria latreillei (DUPONCHEL, 1827)

Ramsar, s

Cryphia receptricula (HÜBNER, [1803])

Aras I, s

Cryphia algae ([DENIS & SCHIFFERMÜLLER], 1775)

Ramsar, r

Cryphia ochsi (BOURSIN, 1941)

Ramsar, r; Astara, r; Al Hord, r; Aras I, r; Aras II, r

Bryophila maeonis LEDERER, 1865

Yush, f; Sabalan, r; Gate Dehh, f

Bryophila spec.

Yush

The genitalia are figured (fig.13).

Bryophila raptricula ([DENIS & SCHIFFERMÜLLER], 1775)

Yush, r; Al Hord, r; Gate Dehh, f

Bryophila petricolor solimana DRAUDT, 1937

Yush, s; Sabalan, r

Nyctobrya amasina (DRAUDT, 1931)

Al Hord, s; Aras I, s

Spodoptera exigua (HÜBNER, [1808])

Yush, r; Ramsar, r; Aras I, r; Gate Dehh, r

Caradrina aspersa (RAMBUR, 1834)

Al Hord, r

Caradrina draudti (BOURSIN, 1936)

Aras I, s (fig.?)

Caradrina pertinax STAUDINGER, 1879

Gate Dehh, r

Caradrina boursini (F.WAGNER, 1936)

Yush, s; Sabalan, s; Gate Dehh, r

Caradrina clavipalpis (SCOPOLI, 1763)

Sabalan, s

Hoplodrina ambigua ([DENIS & SCHIFFERMÜLLER], 1775)

Astara, s; Baladeh, s

Hoplodrina blanda robusta BOURSIN, 1940

Yush, r; Al Hord, r; Gate Dehh, r

Hoplodrina levis (STAUDINGER, 1888)

Gate Dehh, s

First report for the country recently by EBERT & HACKER (2002).

Proxenus hospes (FREYER, 1831)

Ramsar, s; Ramsar, 20m, 23.VII. 2007, s

First report for the country recently by EBERT & HACKER (2002).

Energia paleacea (ESPER, [1788])

Gate Dehh, s

Cosmia trapezina (LINNAEUS, 1758)

Ramsar, r; Al Hord, r

Dypterygia scabriuscula (LINNAEUS, 1758)

Ramsar, r; Astara, r

Trachea atriplicis (LINNAEUS, 1758)

Ramsar, r; Astara, r

First report for the country recently by EBERT & HACKER (2002)

Heterophysa dumetorum mutica (CHRISTOPH, 1885)

Sabalan, s; Gate Dehh, s; Baladeh, r

Chloantha hyperici ([DENIS & SCHIFFERMÜLLER], 1775)

Astara, r; Al Hord, r; Aras I, s; Gate Dehh, r

Chloantha elbursica (BOURSIN, [1968])

Ramsar, f

A poorly known species from the humid northern side of the Elburs Mts.

For comparison the male genitalia of a specimen of *C. elbursica* (fig.17) and two specimens of *C. hyperici* (figs 15, 16) are figured.

Phlogophora scita (HÜBNER, 1790)

Yush, s

Euplexia lucipara (LINNAEUS, 1758)

Ramsar, f

First report for the country recently by EBERT & HACKER (2002). The Elburs populations are somehow similar to the ssp. *leonhardi* REBEL, 1909 from Algeria and Tunisia and represent another, yet undescribed, subspecies from the southern edge of the western Palearctic region.

Auchmis detersa demavendi SCHWINGENSCHUSS, 1955

Yush, r; Al Hord, s; Gate Dehh, r

Auchmis peterseni (CHRISTOPH, 1887)

Gate Dehh, s

Calamia staudingeri WARNECKE, 1941

Yush, r; Sabalan, r; Gate Dehh, r

Eremobia ochroleuca asiatica DRAUDT, 1936

Gate Dehh, s

Pseudoluperina pozzii (CURÓ, 1883)

Aras I, s

New record for Iran. The taxa *kozhantschikovi* PÜNGELER, 1914 from Kazakhstan and *amplificata* HACKER, 1990 from Turkey were recently synonymized with *P. pozzii* (CURÓ, 1883) by ZILLI, RONKAY & FIBIGER 2005. The gravelly river banks of the Aras, surrounded by steppe vegetation, are typical biotopes of the species.

Apamea monoglypha (HUFNAGEL, 1766)

Yush, r; Ramsar, r; Sabalan, r; Gate Dehh, r

Apamea crenata (HUFNAGEL, 1766)

Eshkatechal, s

Apamea lateritia (HUFNAGEL, 1766)

Yush, r; Sabalan, r; Gate Dehh, s

Apamea furva ([DENIS & SCHIFFERMÜLLER], 1775)

Yush, r; Sabalan, r

Apamea platinea armena (EVERSMANN, 1856)

Yush, r; Sabalan, r; Ghotour sui (3050-3100m), r

Apamea sordens (HUFNAGEL, 1766)

Eshkatechal, s; Baladeh, f

Apamea ferrago (EVERSMANN, 1837)

Yush, f; Sabalan, f; Ghotour sui (3050-3100m), f

Mesapamea secalis (LINNAEUS, 1758)

Astara, r; Gate Dehh, r

Oligia latruncula grisescens HEYDEMANN, 1932 (= *erevanica* FAZEKAS, 1984)

Yush, s (gen. prep. Lehmann 52/2007)

Xylomoia apameoides (HACKER, 1989)

Yush, s
 First report for the country recently by EBERT & HACKER (2002).

Litologia literosa (HAWORTH, 1809)
 Yush, r; Sabalan, f; Gate Dehh, r

Sesamia cretica LEDERER, 1857
 Aras I, r; Aras II, s

Cirrhia icteritia (HUFNAGEL, 1766)
 Gate Dehh, s
 First report for the country recently by EBERT & HACKER (2002).

Metopoplus excelsa (CHRISTOPH, 1885)
 Yush, f (pl. 20, fig. 16); Aras I, s; Gate Dehh, f
 First report for the country recently by EBERT & HACKER (2002).

Anarta trifolii (HUFNAGEL, 1766)
 Yush, r; Astara, r; Al Hord, r; Aras I, r

Polia nebulosa (HUFNAGEL, 1766)
 Eshkatechal, r

Polia serratilinea spalax ALPHÉRAKY, 1887
 Yush, f; Sabalan, f

Lacanobia w-latinum (HUFNAGEL, 1766)
 Yush, s; Baladeh, r

Lacanobia oleracea (LINNAEUS, 1758)
 Ramsar, r; Astara, s; Gate Dehh, r

Lacanobia splendens (HÜBNER, [1808])
 Ramsar, s; Astara, r

Melanchra persicariae (LINNAEUS, 1758)
 Ramsar, s

Mamestra brassicae (LINNAEUS, 1758)
 Ramsar, s; Sabalan, r

Sideridis turbida (ESPER, 1790)
 Ghotour sui (3050-3100m), s

Sideridia egena (LEDERER, 1853)
 Baladeh, s

Sideridis unicolor (ALPHÉRAKY, 1889)
 Yush, r

Conisania capsivora (DRAUDT, 1933)
 Baladeh, r

Hecatera bicolorata (HUFNAGEL, 1766)
 Yush, s; Aras I, r; Gate Dehh, r

Hecatera dysodea ([DENIS & SCHIFFERMÜLLER], 1775)
 Yush, r; Sabalan, s

Enterpia laudeti orientis HACKER, 1996
 Yush, r; Gate Dehh, r

Hadena magnolii fabiani HACKER, 1996
 Baladeh, s

Hadena compta persica (SCHWINGENSCHUSS, 1939)
 Yush, r; Gate Dehh, r

Hadena albimacula (BORKHAUSEN, 1792)
 Yush, r; Sabalan, s; Baladeh, s

Hadena melanochoa (STAUDINGER, 1892)
 Baladeh, r

Hadena thecaphaga (DRAUDT, 1937)

Gate Dehh, s

Hadena wehrlii frequens HACKER, 1996

Sabalan, r

Hadena elbursica HACKER, 1996

Yush, r; Gate Dehh, s

Hadena clara gladys (WILTSHIRE, 1947)

Yush, s; Baladeh, s

Hadena drenowskii kendevani (SCHWINGENSCHUSS, 1937)

Yush, r; Gate Dehh, r

Hadena tephroleuca asiatica (WAGNER, 1931)

Yush, r

Hadena cf. *pumila* (STAUDINGER, 1879)

Yush, s

Mythimna conigera ([DENIS & SCHIFFERMÜLLER], 1775)

Yush, s;

Mythimna vitellina (HÜBNER, [1808])

Gate Dehh, s; Baladeh, s

Mythimna unipuncta (HAWORTH, 1809)

Ramsar, s

Mythimna sassanidica (HACKER, 1986)

Baladeh, s

Mythimna sicula scirpi (DUPONCHEL, 1836)

Baladeh, s

New record for Iran. HREBLAY (in HACKER et al. 2002) already assumed an occurrence in the country, but according to our knowledge not yet recorded from Iran.

Mythimna albipuncta ([DENIS & SCHIFFERMÜLLER], 1775)

Al Hord, r

Mythimna ferrago (FABRICIUS, 1787)

Sabalan, f; Al Hord, r;

Mythimna l-album (LINNAEUS, 1767)

Yush, r; Sabalan, s; Gate Dehh, r; Baladeh, s

Leucania zaeae (DUPONCHEL, 1827)

Aras I, s

Leucania loreyi (DUPONCHEL, 1827)

Astara, r; Sabalan, s; Gate Dehh, r

Peridroma saucia (HÜBNER, [1808])

Ramsar, r

Ledereragrotis multifida (LEDERER, 1870)

Ghotour sui (3050-3100m), s

Dichagyris squalorum (EVERSMANN, 1856)

Yush, s

Dichagyris squalidior (STAUDINGER, 1901)

Yush, r; Sabalan, r

Dichagyris vallesiaca subsqualorum KOZHANTSHIKOV, 1929

Sabalan, r; ?Gate Dehh, r

Dichagyris terminicincta CORTI, 1933

Yush, r

Dichagyris candelisequa achaemenidica HACKER, 1990

Yush, s; Al Hord, s; Gate Dehh, r

Dichagyris elbursica (DRAUDT, 1937)

Yush, r; Gate Dehh, r

Dichagyris melanura hyrcanica (BOURSIN, 1963)

Gate Dehh, s

Dichagyris forficula (EVERSMANN, 1851)

Yush, r; Sabalan, r; Baladeh, r

Dichagyris forcipula amasicola KOÇAK, 1980

Yush, r; Sabalan, r; Gate Dehh, r; Baladeh, s

Dichagyris iranicola KOÇAK, 1990

Baladeh, r

Dichagyris spec.

Al Hord, s

Dichagyris nigrescens robustior (CORTI & DRAUDT, 1933)

Al Hord, s

Dichagyris disturbans (PÜNGELER, 1914)

Yush, r

Dichagyris signifera farsistana (BRANDT, 1938)

Gate Dehh, s (W gen. prep. Lehmann 43/2007)

Euxoa rjabovi KOZHANTSHIKOV, 1929

Yush, r; Sabalan, r; Ghotour sui (3050-3100m), r

Euxoa conspicua (HÜBNER, 1827)

Yush, r; Sabalan, r

Euxoa segnilis cortii (F. WAGNER, 1930)

Sabalan, s

Euxoa birivia ([DENIS & SCHIFFERMÜLLER], 1775)

Sabalan, r

FIBIGER (1990) mentioned the species for Iran, but this report could not be traced back by us. According to VARGA (pers. comm.) the easternmost reliable records are from NE Turkey and NE Caucasus (compare LEHMANN & BERGMANN, 2005). So our records are probably the easternmost ones for the species and proof the occurrence in the country.

Euxoa aquilina ([DENIS & SCHIFFERMÜLLER], 1775)

Yush, r; Sabalan, r; Gate Dehh, r

Euxoa heringi (CHRISTOPH, 1877)

Sabalan, s, Gate Dehh, s

Euxoa scurrilis DRAUDT, 1937

Yush, r

Euxoa homicida schahkuhensis (BARTEL, 1907)

Yush, f; Sabalan, r

Euxoa difficillima DRAUDT, 1937

Yush, s; Sabalan, s

Agrotis exclamationis (LINNAEUS, 1758)

Yush, r; Baladeh, s

Agrotis segetum ([DENIS & SCHIFFERMÜLLER], 1775)

Astara, s; Turkey Res. Station, s

Agrotis ipsilon (HUFNAGEL, 1766)

Astara, r; Turkey Res. Station, s; Al Hord, s; Aras I, s

Agrotis spinifera (HÜBNER, 1808)

Astara, r; Aras I, r

Axylia putris (LINNAEUS, 1758)

Ramsar, f

Ochroleura plecta (LINNAEUS, 1758)

Astara, r; Sabalan, s; Al Hord, r

Diarsia mendica monochroma BOURSIN, 1963

Al Hord, r

Eicomorpha antiqua STAUDINGER, 1888

Yush, s

Epipsilia cervantes (REISSER, 1935)

Ghotour sui (3050-3100m), s

Rhyacia nyctimerides (BANG-HAAS, 1922)

Sabalan, c; Ghotour sui (3050-3100m), f

Chersotis alpestris ponticola (DRAUDT, 1936)

Yush, r; Gate Dehh, s

Chersotis multangula subdissoluta (F.WAGNER, 1931)

Sabalan, s

Chersotis capnistis (LEDERER, 1872)

Sabalan, s

Chersotis larixia asiatica (SCHWINGENSCHUSS, 1938)

Sabalan, r

Chersotis anatolica (DRAUDT, 1936)

Sabalan, r

Chersotis fimbriola raddei (CHRISTOPH, 1877)

Sabalan, r; Ghotour sui (3050-3100m), s

Chersotis glebosa (STAUDINGER, 1900)

Yush, r

Standfussiana lucerneae koruschicola (BOURSIN, 1940)

Sabalan, s

Noctua pronuba (LINNAEUS, 1758)

Yush, r; Ramsar, r; Astara, r; Al Hord, r

Noctua orbona (HUFNAGEL, 1766)

Yush, r; Al Hord, r

Noctua interposita (HÜBNER, 1790)

Al Hord, s

New record for Iran.

Noctua comes ([DENIS & SCHIFFERMÜLLER], 1775)

Al Hord, s

Noctua fimbriata (SCHREBER, 1759)

Yush, s; Ramsar, s; Astara, r; Al Hord, r

Noctua janthina ([DENIS & SCHIFFERMÜLLER], 1775)

Astara, r

Epilecta linogrisea ([DENIS & SCHIFFERMÜLLER], 1775)

Al Hord, r

Spaelotis demavendi (WAGNER, 1937)

Yush, s

Opigena huberi HACKER, 1999

Yush, s

First report for the country recently by EBERT & HACKER (2002)

Xestia baja ([DENIS & SCHIFFERMÜLLER], 1775)

Ramsar, r

The population from Elburs Mts. differs from the nominotypical one from the western Palaearctic region. The *baja*-complex is under investigation (LEHMANN in prep.).

Xestia c-nigrum (LINNAEUS, 1758)

Ramsar, r

Xestia ditrapezium ([DENIS & SCHIFFERMÜLLER], 1775)
Ramsar, s

Xestia triangulum ehrmanni HACKER & EBERT, 2002
Al Hord, r

Xenophysa junctimacula (CHRISTOPH, 1887)
Yush, s; Gate Dehh, s

Naenia typica (LINNAEUS, 1758)
Gate Dehh, s

Acknowledgement

We are very grateful to Mr. Oliver BRITNER, Mrs. Helen ALIPANAH and Dr. Alimorad ZARAFRAZI (ITRD, IRIPP) for accompanying us during the trip and help in many ways. Our thanks also go to Hossein FALSAFI, Ali KHORSAND and Mahmoud MOMENI for company and supply during the expedition. The authors also thank Dr. Ebrahim EBRAHIMI, Curator of HMIM and Head of ITRD (IRIPP) for great hospitality and support in the organization of the trip.

For help with the determination of difficult species we thank Dr. Dieter STÜNING, Dr. Axel HAUSMANN, Sven ERLACHER, L. REZBANYAI-RESER, Dr. V. MIRONOV and Dr. V. ZOLOTUHN.

For the possibility to work in institutional collections under their curation we thank Dr. Wolfram MEY (Naturkunde Museum der Humboldt-Universität-Berlin), Dr. Axel HAUSMANN (Zoologische Staatssammlung-Munich) and Dr. Dieter STÜNING (Museum Alexander König-Bonn). For the help in getting necessary literature we are thankful to the colleagues of the Entomological Library of the DEI[Senckenberg] in Müncheberg.

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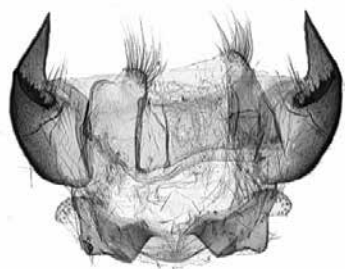


Fig. 1

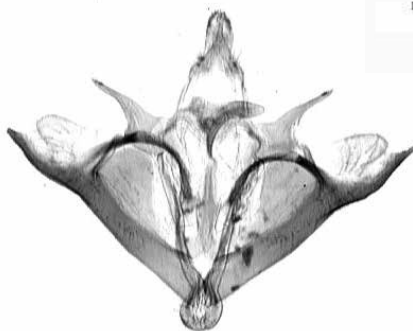
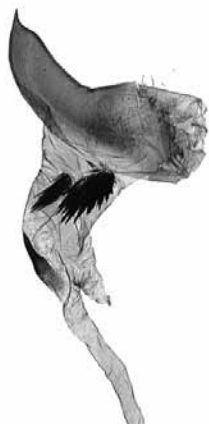


Fig. 2

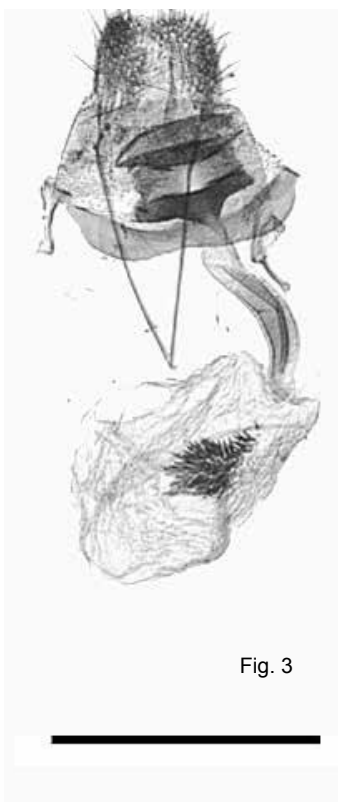


Fig. 3



Fig. 4

Figure 1: female genitalia of *Phylloidesma farahae* LAJONQUIÈRE, 1963 (gen. prep. LEHMANN 26/2007)
 Figure 2: male genitalia of *Scotopteryx decolor* (SCHWINGENSCHUSS, 1939) (gen. prep. LEHMANN 2/2007)
 Figure 3: female genitalia of *Xanthorhoe cf. rectifasciaria* (LEDERER, 1853) (gen. prep. LEHMANN 16/2009)
 Figure 4: female genitalia of *Pasiphila hyrcanica* VIDALEPP & MIRONOV, 2006 (gen. prep. LEHMANN 33/2010)

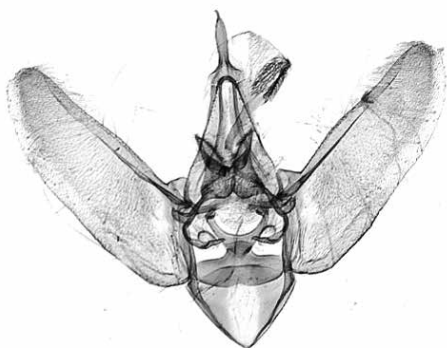


Fig. 5

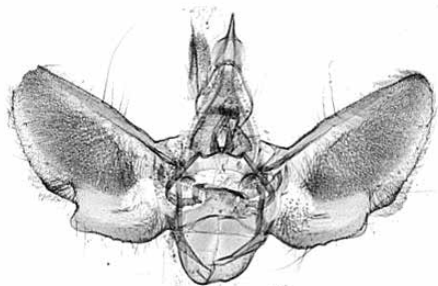


Fig.6



Fig.7

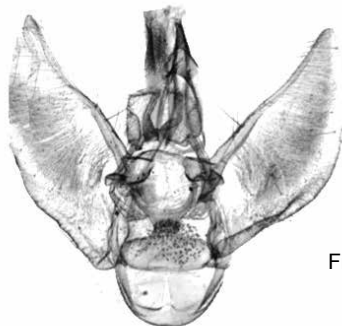


Fig.8

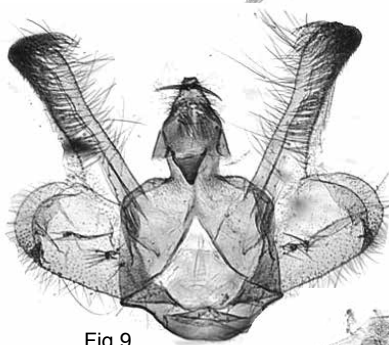


Fig.9



Figure 5: male genitalia of *Eupithecia silenicolata sultanabadi* BRANDT, 1941 (gen. prep. LEHMANN 20/2008)

Figure 6: male genitalia of *Eupithecia subtilis* DIETZE, 1910 (gen. prep. LEHMANN 19/2008)

Figure 7: male genitalia of *Eupithecia laterata* DIETZE, 1904 (gen. prep. LEHMANN 32/2010)

Figure 8: male genitalia of *Eupithecia lithographata* CHRISTOPH, 1887 (gen. prep. LEHMANN 31/2010)

Figure 9: male genitalia of *Macaria notata* (LINNAEUS, 1758) (gen. prep. LEHMANN 25/2008)

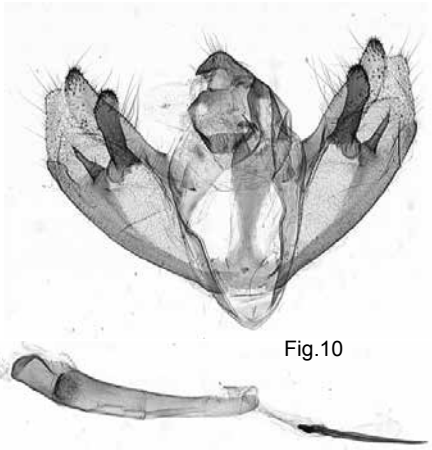


Fig.10

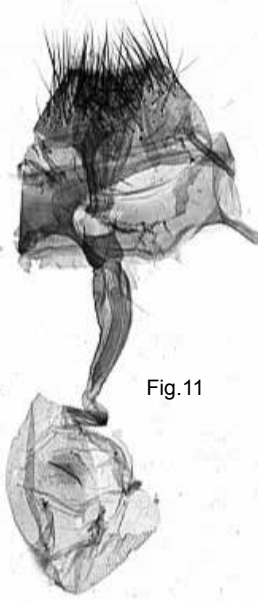


Fig.11

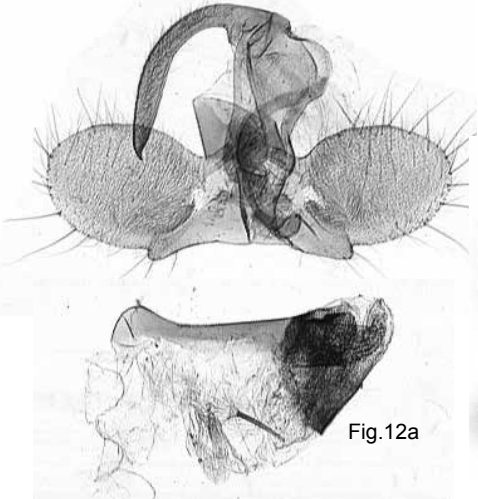


Fig.12a

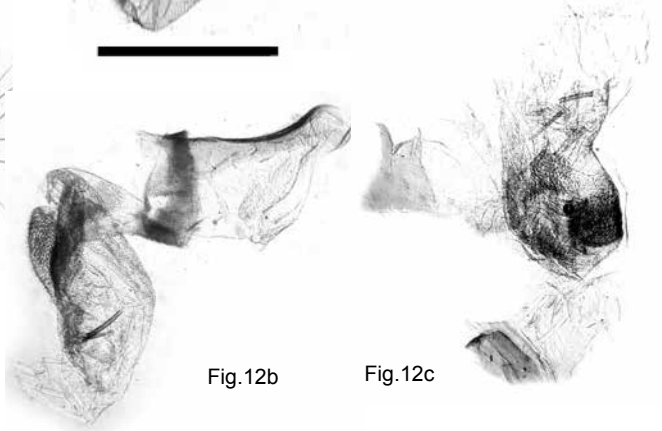


Fig.12b

Fig.12c

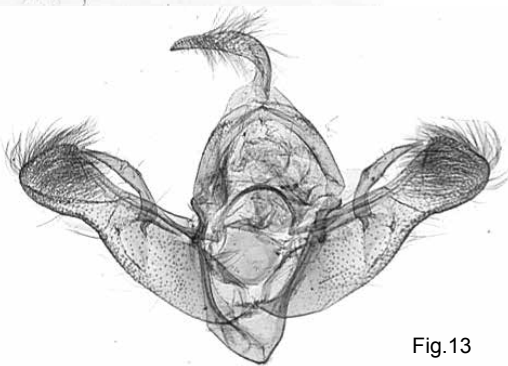


Fig.13

Figure 10: male genitalia of *Nychiodes divergaria elbursica* WEHRLI, 1937 (gen. prep. LEHMANN 1/2007)

Figure 11: female genitalia of *Meganola kolbi* (DANIEL, 1935) (gen. prep. LEHMANN 46/2007)

Figure 12: male genitalia of *Amphipyra stix* (HERRICH-SCHÄFFER, 18350) (gen. prep. LEHMANN 7/2007; gen. prep. ZAHIRI 541 and 542 aedeagus only)

Figure 13: male genitalia of *Bryophila spec.* (gen. prep. LEHMANN 59/2007)

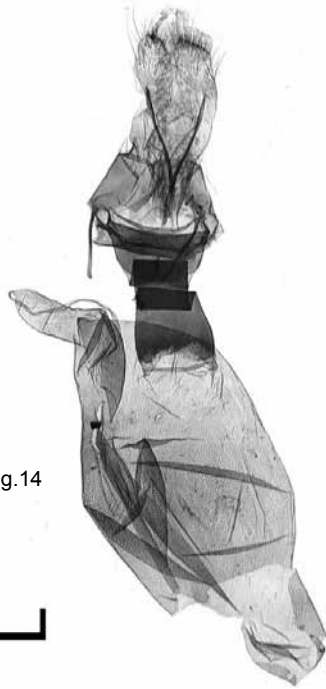


Fig.14

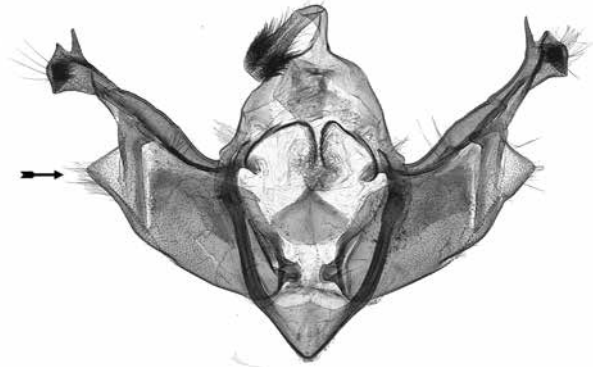


Fig.15

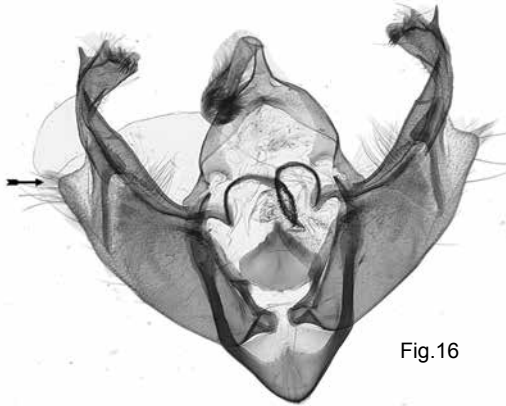
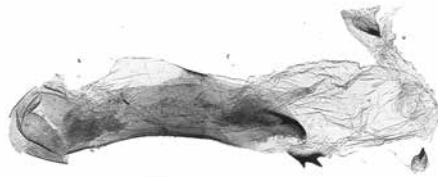


Fig.16

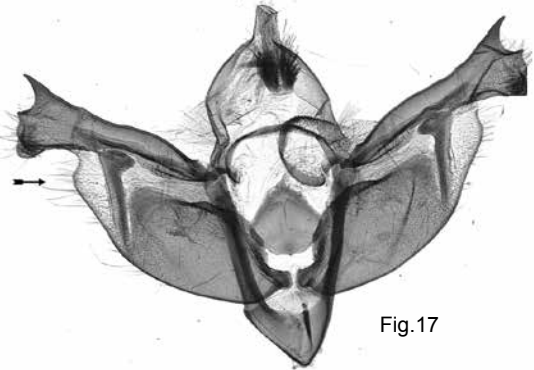


Fig.17



Figure 14: female genitalia of *Caradrina DRAUDTI* (BOURSIN, 1936) (gen. prep. LEHMANN 19/2007)

Figure 15: male genitalia of *Chloantha hyperici* ([DENIS & SCHIFFERMÜLLER], 1775) (gen. prep. LEHMANN 60/2007)

Figure 16: male genitalia of *Chloantha hyperici* ([DENIS & SCHIFFERMÜLLER], 1775) (gen. prep. LEHMANN 68/2007)

Figure 17: male genitalia of *Chloantha elbursica* (BOURSIN, [1968]) (gen. prep. LEHMANN 61/2007)