

A contribution to the Dryadaulidae and Tineidae of Lebanon, with two species new to science (Lepidoptera)

With 7 figures

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Summary

Data on recently collected Lebanese Dryadaulidae and Tineidae specimens is presented, as well as a review of previously published records from Lebanon. Altogether 32 species are listed, seven being new for the country. Two of them are described as new to science: *Nemapogon phoenicica* and *Nemapogon shamica*.

Key words

Lepidoptera, Tineidae, Dryadaulidae, Lebanon

Zusammenfassung

Die Arbeit ist eine Zusammenstellung der bisher aus dem Libanon bekannten Dryadaulidae und Tineidae. Es werden 32 Arten aufgelistet, sieben davon sind Erstfunde für das Land, zwei sind neu für die Wissenschaft, die hier beschrieben werden: *Nemapogon phoenicica* und *Nemapogon shamica*.

Introduction

Lebanon is a small, but biogeographically diverse area. The Mediterranean Sea shore and adjacent heavily populated lowlands share a fauna similar to neighbouring countries, but the highest mountain range of the area, the Mount Lebanon (Jabal Lubnān), makes a difference. The 170 km long mountain range divides Lebanon into a humid western part and dry eastern part. The range is on average 2500 meters high, the highest summit being Qurnat as Sawda', at 3088 m. During winter the range is under thick snow cover, and the mountains have considerable resources of water. The name Lebanon originates from the old Semitic word Ibn meaning white and is an obvious reference to the snow, which remains in the

mountains until late in summer (ROOM 2006). To the east of Mount Lebanon lies the Beqaa rift valley, with the Antilebanon mountains on the Syrian border.

Generally, in Lebanon and other Arabic speaking countries, it is necessary to be careful with local names and their transliterations to various western languages and alphabets. In Lebanon the transliterated locality names differ remarkably, depending, on whether they are transliterated to French or English. Different Arabic dialects and other local minority languages may also cause confusion in locality names.

Because of the topography and the almost continuous mountain range from Lebanon to Syria and the Turkish

Hatay province, some species are common not only to the Lebanese and Turkish fauna, but also to that of Central Europe. This can be seen especially at higher altitudes of 1700–2300 m, where widespread Palaearctic butterfly species such as *Parnassius mnemosyne* (L.) and *Melitaea cinxia* (L.) occur, the Levant being the extreme southern limit of their range.

The number of species in Lebanon (32) is nearly the same as in the neighbouring countries Israel (30) and Syria (24), whereas in Turkey (92) and in Greece (114) many more species are known. The differences depend merely on the level of collecting activity hitherto undertaken, rather than the habitat diversity in these two countries.

Material

The coastal Mediterranean area of Lebanon and the adjacent regions were frequently visited by collectors during a long period in the past. The results on the Tineidae collected at that time were published, together with a critical revision of the literature, by PETERSEN (1968) and PETERSEN & GAEDIKE (1979). Recently the first author has been able to study some additional material from Lebanon, namely that collected by Groß (in LMD) and previously unstudied material collected by Zerny (in NMW). An important advance in the knowledge of the Lebanese fauna was made, when the second author undertook two expeditions to the Mediterranean Lebanon and the Mount Lebanon range in 2010 (with Anssi Kullberg) and 2012 (with Tommi Lievonen).

As the result of examining this material, a total of one Dryadaulidae and six Tineidae species were recorded as new to the Lebanese fauna. Two of them are also new to science and are described below.

Abbreviations

coll. Arenberger	Ernst Arenberger, Vienna, Austria
coll. Roweck	Hartmut Roweck, Kiel, Germany
FMNH	Finnish Museum of Natural History, Helsinki, Finland
LMD	Löbbecke-Museum, Düsseldorf, Germany
MNHP	Museum of Natural History, Praha, Czech Republic
NMW	Naturhistorisches Museum, Vienna, Austria
SDEI	Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany
SMNK	Staatliches Museum für Naturkunde, Karlsruhe, Germany
ZMUC	Zoological Museum of Copenhagen, Denmark

Results

List of the hitherto known Dryadaulidae and Tineidae species from Lebanon

The numeric codes starting with GK. refer to electronic specimen archives of the Finnish Museum of Natural History: <http://id.luomus.fi/>

Dryadaulidae

According to recently published studies the genus *Dryadula*, hitherto regarded as a member of the subfamily Dryadulinae, is now placed in its own family: Dryadaulidae (REGIER et al., 2014).

Dryadula minuta GAEDIKE, 2007

1 ♂, GK.7854, Koura 308 m, 34°19'33"N, 35°47'24"E, Beshmezzine, 3.vi.2012, J. Kullberg & T. Lievonen leg.: FMNH.

New to Lebanon, hitherto known only from Turkey (type series) and Greece (Rhodes).

Tineidae

Meessiinae

According REGIER et al. (2014) *Eudarcia* CLEMENS, 1860 and *Bathroxena* MEYRICK, 1919 from the former subfamily Meessiinae form a basal family Meessiidae in Tineoidea. As the positions of the majority of other Palaearctic genera of the former subfamily Meessiinae are still uncertain, these genera are still placed here.

Eudarcia holtzi (REBEL, 1902)

Holotype and paratype of the synonym of *Obesoceras libanoticum* Petersen, 1968 are from Lebanon (PETERSEN, 1968: 60).

3 ♂, GK.7843, 7847, 7886, Koura 308 m, 34°19'33"N, 35°47'24"E, Beshmezzine, 3.vi.2012, J. Kullberg & T. Lievonen leg.: FMNH; SDEI (7847).

Infurcitinea karmeliella (AMSEL, 1935)

PETERSEN (1986: 61)

1 ♂, Beqaa, 860 m, 33°43'57"N, 35°47'14"E, 2.ix.2010, leg. J. & A. Kullberg; FMNH; 1 ♂, GK.6374, Kesrouan, 950 m, 34°03'57,85"N, 35°45'04,03"E, Jebel Musa, Mar Geryes, 25., 29.v.2012, J. Kullberg & T. Lievonen leg.: FMNH; 2 ♂, GK.7231, 7261, Kesrouan, 1150 m,

34°03'08,33"N, 35°46'03,87"E, Jebel Musa, Mar Elias, 27.v.2012, J. Kullberg & T. Lievonen leg.: FMNH; SDEI.

Lichenotinea pustulatella (ZELLER, 1952)

1 ♂, GK.7240, Kesrouan 1130 m, 14°03'08,33", 35°46'03,87" Jebel Musa, Mar Elias, 27.v.2012, J. Kullberg & T. Lievonen leg.: FMNH; 2 ♂, GK.6416, 6419, same location, but 29.v.2012: FMNH; SDEI (6419).

New to Lebanon, hitherto known from Spain, France, Italy, from Balkan Peninsula to Romania, in Central Europe from Austria to Germany and Belgium. Outside Europe recorded from Turkey.

Stenoptinea cyaneimarmorella (MILLIÈRE, 1854)

PETERSEN (1968: 58 [under the synonym *Celestica angustipennis* STAUDINGER, 1871]).

Hapsiferinae

Hapsifera luridella ZELLER, 1847

PETERSEN (1968: 65)

6 exx., 12 km N Beirut [12 km N of Beirut], 9.vi.1969, leg. Groß: LMD;

10 exx., Zedern bei Becharré [Cedars of Bsharri], 14–16.vi.1969, leg. Groß: LMD.

4 ♂, 1 ♀, Batroun, 200 m, 34°16'50,72"N, 35°47'23,99"E, Tel Ras Nhascl, 1.vi.2012, leg. J. Kullberg & T. Lievonen: FMNH; 2 ♂, GK.7943, Koura 308 m, 34°19'33"N, 35°47'24"E, Beshmezzine, 3.vi.2012, J. Kullberg & T. Lievonen leg.: FMNH; 2 ♂, GK.7272 & 7215, Kesrouan, 1150 m, 34°03'08,33"N, 35°46'03,87"E, Jebel Musa, Mar Elias, 27.v.2012, J. Kullberg & T. Lievonen leg.: FMNH; 1 ♂, GK.8217, Kesrouan, 900 m, 34°04'07"N, 35°45'10"E, Jebel Musa, St. Takla, 4.vi.2012, J. Kullberg & T. Lievonen leg.: FMNH; 1 ♂, 1 ♀, GK.6302 & 6324, Kesrouan, 1520 m, 34°02'56,69"N, 35°47'17,35"E, 2 km W Ain el Qadah, 29.v.2012, J. Kullberg & T. Lievonen leg.: FMNH.

Hapsifera multiguttella (RAGONOT, 1895)

PETERSEN (1968: 65)

Rhodobates nodicornellus (REBEL, 1911)

PETERSEN (1968: 53)

1 ♂, 3 ♀, GK.8122, 8133, 8135, 8139, Kesrouan, 885 m, 34°3'25,63"N, 35°43'2,28"E, Ghbele, 5.–6.vi.2014, J. Kullberg & T. Lievonen leg.: FMNH; SDEI (GK.8122); 3 ♂,

3 ♀, GK.8202, 8208, 8212, 8219, 8229, 8232, Kesrouan, 900 m, 34°3'25,63"N, 35°04'07"E, Jebel Musa, St. Takla, 4.vi.2014, J. Kullberg & T. Lievonen leg.: FMNH; SDEI (GK.8208, 8233); 4 ♂, 1 ♀, GK.6441, 6444, 6461, 6474, 6616, Kesrouan, 950 m, 34°03'57,85"N, 35°45'04,03"E, Jebel Musa, Mar Geryes, 29.v.2014, J. Kullberg & T. Lievonen leg.: FMNH; 6 ♂, 4 ♀, GK.8008–8010, 8193–9198, 8253, Kesrouan, 960 m, 34°03'57"N, 35°45'04"E, Jebel Musa, Mar Geryes, 29.v.2014, J. Kullberg & T. Lievonen leg.: FMNH; SDEI (GK.8009, 8196); 1 ♂, GK.8271, Kesrouan, 1150 m, 34°03'08"N, 35°46'03"E, Jebel Musa, Mar Elias, 6.vi.2014, J. Kullberg & T. Lievonen leg.: FMNH; 5 ♂, GK.5869–5871, 5916, 6331, Kesrouan, 1520 m, 34°02'56,69"N, 35°47'17,35"E, 2 km W Ain el Qadah, 29.v.2014, J. Kullberg & T. Lievonen leg.: FMNH; SDEI (GK.5331).

Pararhodobates syriaca (LEDERER, 1857)

Holotype from Lebanon.

Nemapogoninae

Nemapogon kasyi GAEDIKE, 1986

Part of type series from Lebanon.

5 ♂, GK.4446, 4469, Kesrouan, 1070 m, 34°3,2'N, 35°45'48"E, Jebel Musa, 29.viii.2010, leg. J. & A. Kullberg: FMNH; SDEI (GK.4446); 1 ♂, 1 ♀, GK.7239, 7768, Kesrouan, 1150 m, 34°03'08,33"N, 35°46'03,87"E, Jebel Musa, Mar Elias, 27., 31.v.2012, J. Kullberg & T. Lievonen leg.: FMNH.

First records from Lebanon since the type series.

Nemapogon vartianae GAEDIKE, 1986

Part of type specimens from Lebanon.

2 ♀, Kesrouan, 1070 m, 34°3,2'N, 35°45'48"E, Jebel Musa, 29.viii.2010, leg. J. & A. Kullberg: FMNH.

First records from Lebanon since the the type series.

Nemapogon phoenicica GAEDIKE & KULLBERG spec. nov.

Holotype: ♂, "11.v.1963, Libanon, 25 km N von Beirut [Lebanon, 25 km N of Beirut], [leg.] Kasy & Vartian;" "Gen.präp. [genitalia slide] Petersen Nr. 2107;" "Holotypus ♂, *Nemapogon phoenicica* sp. n. det. G. Gaedike, 2014;" NMW.

Paratypes: 1 ♂, from same location, but 11.v.1961; "Gen.präp. [genitalia slide] Petersen Nr. 2112;" SDEI; 1 ♂, "GK.4405, Lebanon, Kesrouan, 1070 m, 34°3,2'N, 35°45'48"E, Jebel Musa, Mar Elias, 29.viii.2010, J. & A. Kullberg leg." "Gen.präp. [genitalia slide] Gaedike Nr. 8003;" FMNH; 1 ♀, "GK.8126, Lebanon, Kesrouan,

885 m, 34°3'25,63"N, 35°43'2,28"E, Ghbele, 5.–6.vi.2014, J. Kullberg & T. Lievonen leg." "Gen.präp. [genitalia slide] Gaedike Nr. 8501;" FMNH; 1 ♂, "Turkey, Prov. Mersin, 5 km nw Erdemli, 300 m, 16.vii.1986, leg. M. Fibiger;" "Zool. Museum DK Copenhagen;" "Gen.präp. [genitalia slide] Gaed.[ike] Nr. 4262;" ZMUC; 1 ♂, "Asia min. Turcia, Mersin, 0–300 m, leg. M. u. W. Glaser;" "20.v.1070, coll. Glaser;" "Gen.präp. [genitalia slide] Gaed.[ike] Nr. 4000;" SMNK; 2 ♀, "Turkey, Prov. Icel, Taurus Road Ermenak-Mut, 600 m, 15.vii.1986, leg. M. Fibiger;" "Zool. Museum DK Copenhagen;" "Gen.präp. [genitalia slide] Gaed.[ike] Nr. 4294; 4298;" ZMUC; SDEI; 1 ♀, "Turkey, Alanya, 15 km N, 800 m, 17.vii.1998, [leg.] K. Larsen;" "Gen.präp. [genitalia slide] Gaedike Nr. 7357;" coll. Roweck; 2 ♀, "1.vii.1990, Asia minor, Celemil, Misis, 50 km so Adana [Asia minor, Celemil, Misis, 50 km SE Adana];" "Xerothermhügelland, Lichtfang, [xerothermic hill landscape, at light] 23/90, leg. E. M. u. M. Lödl;" "Gen.präp. [genitalia slide] Gaed.[ike] Nr. 4332;" NMW; SDEI; 1 ♂, 1 ♀, "Zypern [Cyprus], 29.–31.vii.[19]81, Troodos-Gebirge südl. Lania [Troodos mountains, south of Lania], 600 m, [leg.] M. u. E. Arenberger;" "Gen.präp. [genitalia slide] Gaed.[ike] Nr. 2682; 2721;" coll. Arenberger; SDEI; 1 ♀, "Cyprus, Laneia, N. Limassol, 550 m, 23.–29.vi.1997, leg. D. Nilsson, A. Madsen, M. Fibiger, P. Svendsen;" "Coll. ZMUC;" "Gen.präp. [genitalia slide] Gaedike Nr. 6537;" ZMUC; 4 ♂, 3 ♀, „Israel, Nahal Oren, Mt. Carmel, light trap, 24.vi.1997; 21.v., 19.vi.1998; 27.v., 5.vii.1999, NFS-6, Pavliček & Kravchenko;" „Gen.präp. [genitalia slide] Gaedike Nr. 8828, 8829, 8832, 8833, 8837, 8839;" SDEI; MNHP.

Description (fig. 1): Wingspan 9 – 12 mm; head brush pale creamy, laterally light brown; antenna grey-brown, scape and the first segment of flagellum darker; labial palpus outside dark grey-brown, inside creamy, second segment apically with two bristles; thorax and tegulae brown, apical half pale creamy, nearly white: Forewing with white ground colour and pattern of brown scales, characteristic for the genus: brown are an oblique short stripe from base at costa, a stripe at 1/2 from costa to cell connected with a larger dot, being oblique from below; before dorsum, four short stripes on costa from 1/2 to apex; a nearly complete line and a thin line at base of fringe from apex to the end of fringe; in the white area overlaid partly with lighter brown scales. Hindwing white.

Male genitalia (figs 2–4): Uncus with two short pointed lobi, gnathos arms basally rounded, slightly curved to pointed tip, saccus a little shorter than valva; valva as long as uncus, terminating in a pointed slightly hook-shaped pointed apex, digitus clearly projecting above apex, anellus short, band-shaped; phallus nearly as long as uncus-tegumen-saccus complex, with break at 1/3, without any cornuti or appendices.

Female genitalia (figs 5–5c): Anterior apophysis end in elongated sclerotised plate connected with edge of ostium; ostium lip cup- or mushroom-shaped, apically with some long bristles, the shape is somewhat variable; ostium lip and the first part of ductus bursae with stronger sclerotization.

Etymology: Named after the ancient culture of the Phoenicians, which originally centred in the present coastal Lebanon and was known as Phoenicia.

Biology: Larval host unknown. Previous records of many members of the genus show that larvae are fungivorous, therefore it can be presumed that larvae of this species have a similar life history. The adults were collected between May and August.

Remarks: Superficially not necessarily distinguishable from the other members of the genus. The genitalia structure shows similarities to the species group with a more or less mushroom-shaped ostium lip in females. Differences are in the larger sclerotized part of ductus bursae and in the more cup-shaped ostium lip in females. In males the phallus is without any cornuti and other appendices, which are characteristic for most of the members of the group of species: *hungaricus* GOZMÁNY, 1960; *cyprica* GAEDIKE, 1986; *arcosuensis* GAEDIKE, 2007; *anatolica* GAEDIKE, 1986; *arenbergeri* GAEDIKE, 1986; *gravosaellus* PETERSEN, 1957.

Nemapogon shamica GAEDIKE & KULLBERG, spec. nov.

Holotype: ♀, "9.–16.v.1963, Libanon, O v. Saida [Lebanon, E of Saida], [leg.] Kasy & Vartian;" "Gen.präp. [genitalia slide] Petersen Nr. 2133;" "Holotypus ♂, *Nemapogon shamica* sp. n. det. G. Gaedike, 2014;" NMW.

Paratypes: 5 ♀, with same data as the holotype, but genitalia slides Petersen Nr. 2105; 2126; 2127; genitalia slides Gaedike Nr. 2820; 2821; NMW; SDEI; 1 ♀, "Libanon, 25 km N von Beirut [Lebanon, 25 km N of Beirut], 9.vi.1961, [leg.] Kasy & Vartian;" "Gen.präp. [genitalia slide] Petersen Nr. 2135;" NMW; 1 ♀, "GK.6279, Lebanon, Kesrouan, 1520 m, 34°02'56,69"N, 35°47'17,35"E, 2 km W Ain el Quadah, 29.v.2012, J. Kullberg & T. Lievonen leg.: FMNH;" "Gen.präp. [genitalia slide] Gaedike Nr. 8435;" FMNH; 1 ♀, "GK.6694, Lebanon, Kesrouan, 950 m, 34°03'57,85"N, 35°45'04,03"E, Jebel Musa, Mar Garyes, 25.v.2012, J. Kullberg & T. Lievonen leg.: FMNH; 2 ♀, "Zypern [Cyprus], 4.viii.[19]83, Troodos Gebirge, ndl. Troodos [Troodos mountains, north of Troodos], 1500 m, [leg.] M. & E. Arenberger;" "Gen.präp. [genitalia slide] Gaedike Nr. 2714; 2722;" coll. Arenberger; SDEI; 2 ♀, "Zypern [Cyprus], 11.viii.[19]83, Troodos Gebirge [Troodos mountains], Tripylos Cedar Valley, 1300 m, [leg.] M. &

E. Arenberger;” “Gen.präp. [genitalia slide] Gaedike Nr. 2712; 2725;” coll. Arenberger; SDEI; 1 ♀, Zypern, Paphos Umg., [Cyprus, env. of Paphos] 8.–20.v.[19]93, leg. J. Wimmer;” “Gen.präp. [genitalia slide] Gaedike Nr. 4953;” coll. Arenberger; 1 ♀, “Cyprus, Troodos mts., Adeifi above Khandria, 1600 m, 24.vi.1997, leg. M. Fibiger, A. Madsen, D. Nilsson, P. Svendsen;” “Coll. ZMUC;” “Gen.präp. [genitalia slide] Gaedike Nr. 6543;” ZMUC; 1 ♀, “Cyprus, Troodos Mts, Olympus, 1950 m, 23.–29.vi.1997, leg. D. Nilsson, A. Madsen, M. Fibiger, P. Svendsen;” “Coll. ZMUC;” “Gen.präp. [genitalia slide] Gaedike Nr. 6544;” ZMUC.

Description (fig. 6): Wingspan 12 – 15 mm; head brush pale creamy, laterally and tuft between antennae grey-brown; antenna grey-brown, underside lighter; outside of labial palpus dark grey-brown, inside creamy, second segment on upper side with some bristles, apically with four to five bristles; thorax and tegulae brown, only apically pale creamy. The whitish ground colour of forewing nearly completely overlaid with brown scales, forming a pattern, characteristic for the genus: from base at costa oblique to the begin of cell; at 1/2 from costa oblique through cell to dorsum at begin of fringe; a large patch before apex from costa to fringe; some short stripes at costa; a line from apex along fringe to the end of them. Hindwing light grey.

Male genitalia: Unknown.

Female genitalia (figs 7–7h): Apophysis anterioris ends in narrow prolonged plate; ostium lip arrowhead-shaped, the apical process with variable length, ostium lip basally with a more strongly sclerotized area of different length.

Etymology: The name is derived after the Arab name “ash-Sham” of the Levant, originally meaning the area under the rule of Caliphate and its capital Damascus.

Biology: Larval host unknown. The hitherto known records of many members of the genus show that larvae are fungivorous, therefore it can be presumed that larvae of this species have a similar life history.

Remarks: Not superficially certainly distinguishable from the other members of the genus. The new species is a member of a group of species having an arrowhead-shaped ostium lip with a more or less long terminal process with some long bristles. It is similar to *N. sardicus* GAEDIKE, 1983, but the ostium lip is more or less triangular, with a short apical process, and *N. signatellus* PETERSEN, 1957, but this species is characterised by having a signum in the corpus bursae.

Nemapogon signatellus PETERSEN, 1957

GAEDIKE (1986: 37)

3 ♂, GK.8132, 8169, 8170, Kesrouan, 885 m, 34°3'25,63"N, 35°43'2,28"E, Ghbele, 26.v.2012, J. Kullberg & T. Lievonen leg.: FMNH; 2 ♂, GK.6297, 6311, Kesrouan, 1520 m, 34°02'56,69"N, 35°47'17,35"E, 2 km W Ain el Qadah, 29.v.2012, J. Kullberg & T. Lievonen leg.: FMNH; 4 ♂, GK.6367, 6372, 6680, 6682, Kesrouan, 950 m, 34°03'57,85"N, 35°45'04,03"E, Jebel Musa, Mar Geryes, 25., 29.v.2012, J. Kullberg & T. Lievonen leg.: FMNH; 1 ♂, GK.7856, Koura, 308 m, 34°19'33"N, 35°47'24"E, Beshmezzine, 3.vi.2012, J. Kullberg & T. Lievonen leg.: FMNH.

Nemapogon ruricolella (STANTON, 1849)

1 ♂, GK.8114, Kesrouan, 885 m, 34°3'25,63"N, 35°43'2,28"E, Ghbele, 5.–6.vi.2014, J. Kullberg & T. Lievonen leg.: FMNH.

New to Lebanon. Hitherto known from nearly all southern and central European countries, apart from Scandinavia. Outside Europe known from Turkey.

Nemapogon orientalis PETERSEN, 1961

Holotype from Lebanon.

PETERSEN & GAEDIKE (1979: 391)

Myrmecozelinae

Ateliotum syriaca (CARADJA, 1920)

Holotype from Lebanon; PETERSEN & GAEDIKE (1979: 400); PETERSEN (1968: 54).

1 ♂, Beqaa, 860 m, 33°43'57"N, 35°47'14"E, Kefraya, Aammig marshes, 3.ix.2010, leg. J. & A. Kullberg: FMNH; 10 ♂, 2 ♀, Kesrouan, 1070 m, 34°3,2'N, 35°45'48"E, Jebel Musa, 29.viii.2010, leg. J. & A. Kullberg: FMNH; SDEI; 5 ♂, 1 ♀, Batroun, 200 m, 34°16'50,72"N, 35°47'23,99"E, Tel Ras Nhascl, 1.vi.2012, leg. J. Kullberg & T. Lievonen: FMNH; SDEI; 1 ♀, GK.7871, Koura 308 m, 34°19'33"N, 35°47'24"E, Beshmezzine, 3.vi.2012, J. Kullberg & T. Lievonen leg.: FMNH.

Cephimallota praetoriella (CHRISTOPH, 1872)

1 specimen, Zedern bei Becharré [Cedars of Bsharri], 1900–2000 m, 14.–16.vi.1969, leg. Groß: LMD.

New to Lebanon, hitherto known in Europe from Germany, Czech Republic, Ukraine and European part of

Russia. Outside Europe from Kazakhstan, Turkmenistan, Caucasus region (Armenia, Azerbaijan), Iran and Turkey.

Cephimallota angusticostella (ZELLER, 1839)

The Holotype of the synonym *Cephimallota libanotica* Petersen, 1959 is from Lebanon.

PETERSEN (1968: 54 [under the name *libanotica*]).

1 ♂, GK.8016, Kesrouan, 960 m, 34°02'56"N, 35°44'14"E, Nar ed Dahab, 4.vi.2012, J. Kullberg & T. Lievonen leg.; FMNH.

Perissomasticinae

Edosa lardatella (LEDERER, 1858)

PETERSEN & GAEDIKE (1979: 398)

2 ♂, GK.7327, 7218, Kesrouan 1150 m, 14°03'08,33", 35°46'03,87" Jebel Musa, Mar Elias, 27.v.2012, J. Kullberg & T. Lievonen leg.: FMNH.

Edosa fuscoviolacella (RAGONOT, 1895)

PETERSEN (1968: 55); PETERSEN & GAEDIKE (1979: 399 [under the synonym *Episcardia violacella* (REBEL, 1893)])

2 ♂, Kesrouan, 1070 m, 34°03'02"N, 35°45'48"E, Jebel Musa, 29.viii.2010, leg. J. & A. Kullberg: FMNH; 4 ♂, GK.6360, 6495, 6858, 6883, Kesrouan, 950 m, 34°03'08.33"N, 35°45'04.03"E, Jebel Musa, 29.viii.2010, leg. J. & A. Kullberg: FMNH; 8 ♂, GK.2299, 2310, 2320–2322, 2326, 2328, 2340, Kesrouan, 1070 m, 34°03'02"N, 35°45'48"E, Jebel Musa, 29.viii.2010, leg. J. & A. Kullberg: FMNH; 1 ♂, GK.7645, Kesrouan, 1150 m, 34°03'08.33"N, 35°46'03.87"E, Jebel Musa, Mar Elias, 31.v.2012, leg. J. Kullberg & T. Lievonen: FMNH; SDEI (2321, 2328, 2340); 2 ♂, Beqaa, 860 m, 33°43'57"N, 35°47'14"E, Kefraya, Aammig marshes, 3.ix.2010, leg. J. & A. Kullberg: FMNH.

Crassicornella crassicornella (ZELLER, 1847)

1 ♂, Becharre [Bsharri], 1400 m, 21.–28.vi.1931, leg. Zerny: NMW.

New to Lebanon, hitherto known from Italy and through the Balkan Peninsula (Albania, Greece) to Turkey.

Praelongicera palaestinella AMSEL, 1956

PETERSEN (1968: 55); PETERSEN & GAEDIKE (1979: 399 [under the synonym *Perissomastix palaestinella* (AMSEL, 1956)])

5 ♂, Kesrouan, 1070 m, 34°3,2'N, 35°45'48"E, Jabal Moussa [= Jebel Musa], 29.viii.2010, leg. J. & A. Kullberg: FMNH.

Tineinae

Ceratuncus affinitella (REBEL, 1901)

PETERSEN (1968: 56); PETERSEN & GAEDIKE (1979: 401)

1 ♂, Quadi el Azbuniye/Sofar, 25 km östl. Beirut [25 km east of Beirut], 30.v.1969, leg. Groß: LMD; 9 specimens, Zedern bei Becharré [Cedars of Bsharri], 1900–2000 m, 3.–5.vi.1969, leg. Groß: LMD; 16 ♂, GK.5166, 5168, 5169, 5171–5176, 5184, 5191, 5192, 515, 5197, 5199, 5204, Bcharre, 1825 m, 34°15'17,52"N, 36°01'41,92"E, Al Ariz, meadows, 9.vi.2012, J. Kullberg & T. Lievonen leg.: FMNH; SDEI (5174, 5184, 5191, 5197).

Reisserita latiusculella (STAINTON, 1867)

PETERSEN (1968: 56); PETERSEN & GAEDIKE (1979: 402)

6 specimens Nahr el Kalb, 12 km nördl. Beirut [12 km north of Beirut], 31.v., 12.vi.1969, leg. Groß: LMD; 1 ♂, Umgebung [env. of] Tabarja beach, 20 km nördl. Beirut [20 km north of Beirut], 1.–9.vi.1969, leg. Groß: LMD; 1 ♂, Zedern bei Becharré [Cedars of Bsharri], 1900–2000 m, 14.–16.vi.1969, leg. Groß: LMD; 7 ♂, Batroun, 200 m, 34°16'50,72"N, 35°47'23,99"E, Tel Ras Nhascl, 1.vi.2012, leg. J. Kullberg & T. Lievonen: FMNH; SDEI; 6 ♂, GK.7862, 7863, 7904, 7908, 7918, 7920, Koura 308 m, 34°19'33"N, 35°47'24"E, Beshmezzine, 3.vi.2012, J. Kullberg & T. Lievonen leg.: FMNH; SDEI (7863, 7904); 1 ♂, GK.7753, Kesrouan 1150 m, 14°03'08,33", 35°46'03,87" Jebel Musa, Mar Elias, 31.v.2012, J. Kullberg & T. Lievonen leg.: FMNH.

Trichophaga tapetzella (LINNAEUS, 1758)

PETERSEN (1968: 57)

Trichophaga bipartitella (RAGONOT, 1892)

PETERSEN (1968: 57 [under the name of the synonym *abruptella* WOLLASTON, 1858])

Tineola bisselliella (HUMMEL, 1823)

PETERSEN (1968: 57)

Tinea basifasciella RAGONOT, 1895

PETERSEN (1968: 57)

1 ♂, Batroun, 34°18'29"N, 35°52'14"E, Tannourine, Balaá, 1512 m, 22.viii.2010, leg. J. & A. Kullberg; FMNH.

Niditinea fuscella (LINNAEUS, 1758)

PETERSEN & GAEDIKE (1979: 406)

Proterospastis merdella (ZELLER, 1847)

PETERSEN (1968: 58)

Monopis imella (HÜBNER, 1813)

PETERSEN & GAEDIKE (1979: 409)

1 ♀, GK.5819, Kesrouan, 1520 m, 34°02'56,69"N, 35°47'17,35"E, 2 km W Ain el Qadah, 29.v.2012, J. Kullberg & T. Lievonen leg.: FMNH.

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References

- GAEDIKE, R. 1986: Beitrag zur Kenntnis der ostmediterranen Nemapogoninae (Lepidoptera, Tineidae). – Reichenbachia, Staatliches Museum für Tierkunde Dresden **24** (2): 23–39, 101 figs.
- PETERSEN, G. 1968: Beitrag zur Kenntnis der ostmediterranen Tineiden (Lepidoptera: Tineidae, exclus. Nemapogoninae). – Acta entomologica bohemoslovaca **65** (1): 52–66, 15 figs.
- PETERSEN, G. & GAEDIKE, R. 1979: Beitrag zur Kenntnis der Tineiden-Fauna des Mittelmeerraumes. – Beiträge zur Entomologie **29** (2): 383–412, 29 figs.
- REGIER, J. C.; MITTER, C.; DAVIS, D. R.; HARRISON, T. L.; SOHN, J.-C.; CUMMINGS, M. P.; ZWICK, A. & MITTER, K. T. 2014: A molecular phylogeny and revised classification for the oldest ditrysian moth lineages (Lepidoptera: Tineoidea), with implications for ancestral feeding habits of the mega-diverse Ditrysia. – Systematic Entomology **39**: 1–24, 11 figs.
- ROOM, A. 2006: Placenames of the World: Origins and Meanings of the Names for 6,600 Countries, Cities, Territories, Natural Features and Historic Sites (2nd ed.). McFarland: pp. 214–215.

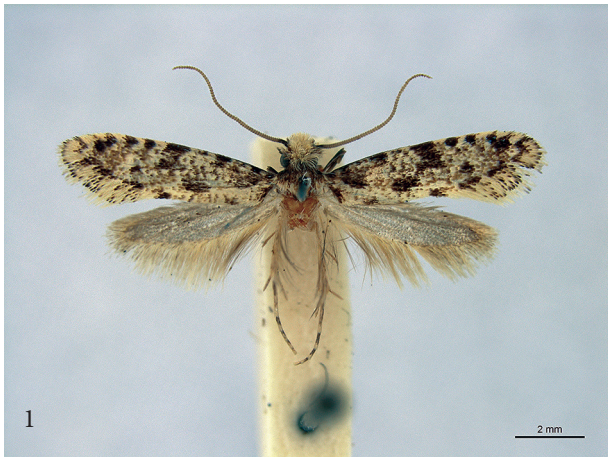
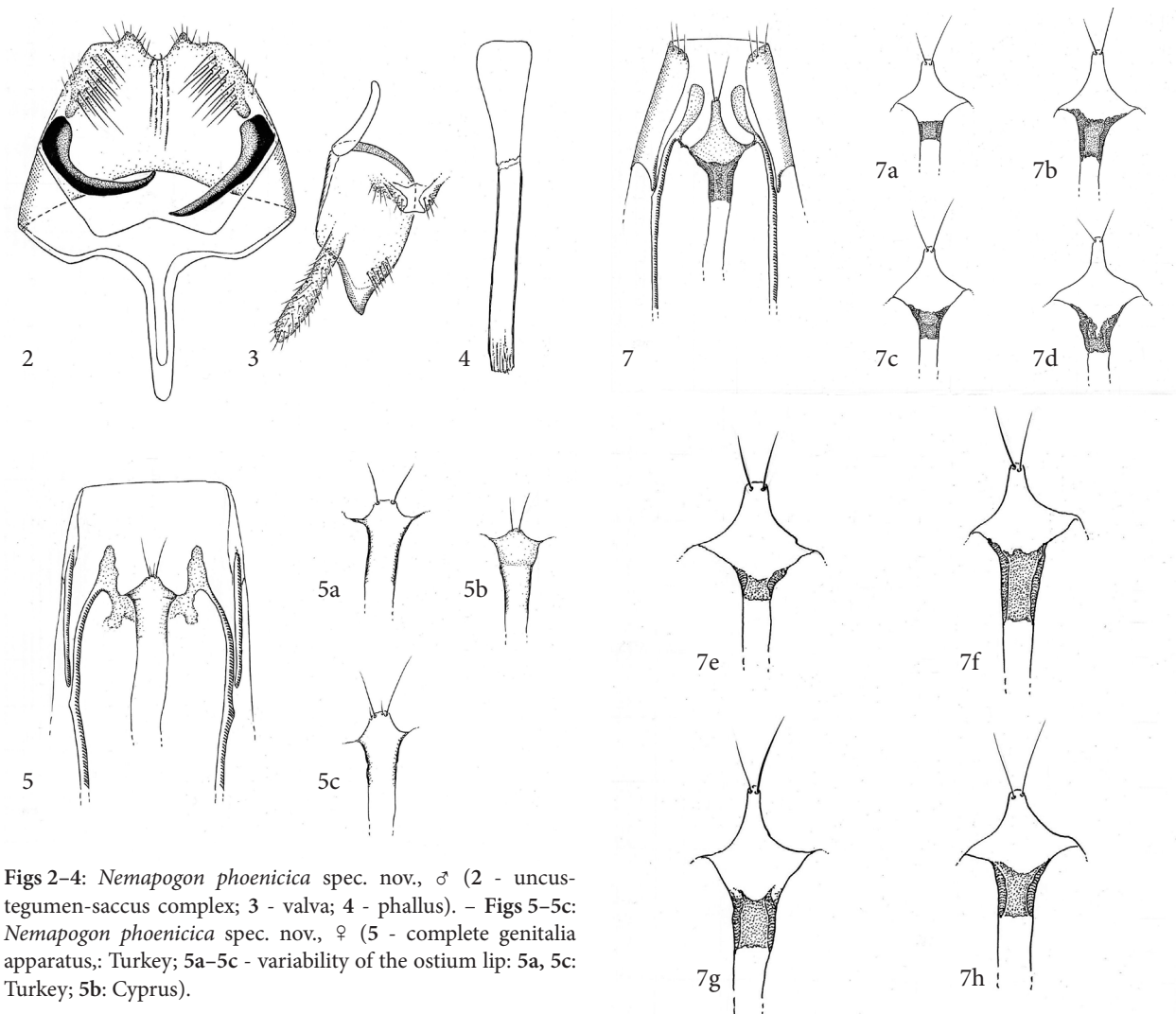


Fig. 1: *Nemapogon phoenicica* spec. nov., holotype.



Fig. 6: *Nemapogon shamica* spec. nov., holotype.



Figs 2–4: *Nemapogon phoenicica* spec. nov., ♂ (2 - uncus-tegumen-saccus complex; 3 - valva; 4 - phallus). – Figs 5–5c: *Nemapogon phoenicica* spec. nov., ♀ (5 - complete genitalia apparatus.; Turkey; 5a–5c - variability of the ostium lip: 5a, 5c: Turkey; 5b: Cyprus).

Figs 7–7h: *Nemapogon shamica* spec. nov., ♀ (7 - complete genitalia apparatus.; Cyprus; 7a–7h: variability of the ostium lip: 7a, b, c, e, h: Lebanon; 7d, f, g: Cyprus).