

Bonner zoologische Beiträge	Band 56 (2007)	Heft 1/2	Seiten 101–106	Bonn, März 2009
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Some New and Interesting “Microlepidoptera” from the Collection of the Zoologisches Forschungsmuseum Alexander Koenig (ZFMK), Bonn (Lepidoptera: Tineidae, Epermeniidae, Acrolepiidae, Douglasiidae)

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Abstract. The study of some of the so called “Microlepidoptera” families, the Tineidae, Epermeniidae, Acrolepiidae and Douglasiidae, at the collection of the ZFMK, brought some species of taxonomical and faunistical interest to light. Two species are described as new: *Reisserita zouhari* sp. n. (Tineidae), and *Epermenia (Epermenia) dalianicola* sp. n. (Epermeniidae), and the type-material of the four families, represented in this collection, is listed and commented.

Keywords. Tineidae, Epermeniidae, Acrolepiidae, Douglasiidae, new species, type material.

The courtesy of my colleague Dr. Dieter Stüning, curator of the Lepidoptera collection at the Zoologisches Forschungsmuseum Alexander Koenig, Bonn, enabled me to study the material of the four families Tineidae, Epermeniidae, Acrolepiidae and Douglasiidae, stored at this collection.

The paper includes descriptions of two new species, a list of taxa represented by type-specimens and comments on some additional species which are of faunistical interest.

TINEIDAE

Scalidomia hoenei Petersen, 1991

Holotype ♂, [China, Jiangsu]. “Lungtan b. Nanking, Prov. Kiangsu, 25. IX. 1933, H. Höne”; Paratype ♂ same location and collector, but 22. VIII. 1933.

Known from the type locality only.

Rhodobates sinensis Petersen, 1987

Holotype ♂, [China, Yunnan]. “Li-kiang, Prov. N. Yunnan, 18. VII. 1934, H. Höne”.

The collection contains numerous additional specimens from the type locality and from other locations in China:

12 ♂, 28 ♀, Prov. Nord-Yuennan, Li-kiang, between 28. V. and 17. VIII. 1934, leg. H. Höne; 2 ♂, Shanghai, 10. V. 1933, leg. H. Höne; 1 ♂, Kuling, 2. V. 1934, leg. H. Höne; 1 ♀, Prov. Shantung, Laushan bei Tsingtau, 6. VI. 1936, leg. H. Höne; 1 ♂ Batang (Tibet), Tal des Yangtze, ca. 2800 m, 9. VII. 1936, leg. H. Höne.

The female genitalia were illustrated for the first time by LI & XIAO (2006). It is of interest, that the authors collected a large series of this species at the type locality, after more than 70 years.

Morphaga formosana Robinson, 1986

[= *kobella* Robinson, 1986]

1 ♂, [China, Jiangsu]. “Shanghai, Provinz Kiangsu, 30. V. 1935, H. Höne”

Distribution. First record from the Palaearctic region; previously known only from the type locality (Taiwan) and from Fu-chou (China, Fujian).

Nemapogon gliriella (Heyden, 1865)

[= *cachetiellus* Zagulajev, 1963; = *cacheticus* Zagulajev, 1964; = *ibericus* Zagulajev, 1968]

1 ♂ Düsseldorf-Eller, 6. VII. 1941, leg. Friedel. New record for Nordrhein-Westfalen.

Distribution. The species is hitherto known from Germany, Austria, Czech Republic, Slovakia, Slovenia, Turkey and the Caucasus region (Georgia, Armenia). Every time, only few specimens were collected.

Biology. Larvae feed in fungi *Stereum hirsutum* (BETTAG 1995; BETTAG & BASTIAN 1996), *Stereum rugosum* (C.Vetter, Hamburg, 1996 in litt.).

Edosa spinosa (Gaedike, 1984)

Holotype ♂, [China, Shaanxi]. "Tapaishan im Tsinling, Prov. Süd-Shensi, 1700 m, 16. VI. 1936, H. Höne".

Distribution. Known from the type locality only.

Edosa sinica (Gaedike, 1984)

Holotype ♂, [China, Jiangsu]. "Prov. Kiangsu, Lungtan bei Nanking, 23. V. 1933, H. Höne". Paratypes: 4 ♂, same location, but 20., 22., 28. V. 1933, leg. H. Höne.

Distribution. Known from the type locality only.

***Reisserita zouhari* sp. n.** (Fig. 1)

Holotype ♂, "Aegyptus Mariput El Agami, 9. 5. 1975, Ing. Vlad. Zouhar lgt.;" "Museum A. Koenig Ein[gang] Nr. 90/283 ex Coll. Zouhar;" "Gen. präp. [genitalia slide] Gaedike Nr. 5644;" "Holotypus ♂ *Reisserita zouhari* sp. n. det. R. Gaedike 2007"

Description. Wingspan 12 mm; head, palpi, thorax light ochre, basal area of tegulae darker; forewing light ochre, too, without any pattern, first half of costa darker.

Male genitalia (Fig. 4). Uncus bilobate, each lobus with pointed end, between the lobi with deep incision; gnathus arms hooke-shaped, pointed, broadest in the middle; tegumen and vinculum broad, saccus nearly triangular, apically rounded; valva with long narrow transtilla, corpus divided into two processus, one short processus at beginning of the costa, the second one longer, hook-shaped, pointed, the view depending on the preparation; aedeagus as long as the whole genitalia, narrow, with two slightly curved cornuti.

Female genitalia. Still unknown.

Remarks. The new species is similar to *Reisserita mauritanica* (Baker, 1885), but the structure of uncus (deep incision, pointed lobi), and valva, the shorter and broader gnathus arms and the aedeagus with two cornuti make it distinguishable.

The new species is named in honour of the collector, Mr. Vladimir Zouhar.

Praeacedes atomosella (Walker, 1863)

[= *seminolella* Beutenmüller, 1889; = *thecophora* Walsingham, 1908; = *despecta* Meyrick, 1919; = *deluccae* Amsel, 1955; = *malgassica* Gozmány, 1970; = *decui* Capu?e & Georgescu, 1977]

5 ♂, 2 ♀, Egypt. Kahira-Garden city; Wadi El Natrun, between 1970 and 1974, leg. V. Zouhar.

Distribution. Pantropical (ROBINSON & NIELSEN, 1993). Palaearctic region including the Canary Islands; Azores; Malta; Cyprus; Egypt.

Biology. The larvae feed from characteristic flattened, elongate oval cases composed of fibers and detritus and lined with silk. They are similar to those of *Phaereoeca allutella* (Rebel) but in average smaller and more rounded at proximal end. The cases can be found at house walls. The feeding habit is not known with certainty, but probably the larvae are chitinophagous like those of *P. allutella* (ROBINSON & NIELSEN 1993; O. Karsholt, Copenhagen, pers. observ. 2000). A detailed description of the larva is given by HINTON & BRADLEY (1956) under the name *Titaenoses thecophora*.

Tinea subalbidella Stainton, 1867

[= *arcanella* Zagulajev, 1960; = *liberiella* Zeller, 1879; = *excavata* Meyrick, 1914; = *frugivora* Meyrick, 1917; = *insectivora* Meyrick, 1932]

1 ♂, Egypt. Kahira-Garden city, 25. IX. 1974, leg. V. Zouhar.

New record for Egypt.

Distribution & biology. According to ROBINSON (1989), who in detail described the distribution and the biology, the species is known from Palaearctic (Pakistan), Oriental (Thailand, India, Sri Lanka) and Afrotropical (Sierra Leone, Nigeria) regions. Specimens were reared from monkey skins, the pelt of a wild cat, horns and dead Orthoptera. In Thailand, larvae shared nests with an infestation of *Monopis longella*. They behaved in a similar way to those of *M. longella*, tunnelling in the feathers and pupating just below the nest surface in a cylindrical cocoon of thin silk with adhering fragments of feathers.

Tinea omichlopi Meyrick, 1928

[= *nonimella* Zagulajev, 1955]

2 ♂, [China, Shaanxi]. "Tapaishan im Tsinling, Süd-Shensi, 28., 31. V. 1935, H. Höne".

Distribution. Hitherto known throughout the Palaearctic region from Italy, Balkan peninsula, Central Europe to Caucasus region, Middle to Far East. First record for China.

Niditinea sinensis Petersen & Gaedike, 1993

Holotype ♂, [China, Jiangsu]. "Prov. Kiangsu: Shanghai, 19. IX. 1943, H. Höne".

Paratypes. 3 ♂, same location, but 19. VIII., 9., 17. IX. 1942, leg. H. Höne.

Distribution. Known from the type locality only.

Crypsithyris japonica Petersen & Gaedike, 1993

Holotype ♂, Japan, Unzen, 15. VII. 1937, leg. H. Höne.

Distribution. Known from the type locality only.

Crypsithyris hoenei Petersen & Gaedike, 1993

Holotype ♂, [China, Yunnan]. „Li-kiang, Prov. Nord-Yuennan, 22. VI. 1934, H. Höne”. Paratype: 1 ♂, same location, but 4. VII. 1934, leg. H. Höne. One additional ♂ from the type location.

Distribution. Known from the type locality only.

Monopis megalodelta Meyrick, 1908 (Fig. 2)

1 ♂, Türkei, Bedirge, 4. V. 1968, leg. Mittendorf.

Distribution. Previously known only from the Afrotropical region, first record from the Palaearctics.

The species is superficially similar to *M. monachella* (Hübner, 1796), but the shape of the white area on forewing is distinctly different, other differences are seen in the structure of the genitalia (Fig. 5).***Monopis trapezoides*** Petersen & Gaedike, 1993

Holotype ♂, [China, Zhejiang]. „Prov. Chekiang, West Tien-mu-shan, 15. IX. 1932, H. Höne”. Paratypes: 2 ♂, same location and collector, but 3., 5. IX. 1932.

Distribution. Known from the type locality only.

Gerontha hoenei Petersen, 1987

Holotype ♂, [China, Yunnan]. „Li-kiang, Prov. N-Yuennan, 31. VII. 1935, H. Höne”. Paratypes: 2 ♂, same locality, but 26. VII., 2. VIII. 1935, leg. H. Höne; 1 ♂ China, West Tien-mu-shan, Prov. Chekiang, 2. VIII. 1932, leg. H. Höne. Additionally 3 specimens from the type locality.

Distribution. Known from the type locality only.

Tinissa insularia Robinson, 1976

Paratypes. 1 ♂, 1 ♀, NO-Sumatra, Dolok Merangier, 180 m, September 1969, 9.I.–2.II.1970, leg. Diehl; 1 ♀ N-Sumatra, Ketambe, 40 km NW of Kutatjane, 300–500 m, 10.–18.VI.1972, leg. Roesler & Küppers.

Distribution. Known from the type localities: Java, Malaya, Borneo, Celebes, Moluccas, Philippines, New Guinea, Solomon Islands, Sumatra.

EPERMENIIDAE

Epermenia (Epermenia) dalianicola sp. n. (Fig. 3)

Holotype ♂, “China. Luda, Dalian, 10. 5. 1959, Ing.

VLAD. ZOUHAR lgt.,” “Museum A. Koenig Eing.[ang] Nr. 90/283 ex Coll. Zouhar;” “Gen. präp. [genitalia slide] Gaedike Nr. 5832;” “Holotypus ♂ *Epermenia (Epermenia) dalianicola* sp. n. det. R. Gaedike 2008;”Paratype. Without abdomen, same location, but 29. 4. 1959, “Museum A. Koenig Eing.[ang] Nr. 90/283 ex Coll. Zouhar;” “Paratypus *Epermenia (Epermenia) dalianicola* sp. n. det. R. Gaedike 2008;”

Description. Wingspan 11 mm; head, palpi, thorax dark grey, tips of the scales whitish; scales on forewing whitish at base, distal half dark grey; on dorsum at 1/3 and 1/2 a tuft of raised black scales; fringe with two black lines in the middle and apically; on the cell, before and behind 1/2 and at 3/4, three light brown dots present, the apical dot is the largest; obliquely above the two tufts, indications of additional very small brown dots are present; hindwing light grey.

The holotype is somewhat lighter, because the pattern is rubbed.

Male genitalia (Fig. 6). Uncus long, narrow, slightly curved, with pointed tip; tegumen broad, apical edge and the middle stronger sclerotized than the other part; valva with small transtilla, ampulla broad, curved, with a blunt tip, basally with a strong sclerotized edge; cucullus broad, rounded; sacculus apically with a very small pointed tip below the sclerotized edge of ampulla; aedeagus shorter than valva, with a hooked cornutus.

Female genitalia. Still unknown.

Remarks. The new species is superficially similar to *E. ochreomaculella asiatica* Gaedike, 1979, but clearly distinguishable by the structure of the genitalia, especially the shape of the ampulla.

The species is named after the location of the types: Dalian.

Epermenia (Cataplectica) sinica Gaedike, 1996

Holotype ♂, [China, Yunnan]. „Li-Kiang, Prov. Nord-Yuennan, 19. VII. 1934, H. Höne“.

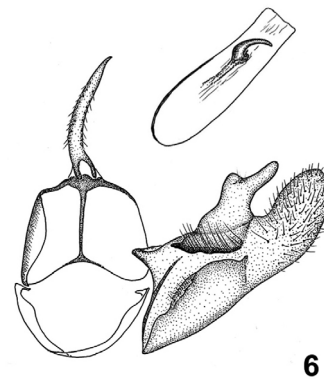
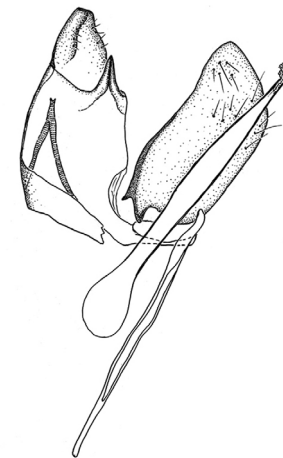
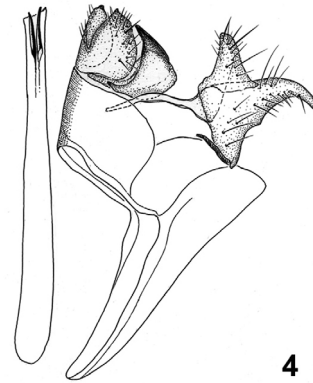
Distribution. Known from the type locality only.

Ochromolopis kaszabi Gaedike, 1973

1 ♂, [China, Hunan]. “Prov. Hunan, Hoengshan, 15. IV. 1933, H. Höne”.

New record for China.

Distribution. Hitherto known from eastern parts of the Palaearctic region (Mongolia, Siberia, Russian Far East).



Figs 1–3. 1. *Reisserita zouhari* sp. n.; 2. *Monopis megalodelta* Meyrick, 1908; 3. *Epermenia (Epermenia) dalianicola* sp. n.

Figs 4–6. 4. *Reisserita zouhari* sp. n., male genitalia (aedeagus separated); 5. *Monopis megalodelta* Meyrick, 1908, male genitalia (left valva removed); 6. *Epermenia (Epermenia) dalianicola* sp. n., male genitalia (left valva removed, aedeagus separated).

ACROLEPIIDAE

Digitivalva (Digitivalva) asiatica Gaedike, 1971

Holotype ♂, [China, Shaanxi]. „Tapaishan im Tsinling, Süd-Shensi, 1. VII. 1935, H. Höne”;

3 ♂, China, Li-kiang, Prov. Nord-Yuennan, 18. VI., 10. VII., 13. VIII. 1934, leg. H. Höne

First record besides the holotype.

Distribution. China: Shaanxi, Yunnan.

Digitivalva (Digitivalva) hoenei Gaedike, 1971

Holotype ♂, [China, Yunnan]. „Li-kiang, Prov. Nord-Yuennan, 10. VIII. 1934, H. Höne”. Paratype: 1 ♀, same location, but 8. VII. 1934, leg. H. Höne; one additional specimen from the type locality.

Distribution. Known from the type locality only.

Acrolepiopsis sinense Gaedike, 1971

Holotype ♂, [China, Zhejiang]. „Wenchow (Chekiang), 12. IV. 1934, H. Höne”.

Paratype. 1 ♀, same data.

Distribution. Known from the type locality only.

Acrolepiopsis deltooides Gaedike, 1971

Holotype ♂, [China, Zhejiang]. „West Tien-mu-shan, Provinz Chekiang, 4. IX. 1932, H. Höne.

Distribution. Known from the type locality only.

DOUGLASIIDAE

Tinagma anchusellum (Benander, 1936)

1 ♂, Jordanien, Amman, 25. III. 1968, leg. S. u. J. Klapperich; 1 ♀, O-Jordanien, Zerkatal bei Romana, 15. III. 1966, leg. S. u. J. Klapperich: New record for the country.

Distribution. Known from North Europe (Sweden, Denmark, Estonia, Latvia) through Central Europe and Balkan peninsula (Greece) to Cyprus, Bulgaria, Ukraine, further from Turkey and the Caucasus region (Armenia, Azerbaidshan).

Biology. Larvae are mining on *Anchusa officinalis*.

Tinagma balteolellum (Fischer von Roeslerstamm, 1841) [= *borkhauseniella* Herrich-Schäffer, 1855]

1 ♂, Jordanien, Amman, 4. IV. 1968, leg. S. u. J. Klapperich. New record for Jordania.

Distribution. Known from nearly whole Europe, except northern part, and outside of Europe from Morocco.

Biology. Larvae are mining in stems of *Echium vulgare* and *E. biebersteini*.

Tinagma klimeschi Gaedike, 1987

32 ♂, Aegyptus, Alexandria, 25., 26. II. 1973; 2. III. 1974, leg. V. Zouhar;

1 ♂, Israel, Latroun bei Jerusalem, 25. III. 1968, leg. Bleszynski.

New record for the two countries.

Distribution. Hitherto known only from Rhodos (type-locality) and from Cyprus.

Biology. Larvae are mining on *Echium diffusum*.

Tinagma minutissimum (Staudinger, 1880)

1 ♂, Volgograd, 18.–24. V. 1967, leg. V. Zouhar

Distribution. Previously known only from the type locality (Turkey: Amasia) and from Crimea.

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Received: 15.03.2008

Revised and accepted: 28.04.2008

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